

UNIVERSITY OF CALIFORNIA PUBLICATIONS
IN
AMERICAN ARCHAEOLOGY AND ETHNOLOGY

Vol. 9, No. 3, pp. 273-435

April 29, 1911

THE LANGUAGES OF THE COAST OF
CALIFORNIA NORTH OF
SAN FRANCISCO

BY

A. L. KROEBER

BERKELEY
THE UNIVERSITY PRESS

UNIVERSITY OF CALIFORNIA PUBLICATIONS
DEPARTMENT OF ANTHROPOLOGY

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DIALECTS SHOWN ON THE MAP

Miwok: 1, 2, 3, Southern, Central, Northern Sierra; 4, Plains; 5, 6, Southern, Western Coast; 7, Lake. *Pomo*: 8, Eastern; 9, Northern. *Yuki*: 10, Wappo; 11, Coast; 12, Huchnom. *Yurok*: 13, Coast. *Karok*: 14, Upper. *Athabascan*: 15, Hupa; 16, Tolowa. *Shasta*: 17, Atsugewi (Hat Creek); 18, Achomawi (Pit River).

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INTRODUCTION.

To Mrs. Phoebe A. Hearst, whose generosity began ten years ago to secure for the University of California a valuable series of anthropological museum collections, and has since supported an Ethnological and Archaeological Survey of California, the credit is due for the following pages.

The paper completes the preliminary studies of a grammatical nature made by the author among the languages of California since 1901. Taken in conjunction with his previous articles in this series and those prepared by other investigators working for the University, together with the studies made of several languages of northeastern California by Dr. R. B. Dixon, and the two or three works published before Mrs. Hearst enabled the University to turn its attention to the field, the present paper brings the knowledge of the subject to a point where at least some information is available on the structure of practically every linguistic family in the state.

The territory covered by the present treatise is that lying between the Coast range and the sea from San Francisco to the northern boundary of the state. Two languages in this area have previously been monographically treated in the present series of publications: the Athabascan family as represented by Hupa, by Dr. Goddard,¹ and Chimariko, an isolated stock, by Dr. Dixon.² These are accordingly not included here. Those sketched are, in order from south to north, Miwok, Pomo, Yuki, Wiyot, Yurok, Karok. Further studies of Yurok are in progress; and the author hopes to continue a more detailed examination of Yuki and Karok. No attempt at an exhaustive treatment of these languages has therefore been made: the descriptions of them are preliminary. The accounts given of the other three languages make use of all the information that has been gathered, and are therefore somewhat fuller.

It must be clearly understood that while languages may be spoken of, it is really linguistic families that are dealt with.

¹ III, 1905.

² V, 293-380, 1910.

Where several languages are unquestionably kindred, one of the group has been selected for grammatical investigation. Thus the Pomo family comprises seven distinct dialects or languages, as evinced by a comparison of vocabularies. As a comparative grammatical study of seven languages is a larger task than was feasible for a preliminary investigation, the Eastern dialect has been chosen to represent the six others, which it undoubtedly does approximately typify in all essentials. In the same way the descriptions of Yuki and Miwok apply each primarily to one language selected from the several constituting the family. So far everything shows that kindred languages in California are very similar in structure, however much they differ in a large proportion of their vocabulary.

MIWOK.

As information has been obtained on several Miwok dialects, it seems most practical first to devote a special and more detailed consideration to the best-known of these idioms without reference to its congeners, and then, in a following section, to review and compare all the dialects of the family, both with reference to one another and to their connection with the Costanoan languages, as these now appear to be perhaps genetically related to Miwok.³

Indians of Miwok family held the territory from the Golden Gate northward to beyond the limits of Marin county, as far as Bodega bay, so that this language was the first to be encountered as the coast is followed northward from San Francisco. A second area of Miwok speech was situated in the Coast range, south of Clear lake. The third, largest, and most important division of the family, and the only one to which the name Miwok in its narrower and original sense properly applies, is neither in the coast region nor north of San Francisco, but occupies the western slope of the Sierra Nevada range between Cosumnes and Fresno rivers.⁴

I. THE NORTHERN SIERRA DIALECT.

The form of Miwok specially discussed here is the so-called Amador dialect, the northerly of three constituting the Sierra division of the family. The material was obtained in 1908 from the late Eph Cummings of West Point, Calaveras County, and is supplemented by notes, more elaborate on some points, that were secured at Jackson and San Andreas in 1900 by Dr. A. M. Tozzer, and are available through the courtesy of Mr. C. P. Bowditch and Professor R. B. Dixon. Certain inconsistencies in orthography are due to the fact that the material is from two observers.

³ Present series, IX, 237-271, 1910.

⁴ S. A. Barrett, present series, VI, 1-332 and maps, 333-368 and map, 1908.

PHONETICS.

The phonetics are of the simple Californian type. The vowels are a; i, e, o, u, all open; and *ö, ü*, the quality of which is indistinct, and which might be written *o, u*. Surd and sonant stops are difficult to distinguish, at least as much so as in Costanoan and more than in Yokuts or Pomo. The surd stops are rather forcibly articulated. There are interdental or dental and alveolar t and d; the former occur in *debe, cut, tolokocu, three, damman, south*; the latter apparently in *tuiña, jump, and doklo, strike*. While the existence of two series of dentals is common in Californian languages, the difference between them is usually greater than in this language, the posterior series being formed more nearly palatally than in Miwok. Dr. Barrett distinguishes three t's—t, t, τ—but in many cases appears to have written t for τ where interdental t occurs. The two positions of the dentals have not been distinguished orthographically in these notes. K is formed rather far back. X, spirant of k, is usually heard more nearly like h and is probably the same sound; ñ, the nasal of k, occurs, but not initially. There is l but no r. Glottal stops occur but are not prominent. Consonants are frequently lengthened or doubled; n, m, c, k, have been observed thus: *kanni, I*.

| | | | | |
|---|----------------|--------|---|---|
| k | g | | | ñ |
| t | d | c | j | |
| t | d | s | z | n |
| p | b | | | |
| | w, y, h, l, ', | te, dj | | |

No words begin or end in two consonants. Juxtapositions of consonants are rare also in words, and in most cases are visibly due to composition, derivation, or affixion.

The stress accent of words does not tend so strongly as in some languages to rest on the penult, but may be found on any syllable between the first and the last. The numerals to sixteen illustrate: *lu'ti, odi'ko, tolò'kocu, oyi'sa, ma'coka, te'mmoko, ke'nnkakü, ka'winta, wo'e, na'a'tca, lu'sagèna, o'diksagèna, tolò'teakü, kolò'kakü, yu'ali, o'yodo*. It seems that long vowels and vowels followed by a glottal stop or doubled consonant generally bear the accent, which is well marked.

STRUCTURE.

The majority of noun and verb stems are disyllabic. Neither etymological duplication nor grammatical reduplication is conspicuous. There seems to be little vocalic mutation. Position plays an unimportant part syntactically. There is apparently no prefix in the language, even preposed pronouns such as those of Yuki and Yokuts being lacking. Grammatical form is therefore expressed almost wholly by suffixes.

PLURAL.

The plural of animate nouns is expressed by -k, sometimes -ko. Thus *naña-k*, men, *occa-k*, women, *ole'teu-k*, coyotes, *teummeto-k* or *teummeto-ko*, southerners. Numerals referring to animate nouns also take the ending: *oyica-k* *tune-ko-nti*, four daughter-s-my. It is also further found on *miko*, ye, from singular *mi*, and in the subjective and possessive suffixes of the same person, -tok and -moko. It appears also on demonstrative and interrogative stems, as *ne-kko-ñ*, their, of these, and *mana-ko-ñ*, somebody's. The term *gotcayakko*, town, from *gotca*, house, evidently contains the suffix. Nouns ending in the diminutive -ti show some irregularity: *naña-ti-koko*, boys; *uya-guta-k*, old men, and *ona-guta-k*, old women, from *uya-ti* and *ona-ti*.

Inanimate nouns lack indication of plurality. Efforts made to determine a modification in verbs according to plurality of either subject or object were fruitless.

CASES.

There are two purely syntactical cases, an objective -i and a possessive -ñ, which have an extensive use. The objective is not only regularly employed on the object noun, animate or inanimate, but on numerals and verbs used objectively, as *masi yinankama tolokocu-i*, we killed three, and *gudjikcuañgum muli-a-i*, I do not wish to sing. It is also used on nouns connected with a prepositional adverb, as in *lilamadoyi gotca-i*, on top of the house. The ending may perhaps also be sought in *umedj-i*, yesterday, *kauleba-i*, tomorrow, and *willa-i*, constantly.

The possessive case-suffix is used not only in the noun, but

also in the independent pronoun and demonstrative: *kannü-ñ*, my, *mi-nü-ñ*, your, *ne-cü-ñ*, his, this one's, *itci-ñ*, our, *mana-ko-ñ*, somebody's. When two nouns are possessively related, the possessive pronoun as well as the possessive case may be, or is usually, employed: *palaia-ñ hake-cü*, close to the ocean, ocean's its edge; *kannü-ñ sake-nti-ñ occa-cü*, my my-friend's his-wife, the latter construction recalling Yokuts *yiwin an limk-in*, wife his prairie-falcon's. It will be seen that the possessive case-suffix is added both to the plural and the pronominal suffixes. The same is true of the objective: *uye'ayi-ko-i*, white men; *sake-t*, my friend, objective *sake-nt-i*. Added to a verb with attached subjective suffix, the possessive case renders it subordinate: *utcux-ce-te-ñ*, when I had stayed, stay-did-I-when; *tolyok-cuke-te-ñ ünu-ce-nti*, after listening I returned. Yokuts uses the locative case -u in exactly parallel constructions. The possessive is also frequently used on the noun or pronoun subject of a verb, apparently when this is in some way dependent: *Kelsi-ñ unu-kuke-te-cö*, Kelsey his-bringing-me; *tolyok-cuke-nti hayapo-ko-ñ liwackoko*, I-heard captains' speaking; *kannü-ñ tuyañ-at*, I jumped; *itci-ñ yulu-teu umedji*, we bit yesterday; *sake-nti-ñ huwata-cö*, my friend ran, my friend's running. Verbs with the potential suffix -uni also may have their subjects in the possessive: *mina-ñ tuyañ-uni-na*, can you jump; *kannü-ñ tuyañ-uni-t*, I can jump.

Like almost all languages of California, Miwok possesses locative and instrumental suffixes. Those determined by the author are a general locative -to, an ablative -mö, a terminalis -m, and an instrumental -su. The only other forms obtained are separate postposed words, such as *unuk*, from, *übuk*, for, on account of, or preposed prepositional adverbs governing the noun in the objective case, like the above mentioned *lilamadoyi*, on top of.

sawalö-to, on Saturday
lelotu-to, on the railroad
isako-to, there
ne-to, here
imaga-to, indoors
min-to, where
gotcayakko-to, to town
mokelumne-mö, from Mokelumne
imaka-ma, from there

gotca-mmö, from the house
mokelumne-m, to Mokelumne
sanhose-im, to San Jose
no'-m, there
sawa-m, on the rock
gudji-su, with a knife
cawa-su, with a stone
leka-su, with a stick.

Dr. Tozzer found the following suffixes :

| | |
|----------------------|---------------------------------|
| -to, superessive | -kō-ta, ko-ta, comitative, with |
| -mō, ablative | or at |
| -m, -am, inessive | -pa, terminalis |
| -pa-zō, instrumental | -ta, for |

It seems that the meaning of the suffixes is not precise, the locative being used to denote the ablative and terminative relations and vice versa.

Dr. Tozzer also gives a number of pronominal forms. These consist of the full form of the pronoun, followed by the case-ending, to which in turn a suffix form of the pronoun is added.

| | |
|-----------------------------|-----------------------|
| kani-to-te, on me (I-on-my) | ikazō-mō-kō, from him |
| mi-ta-ni, for you | mi-ko-ni, at you |
| kani-am-te, in me | itei-kō-me, with us |

It is not certain whether each of these expressions forms one or two words. Possibly kani to-te should be read for kani-to-te.

The suffix ko-ta or kō-ta loses its second syllable -ta in these pronominal forms.

PRONOUNS.

The pronominal forms of Miwok have been most fully determined by Dr. Tozzer, without whose full paradigms their nature would have remained obscure at many points.

As in other American languages, the independent personal pronouns and the affixed pronominal elements, or as we might say, the pronouns and the inflections for person, are quite distinct in Miwok. As in most languages that possess both classes of elements, the independent pronouns are used chiefly for emphasis, when they are actually tautological, or in elliptical and unsyntactical constructions.

In some languages the longer independent words are clearly expansions of the affix or "inflectional" forms, which must be regarded as primary. In other languages the affixed elements are probably reductions of the originally independent and separate pronouns. In Miwok the two classes of forms are evidently of unrelated origin. They show, at least in the singular, no similarity whatever.

The independent pronouns, which are throughout treated and declined like nouns, are :

| | <i>Subjective</i> | <i>Objective</i> | <i>Possessive</i> |
|-----|-------------------|------------------|-------------------|
| S 1 | kanni | | kannü-ñ |
| S 2 | mi' | mini | minü-ñ |
| S 3 | [ikazö | ikazö-i | ikazü-ñ] |
| P 1 | itei, maci | | itei-ñ, maci-ñ |
| P 2 | miko | miko-i | miko-ñ |
| P 3 | [ikako | ikako-i | ikakü-ñ] |

The forms for the third person are demonstrative.

While Dr. Tozzer gives maci, us, as the objective of itci, we, the difference between the two forms is apparently one of duality and plurality respectively, or possibly of inclusion and exclusion of the second person.

The first person subjective together with the object of the second, is expressed by the enclitics mu-cu, I thee, and mu-tok-cu, I you.

yina mucu', I kill you
 huwate-ne mucu', I make you run
 kuteikeu mutokeu, I like you

PRONOMINAL AFFIXES.

The "inflectional" forms, contrary to the prevailing tendency of American languages, are suffixed.

Their most remarkable feature is that the subjective suffixes of the verb show three distinct forms, each used only with certain modes and tenses. The three tense-forms of one person are often entirely dissimilar. One set of forms is employed only for the present and perfect tenses. Another is used with two preterite tenses. Still another, the most common, is used after all other temporal and modal suffixes. This, called hereafter the first form, is perhaps primary, as the objective suffixes of the verb, and in part the possessive suffixes added to nouns, are almost identical. Several of the possessive suffixes, however, resemble the preterite subjective suffixes more closely.

| | <i>Possessive</i> | <i>Objective</i> | <i>Subjective 1 Future, Passive, etc.</i> | <i>Subjective 2 Preterite</i> | <i>Subjective 3 Present and Perfect</i> |
|-----|-------------------|------------------|---|-----------------------------------|---|
| S 1 | -t, -nti | -t, -te | -t, -te | -nti | -ma, -m |
| S 2 | -nö | -n, -ni | -n, -ni | -nö | -s |
| S 3 | -cö | -k, -kö, -wö | -k, -kö, — | -cö | -wö |
| P 1 | -teö, -ma (si) | -m, -me | -me, -m | -teö, -ma (†) | -ti |
| P 2 | -moko, -miko | -tok, -tokni | -tok, -tokni | -muko | -toksu |
| P 3 | -ko, -koñ | -ko, -k | -ko | -ko | -pu |

Contrasting with the independent pronoun, the suffixes almost throughout possess forms for the third person.

When both subject and object are expressed in the verb, the objective suffix precedes.

Examples of the possessive suffixes :

gotca-t, my house
 occa-t, my wife
 hana-t, my hair
 oyaji-nū, your name
 añci-nō, your son
 leka-sū, his stick
 occa-cū, his wife
 hana-tcū, our hair
 gotca-moko, your house
 hana-koñ, their hair, somebody's hair

The possessive suffixes follow the plural ending; case-endings usually but not always follow the possessive suffixes.

sake-nt-i, my friend (objective)
 sake-nti-ñ, my friend's
 occa-i-nū, your wife (objective)
 tune-ko-t, my daughters

The first or primary form of the subjective suffixes is employed after the future suffix -i, the passive -si, the usitative -imi, the potential -uni, and at least certain combinations of past suffixes, such as -ke-ce or -kcō, and -ce-k.

The second form is either attached directly to the stem to express a recent past tense; or it is added to the preterite suffixes -ce or -ke, which appear to indicate a more remote past.

The third form, when immediate to the stem, indicates present time. It also follows the past suffix -naka, which Dr. Tozzer interprets as a perfect.

First form of subjective suffixes :

huwat-imi-t, I run constantly
 wocec-i-t, I shall go
 dobomi-n, you are crazy
 yulu-in a, will you bite?
 muli-i-tok a, will you sing?
 muli-i-me, we shall sing
 yulu-yi-m, we shall bite
 hakaine-cakōcō-t, I was hungry
 itei top-i-me, we shall hit
 itei a hakaine-cak-me, were we hungry?
 miko a hakaine-i-tokni, will ye be hungry?

haline-i-ko, they will be sick
 haline-imi-su-n, you used to be sick
 katce-ca-zö liwa-ni-kö, he said he would talk
 haline-i-tok ane, ye might be sick
 tokla-bosa-i-te, I shall hit myself
 itci osati ete-ksöi-m, we had a girl
 itci osati ete-ma-yi-m, we shall have a girl
 teuku yak-te, or yakö-zö-te, I had a dog
 tiwa-i-ko sumnenu-i, they will bring a hat (sombbrero)
 wentete-i-me, we shall sell (Sp. vender)
 öwö-i-ko, they will eat
 kani mata-si-te, I am shot
 mini mata-si-yi-ni, you will be shot
 kani mata-si-zö-te, I was shot
 tokala-si-zö-te, I was hit
 tokala-si-te, I am hit
 itci yilöa-si-me, we are bitten
 miko yilöa-si-zö-tokni, ye were bitten
 kaltö-i-te, I shall dance
 hakaine-imi-sö-te, I used to be hungry
 hakaine-pa öwö-i-te, if I am hungry, I will eat
 masi hakaine-pa-k, öwö-i-me, if we are hungry we will eat
 hakaine-nit öwö-ni-nö, if you were hungry, you would eat
 • nöka-ni-zö, wököc-i-te, if it rains ("its raining"), I shall go

Second form of subjective suffixes:

huwata-nti, I ran
 hedeana-nö, did you see?
 yüna-nu, did you kill?
 yulu-teu, we bit
 yulu-ce-teö, we bit
 goyoka-te-nö, you looked at me
 hüla-te-nu, you cut me
 yulu-te-cö, he bit me
 ika-zö tope-zö, he hit
 miko tope-muko, ye hit
 tokla-te-zö, he hit me
 mini tokla-ni-zö, he hit you
 ika-zö-i tokla-kö-zö, he hit him
 masi naña etea-me-zö, the man saw us
 toloye-nti liwa-zö, I heard her talking
 moa-se-nti wöna-zö, I met him walking
 moa-tokni-zö wöna-müko, he met you walking
 moa-te-nö wöna-nti, you met me walking
 haline-sö-teö, we were sick
 tiwa-nti or tiwa-se-nti, I bought
 wentete-nö or wentete-ka-nö, you sold
 mi öwö-nö, you ate
 öwö-teö, we ate
 minü-ñ a haline-ke-nö, were you sick?

haline-ke-teö a itci-n̄, were we sick?
 kaltö-zö, he danced
 eteya-kö-nti, I saw him.
 muli-ni-nö tuyañā-nti, when you sang ("your singing"), I jumped
 moa-in-te mega wöne-nö, I will meet you walking
 kani ane topu-pa-nti, I think I was hit

Third form of subjective suffixes:

goyoku-m, I look
 hūla-mu, I cut
 hedeyi-m, I see
 wukcu-ma, I go
 huwate-ma, I run
 yina-naka-ma, I killed
 huwate-ti, let us run
 uhu-ti, let us drink
 min-to yina-naka-tok, where did ye kill?
 muli-sainö-ma, I wish to sing
 muli-sainö-añö-ma, I do not wish to sing
 hōyakö-wö, he is laughing
 tokla-bosa-s, you hit yourself
 mi a hakaine-s, are you hungry?
 hakaine-ti, we are hungry
 ika-ko hakaine-pu, they are hungry
 mi tope-s teuku-i, you are hitting the dog
 kani a hakaine-naka-ma, have I been hungry?
 kateö-wö haline-wö, he says he is sick
 haline-toksu, ye are sick
 ika-ko wökö-sainö-pu, they wish to go
 kani hōyak-sainö-ma, I want to laugh
 muli-sainö-wö, he wishes to sing
 tiwa-wö somnenu-i, he buys a hat
 tiwa-naka-pu, they bought
 wentete-ma pulaka-i, I am selling the basket
 öwö-s, you are eating
 mata-pu, they are killing
 mata-naka-wö, he killed
 kaltö-pu, they are dancing
 eteya-te-wö, he sees me
 eteya-ni-ma, I see you
 kani ane topu-pa-ma, I think I am hit

Examples of objective forms, additional to those already given:

goyoka-ni-t, I saw you
 hūla-ni-t, I cut you
 kuteikce-wacö-ni-t, I did not like you
 goyoka-te-nö, you look at me
 hūla-c-te-ko, he stabbed me
 wiku-te-cu, his taking me
 dobe-tü, teupta-ntö, throw it at me!
 goyoke-tö, look at me!

VERB.

The "inflection" of the verb for person consists of the addition of the pronominal affixes just discussed.

The following derivational, modal, and temporal elements, all suffixes, have been found:

- ne, causative
- ce, -ke, -cainö, desiderative
- imi, continuative
- uni, -ani, potential
- añu, -cewa, negative
- bo, -bo-sa, reflexive
- ce, -cu, -ke, -kcö, -cak, past
- naka, past, perhaps perfect
- i, future
- si, -pa, passive

Dr. Tozzer sometimes writes the potential or dubitative ani as a separate particle before or after the verb. The subject of the verb in the potential usually has the possessive case-suffix.

The order of suffixes is: derivative, modal, temporal. The desiderative and negative precede those that express mode and tense. The potential, the passive, and the usitative come before the preterite and future suffixes. Last of all in the verb are the objective and then the subjective designations of person.

- huwate-ne-i-t, I will make him run
- goyok-cu-m, I want to see
- mi' a tuiña-keö, do you wish to jump?
- tuiña-ke-añu-m, I do not wish to jump
- uhu-ke-añu mi', you do not wish to drink
- uhuk-imi, he drinks constantly
- tuyañ-imi-t, I jump constantly
- yina-añ-uni-t kannü-ñ, I cannot kill him
- tuyañ-cewa-t, I do not jump
- kutei-ke-añu-m, I do not like him (good-wish-not-I)
- yina-ciwa-cö-n, you did not kill it
- kaufie-naka-ma, I shouted
- liwa-ni-nö a, can you talk?
- hōwatō-ni-kö a, can they run?
- wōke-bo-sa-nti, I burned myself
- heka-bo, to wash one's self
- sakizö-bo, to comb one's self

The suffix *-ne*, to be distinguished from causative *-ne*, has verbal force on adjective or intransitive stems.

kutei-ne-ma, I am good
 hakai-ne-ma, I am hungry
 hali-ne-ma, I am sick

The interrogative is indicated by the particle *ā*. This is regularly the second word in the sentence; but far from being enclitic, usually carries the heaviest accent in the phrase. Instances occur among examples previously given.

In certain verbs the stem in the future appears to end in a consonant, while in the past and present a final vowel appears. In some instances this is brought about by a shift of the second stem-vowel to a place after the final consonant.

| <i>Present and Past</i> | <i>Future</i> |
|-------------------------|---------------|
| wukeu- | wokec-i |
| kaufē- | kauñ-i |
| huwate- | huwat-i |
| tuyañē- | tuyañ-i |
| yila- | yil-i |
| tope- | top-i |
| eteya | etey-i |

In Northern Sierra Miwok the verb is certainly as truly conjugated or inflected as in any Indo-European language. The existence of three forms of personal endings whose employment depends on ideas of tense, and the differentiation of all of these from the independent pronouns, make it impossible to describe the language as "agglutinating."

VERB STEMS.

Verb stems are generally disyllabic, unless those so far determined should ultimately prove to contain affixes of motion, shape, direction, or instrument, of which possibility there is no present indication whatever.

| | |
|--------------------|---------------------------------|
| ame, give birth | doklo, tokla, strike with fist, |
| ametö, beg | knock down |
| dekma, tekme, kick | duka, düka, pierce |
| depa, cut | ete, etea, eteyö, hete, hideye, |
| dobe, throw | see, look at |
| dobome, crazy | etepö, lie on stomach |

| | |
|--|--------------------------------|
| hakai, hungry | nipitō, sit with folded leg |
| hali, sick | notcō, notcu, cry, whine |
| hayē, touch | nuzu, mizu(ʔ), undress |
| heka, wash | okye, make basket |
| heñe, ask for | ole, dig |
| hili, pinch | ōwō, eat, bite |
| hinuwo, gamble grass game | pakal, pay (Spanish pagar) |
| hōge, bet | petañe, throw away |
| hōtse, hiccough | pilapa, pinch |
| hōya, laugh | puu, squat |
| hukaye, smell | sakizō, comb |
| hupa, roll | sōtcaya, shine |
| huwa-epo, hasten | sōtcelō, lie on side |
| huwa-te, run | sutwa, break a string |
| huya, start, leave, arrive | takya, hit with stick, whip |
| huyaku, strike | taswa, break |
| hūla, stab | temañu, cross |
| kalte, dance | tiwa, buy |
| kata, shut | tizōye, scratch |
| kauñ, kauñe, shout | toloye, hear |
| kelpe, swallow | tōtci, believe, wish |
| kole-nak, cough | tuka, spit |
| kona, bark | tupi, press |
| kope, open | tuyañ, tuiña, jump |
| koyok, goyok, see, look | teamza, die |
| kōpa, pull | teime, climb |
| kusu, sit with stretched leg | teunuza, slide |
| kute, kuta, gute, push, knock with hand | teupta, throw endwise |
| kuyage, whistle | uhu, drink |
| late, suck | uku, enter |
| latci, chop (Spanish la hacha, the ax) | ukteu, dream |
| lepa, bury | unu, come, return |
| liwa, talk | uteu, stay |
| lōkta, sneeze | weli, catch |
| lōmeta, fall | welza, hunt for |
| lutsu, ascend | wentete, sell (Spanish vender) |
| mata, shoot, kill (Spanish matar?) | wilaño, steal |
| moa, meet | wokee, wukue, wōkeu, go |
| mole, spill | wōke, burn |
| motea, hide | wōkle, swallow |
| muli, mōli, sing | wōna, walk |
| mulagu, wash face | yaña, sleep, lie on back |
| nawu, dress | yilō, yila, yulu, bite |
| nepye, swallow | yina, yunu, kill |
| nete, count | yiya, shake |
| | yōtki, hang |
| | yuhu, swing |
| | yutme, claw |

DEMONSTRATIVES.

The stems corresponding to this and that are *ne* and *no*. *Ne* and *no* have been found, both as substantives and adjectives, only with the ending *-i*; as adverb, here, *ne* occurs with the ending *-to*, *-kkato*. From *no* is derived *no'-m*, there. The possessive case of both stems is formed by the ending *-cü-ñ*—compare *mi-nü-ñ*, from *mi*, you. The possessive plural is *ne-ko-ñ* and *no-kko-ñ*.

Another demonstrative stem denotive either of greater distance than *no*, or of reference rather than position, appears to be *i*.

iga-c-i naña-i, that man
imaka-ma, there, from there
isako-to, there

To these forms are related Dr. Tozzer's *ika-zö* and *ika-ko*, usually given in translation for "he" and "they." "He" also appears several times as *igas* or *iga*.

The interrogatives are *mana*, who, *ti'nü*, what, *mini*, where, *mitan*, when. *Min-to* is used for *mini* when the sentence contains a verb. Somebody's is *mana-ko-ñ*, somewhere *mini-mta*. How large, is *miniwitei*; how, is *mitciksu*.

NUMERALS.

The numerals, when accompanying animate nouns, take the plural suffix: *oyica-k*. They also receive case suffixes: *tolokocu-i*. They also enter into composition: *toloko-ma-i*, *oyica-ma-i*, three times, four days; *toloko'-me*, we three, three persons. "Each" is *-ameni*: *otiko-ameni*, two each.

SUBORDINATION.

Dependent clauses have been mentioned as being indicated by the possessive case-suffix. Either this is added to the subject, the verb receiving a possessive instead of a subjective pronominal ending, so that the construction is really nominal-possessive; or, to express a temporal clause, the case-suffix is added to the verb, pronominal ending and all.

mina-ñ yulu-nö, (I saw) your your-biting
sake-nti-ñ huwata-cö, my friend ran, literally, my friend's running
tol yok-cu-ke-te-ñ, after I had listened, literally, of my listening

ORDER OF WORDS.

The order of words in the sentence is not rigid. The verb sometimes is first, sometimes last. Local modifier and object both precede and follow the verb. Connective words have not been observed.

TEXT.

| | | | | |
|--------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|------------------------------------|
| Sawalö-to On Saturday | hoya-na-ke-nti I started. | stedji-to On the stage | tcume-nti I rode. | |
| mokelumne-m To Mokelumne Hill | huya-ke-nti I arrived. | mokelumne-mo From Mokelumne Hill | wukuc-it I went | |
| wolucpriñu-m to Valley Spring. | wolucpriñu-mo From Valley Spring | tcume-nti I rode | lelotu-to on the railroad. | |
| huya-ke-nti I arrived | sanhose-im at San Jose | wolucpriñu-mo from Valley Spring. | sanhose-mo From San Jose | |
| wiku-ke-te-cü his taking me | Kelsi-ñ Mr. Kelsey's | tcummate south | wukucu went. | imaka-ma From there |
| polaia-ñ ocean's | hake-cü its close | wükuc-e-nti I went. | imaka-ma From there | huya-yi-ke-nti I went |
| maunthömoni-mo to Mt. Hermon | tolokocu three | oyisa-i four | tanalo-i tunnels | uke-nti I went through |
| huya-ke-t I arrived | isako-to there | maunthömon-mo at Mt. Hermon. | toloko-mai Three days | utcu-se-nti I stayed. |
| tolyok-cu-ke-nti I listened | hayapo-ko-ñ chiefs' | liwa-kco-ko their speaking. | tolyok-cu-ke-te-ñ After listening | |
| ünü-ce-nti I returned. | sanhose-m At San Jose | hüya-ke-nti I arrived | Kelsi-ñ Mr. Kelsey's | unu-ku-ke-te-cö his bringing me |
| sanfransisko-mo to San Francisco. | imaka-ma There | toloko-mai three days | oyica-mai four days | utcu-se-nti I stayed. |
| heteyi-yi-ke-nti I saw | coke-i anything, | lapiçayu-i fish, | üçümati bear | heteye-nti I saw, |
| waña-ko-i many | uye'ayi-ko-i Americans, | cowu-ko-i shows | heteye-nti I saw, | sakacü-ko-i circuses |
| heteye-nti I saw. | wukuc-e-nti I went | hisu-m east | toloko-mai three days | utcu-ke-te-ñ after staying |
| haiapo-to at chief | ututi large | kotea-i house. | | |

II. MIWOK DIALECTS.

Dr. Barrett, in determining the three areas formerly occupied by the Miwok,⁵ has established also the principal dialects. In the coast region immediately north of the Golden Gate, two closely related dialects are spoken, called by Dr. Barrett the Marin or Southern Coast and the Bodega or Western Coast dialects. The speech of the Lake county area is not very divergent from these, and constitutes the Lake or Northern Coast dialect. All the Coast dialects form a unit as compared with the Interior division. This group is divisible first of all into a Plains or Northwestern dialect on the one hand, and a group of foothill or Sierra dialects on the other. The Sierra group consists of three dialects, a Northern or Northeastern, a Central, and a Southern; or respectively Amador, Tuolumne, and Mariposa. Of these the Southern is the most divergent though less so from the two others than the Plains language. The Northern and Central dialects are similar, though evidently not to the same degree as the Marin and Bodega on the Coast. Minor subdialectic differences, as within the Mariposa dialect, are slight.

So much is apparent from a comparison of the vocabularies collected for the purpose. Grouping together the Marin and Bodega dialects on account of their close affiliation, the main linguistic divisions of the Miwok, with their designations by Dr. Barrett and Dr. C. Hart Merriam,⁶ are the following:

Lake or Northern Coast; Dr. Merriam's Tuleamme.

Marin-Bodega or Southern and Western Coast; Dr. Merriam's Hookoeko, including the Lekahtewutko and Olamentko.

Plains or Northwestern Sierra; Dr. Merriam's Mewko, comprising the Mokokumne, Mokalumne, Ochehak, and others.

Amador or Northeastern or Northern Sierra; Dr. Merriam's Northern Mewuk.

Tuolumne or Central Sierra; Dr. Merriam's Middle Mewuk.

Mariposa or Southern Sierra; Dr. Merriam's Southern Mewuk.

⁵ Miwok is the name applied to themselves by the people of the interior only. It was so used by Stephen Powers. Powell, in his appendix to Powers, called both Miwok and Costanoan people Mutsun. Subsequently, in "Indian Linguistic Families," he abandoned Mutsun and called the Miwok family Moquelumnan.

⁶ *Am. Anthr.*, n.s. IX, 338-357 and map, 1907.

So far as is possible in simple series, this order represents both the geographical position of the dialects, in order from northwest to southeast, and their linguistic similarities. Thus the Lake seems more removed than the other Coast dialects from the interior division. The Plains dialect is the nearest of the interior division, lexically as well as geographically, to the Coast division. Within the interior group the contiguous Northern Sierra is the most similar, and the remote Southern Sierra the most dissimilar, to the Plains dialect.

Grammatical material for comparison of the various Miwok dialects is available in Dr. Barrett's vocabularies and the miscellaneous earlier ones; in notes made by the author on five of the dialects; in information collected by Professor R. B. Dixon on the Central Sierra dialect and kindly placed at the writer's disposal; and in Gatschet's article on the grammar of the Southern Sierra dialect.⁷

COMPARATIVE PHONETICS.

All four of the interior dialects possess *ö* and *ü*. The Coast dialects lack these sounds,⁸ which are also wanting in the Costanoan languages. This difference is a reflection of linguistic environment. Besides the interior Miwok, the Maidu, Yokuts, and Chumash, all in contact with Shoshonean languages, have these characteristically Shoshonean vowels. Nearer the coast, Yuki, Pomo, and Wintun lack them.

At least *e* and *o* are open in quality.

Sonant stops are difficult to distinguish from surds in all Miwok dialects, as in Costanoan, the two classes being less differentiated than in Maidu, Washo, and Pomo, in which their relation is more nearly as in English.

In the interior dialects the two positions of *t* are close together, and the sounds difficult to distinguish. In the Coast

⁷ Specimen of the Chumeto Language. *American Antiquarian*, V, 72, 173, 1883.

⁸ As written by Dr. Barrett. The writer has recorded *kanni* or *kannü*, I, *kawul* or *kawül*, night, *huma*, *hüma*, or *hōma*, no, *ünüi-ko*, people. In the Plains dialect *ö* and *ü* are perhaps also of less distinct quality than in the Sierras, as an obscure *o* and *u* were generally recorded instead.

idiom, one t is dental, the other, represented by t, post-alveolar or palatal, almost like the affricative tc, so that the difference between the two sounds is more readily perceptible, as in Costanoan.

In the Coast dialect the impression was received that s and c may be but one sound.

Doubling or lengthening of consonants, already mentioned as found in Northern Sierra, occurs frequently in all dialects, though but irregularly recorded. Compare Central Sierra *mulli*, sing, Plains *uceu*, drink, Coast *elli*, see, *luppu*, stone.

The posterior palatal nasal ñ occurs medially in the three Sierra dialects, but is replaced by n in Coast and Plains. Compare Sierra and Plains:

| | | |
|------------|--------|---------------------|
| one | keñe | kenatü (Coast kene) |
| knee | hoñoyu | honoi |
| leg | tuñu | tuna |
| earthhouse | hañi | hanepu |

The dialects actually on the Coast, that is Marin and Bodega, at times show a y corresponding to l of Lake, Plains, and Sierra.

koya, girl, L kola
 koyo, leg, L, P, S kolo
 meye, bird, L mele
 oye, coyote, L, P, S ole, ole-

Another, more irregular, correspondence is of n, l, t, y, s.

two: ot-, oy-, os-
 large: utu-, unu- oya-
 white man: uten-, alen-, utel-
 tongue: nepit, letip (with metathesis)

As Dr. Barrett has pointed out, s frequently changes to h in the Southern Sierra dialect.

No dialect shows words either beginning or ending in more than one consonant. In the Sierra dialects almost all words that may be supposed to be stems, such as simple nouns, end vocally. On the plains and coast the corresponding words often end in consonants.

nose, Sierra huku, Coast and Plains huk
 tooth, Sierra kutu, Coast and Plains kut
 night, Sierra kawulu, Coast and Plains kawul
 water, Sierra kiku, Coast and Plains kik
 louse, Sierra ketu, Coast ket, Plains ken
 tongue, Sierra nepitu, Coast letip, Plains nepit

It is probable that the Sierra final vowel -u is secondary, and that the original form of the stem of such words ended consonantly.

In Southern Sierra some consonantly-ending words do not show the final -u of the two northern Sierra dialects, but this may be the effect of slurred pronunciation. The northern dialects present -u even on such stems as hoñoi, knee, melñai, wasp, lapisai, fish.

While their stems thus end vocally, the three Sierra dialects however possess grammatical suffixes that are consonantal, such as -t, my, -ñ, the possessive case, -m, the terminalis, and -k, the plural.

In all dialects simple nouns and verb stems are rarely monosyllabic.

PLURAL.

The usual plural of animate nouns⁹ is -k in Central as in Northern Sierra; Plains, Coast, and Lake show -ko, of which occasional instances have also been given in Northern Sierra. The Southern Sierra idiom alone possesses a totally different formation for the plural, of which no trace has appeared in any other dialect, just as no instance of -k has been found in Southern Sierra.¹⁰ The plural of nouns is formed in this dialect most frequently by -ya, sometimes by -ti or -yati; the plural of verbs and adjectives usually by -ti. In the formation of the plural in nouns, there is probably usually a change of accent, resulting at times in the dropping or moving of vowels. Occasionally there are irregularities.

⁹ Inanimate nouns show the suffix only occasionally.

¹⁰ That is, in the noun,—except hiso, hair, plural hiso-k. The pronominal and demonstrative forms miko, neiko, iniko, no doubt contain the suffix.

ami-ya-nti, my mothers
 oha-ya-nti, my wives
 huggo-ya, heads
 nito-ya, noses
 yane-ya, bows
 tisso-ya, tisso-ti, hands
 noaha-ti, knives (Spanish)
 uteu-ti, houses
 yūta-yati, evenings
 lokka-yati, summers
 hika-yati, deer.
 nañ-taya, men (naña)
 ox-taya, women (oxa)
 tuhuhi-ti, black
 oyani-ti, large
 huate-ti, run (plural subject)
 ua-ti, eat (plural object)
 uhhu-ti, drink (plural object)

Numerous other instances are given in Gatschet's vocabulary.¹¹

The following illustrate the shift of the accent:

your nail, ha'la-no, pl. hala'-ya-no
 your belly, otce'-no, pl. otce-ya'-no
 bow, ya'we, pl. yawe'-ya
 ax, la'tea, pl. latea'-ya (Sp. la hacha)
 sun, wa'tu, pl. watu'-ya
 star, teala'to, pl. tealu'-yate
 fly, u'tcum, pl. utemu'-ya
 salmon, ko'sum, pl. kosmu'-ti

Southern Sierra nouns take the plural whether animate or inanimate; the -k, -ko suffix of the other dialects has been found chiefly on stems denoting animate beings.

The radical difference of the Southern Sierra dialect from all others in the formation of the plural is remarkable. The suffixion of -ya with shift of accent and occasional modification of the word, recalls the Yokuts plural in -i or -a with accompaniment of similar though more developed changes. The suffix -ti suggests the Salinan plural, which while irregular is most frequently produced by the suffixion, or apparent infixion near the end of the word, of l or t. Yokuts is adjacent to the Southern Sierra dialect, and Salinan is not far distant. A

¹¹ Powers, *Contrib. N. A. Ethnol.*, III, 539, 1877.

plural of verbs such as Southern Sierra possesses is found in Salinan and in Costanoan,¹² but no trace of anything of the kind appears in the material collected by Drs. Tozzer, Dixon, and the author in the other Miwok dialects.

CASE ENDINGS.

The principal case-suffixes are :

| | <i>S. Sierra</i> | <i>C. Sierra</i> | <i>N. Sierra</i> | <i>Plains</i> | <i>S. Coast</i> | <i>Costanoan</i> |
|--------------|--|------------------|------------------|------------------|------------------|------------------------------|
| Objective | -i | -i | -i | -te | -te, -t. | -c, -se, -e, -ne |
| Possessive | -ñ | -ñ | -ñ | -nu, -xno | -n | — |
| Locative | -to, -t | -t | -to | | -to | -tak, -tka, -ta |
| Ablative | -mu | -mō | -mō | -mu | -mo | } -m, -me, -mo ¹³ |
| Terminalis | -m, -ma ¹⁴ -m, -am ¹⁵ -m | | | -m ¹⁶ | -m ¹⁷ | |
| Instrumental | -s | -s | -su | -cu | -cu | -sum, -um, -yum |
| Comitative | | -li | -kōta | | | |

The significance of several of the suffixes does not appear to be rigidly limited even within any one dialect.

An ending -wit or -win, sometimes replacing or replaced by -m, has been found on terms of direction in almost all dialects.

Southern and Central Sierra olo-win, "west," Northern Sierra olo-wit, Plains etca-wit.

Coast olo-m, Lake olo-m-wali, "south."

Southern and Central Sierra hisu-m, hihu-m, "east," Northern Sierra hisu-m, hisu-wit, Plains huke-wit.

Southern Sierra ne-win, "east, upstream."

PRONOMINAL FORMS.

The known pronominal forms in the several dialects have been brought together in the appended table.

It appears that the four interior dialects agree in expressing all indications of person, except in the independent or emphatic

¹² By the suffixion or infixion of -s, in the Mutsun or San Juan Bautista dialect.

¹³ General locative

¹⁴ Given as superessive.

¹⁵ Given as inessive.

¹⁶ Locative and comitative also.

¹⁷ On olo-m, south.

pronoun, by suffixes. On the coast this synthetic trait largely disappears. It is true that the subjective and possessive pronouns are prefixed and the objective suffixed in the Southern Coast dialect, but the affixion of all is quite loose, and perhaps better described as accentless collocation.

A second distinctive feature of the interior dialects is the existence of three series of subjective suffixes, the choice between which is dependent on tense and mode. In the Northern Sierra dialect that series which has been designated as the first is practically identical with the objective suffixes, the second with the possessive, while the third is distinct from both. In Central Sierra and Plains, the *first* series is also essentially a duplicate of the objective forms. An equivalent of the Northern *second* series has not yet been found in Plains, while the Central second series is entirely different from the Northern, and but partially similar to its own possessive suffixes. The *third* series, which is everywhere unconnected with either possessive or objective forms, is characterized by -m in the first person singular, -s in the second singular, and -p in the third plural. It is found with but little variation in Plains, Northern, and Central Sierra, and seems to be represented also in Southern Sierra.

On the coast, there is no indication of three subjective series, as indeed might be expected from the analytical or at most loosely synthetic character of the pronominal forms. In the table, the subjective prefixes of the Southern Coast dialect have been coördinated with the second subjective series only because of their identity with the possessive prefixes; it is not certain that they correspond genetically to the interior second series more than to the first or third.

| <i>Independent</i> | <i>S. Sierra</i> | <i>C. Sierra</i> | <i>N. Sierra</i> | <i>Plains</i> | <i>S. Coast</i> |
|--------------------|------------------|--------------------|------------------|--------------------|-----------------|
| I | kanni | kanni | kanni | kanni | kanni |
| thou | mi | mi' | mi' | mi' | mi' |
| we | mahi | masi ¹⁸ | maci | maci ¹⁹ | mako |
| | otit-i | otiteik | itei | itei | — |
| ye | miko | miko | miko | moko ²⁰ | miko |

¹⁸ Or otim.

¹⁹ Maci-mi-te, objective plural.

²⁰ Or moko-tokni.

| | <i>S. Sierra</i> | <i>C. Sierra</i> | <i>N. Sierra</i> | <i>Plains</i> | <i>S. Coast</i> |
|---------------------|------------------|------------------|--------------------|---------------|-----------------------|
| <i>Possessive</i> | | | | | |
| my | -nti | -kan | -nti, -t | -ka | ka- |
| thy | -nu | -n | -nō | -nu, -in | un- |
| his | -hu | -s | -eō | -eu, -ie | ue- |
| our | -ti | -ti | -ma | -mac | ma- |
| | -tei | -tik | -teō | | — |
| your | | -mok | -moko | -mok | mikon |
| their | -hu | -k | -ko | -ik | |
| <i>Subjective 1</i> | | | | | |
| I | | -t | -t, -te | -t | |
| thou | -ni | -n | -n, -ni | -n | |
| he | | -k ²¹ | -k, -kō, — | — | |
| we | -m | -m | -m, -me | -m | |
| ye | -toxni | -ton | -tok, -tokni | | |
| they | | -k ²² | -ko | -k | |
| <i>Subjective 2</i> | | | | | |
| I | | -k ²³ | -nti ²³ | | ka-, k- ²⁴ |
| thou | | -s | -nō | | un- |
| he | | — | -eō | | ue-, e- |
| we | | -kti | -ma | | ma- |
| | | -ktitc | -teō | | — |
| ye | | -ktos | -muko | | mikon- |
| they | | -p | -ko | | |
| <i>Subjective 3</i> | | | | | |
| I | -ma, -m | -m | -m, -ma | -m | |
| thou | | -s | -s | | |
| he | | — | -wō | — | |
| we | | -ti | -ti | -mac | |
| | | -tite | | | |
| ye | | -tos | -toksu | -tokun | |
| they | -pu | -p | -pu | -p | |
| <i>Objective</i> | | | | | |
| me | | -t | -t, -te | -t, -ti | -kanni ²⁵ |
| thee | | -n | -n, -ni | -n, -ni | -mi |
| him | | — | -k, -kō, -wō | | -t, — |
| us | | -m | -m, -me | -muk | -mako |
| you | | -ton | -tok, -tokni | | |
| them | | — | -k, -ko | | |
| <i>I-thee</i> | musu | mōs | mucu | cima | |
| <i>I-you</i> | | mutos | mutokeu | cimatoku | |

²¹ Found only after the future suffix -i.

²² Takes the form -ko after the future suffix -i.

²³ The second series subjective do not correspond in Central and Northern Sierra.

²⁴ The single subjective series, in the Coast dialect, is identical with the possessive prefixes.

²⁵ Evidently the objective forms of the Coast dialect are merely the independent pronouns suffixed or postposed to the verb.

MEANING OF THE SUBJECTIVE FORMS.

The three distinct series of subjective affixes suggest a feature which is found in other languages and has sometimes been erroneously interpreted. In some American tongues the subjective personal elements used with the verb are partly or wholly the same as the possessive forms employed with nouns. In other idioms certain of the subjective elements, especially the intransitive ones, resemble the objective forms or are identical with them. An explanation that is plausible rather than substantial has repeatedly been made for such phenomena. It is said that in such languages the verb is essentially a noun, or the intransitive verb in reality impersonal and transitive, the form "I eat" being literally "my eating," and "I am sick" more correctly "it is sick to me." This view must be vigorously opposed on general grounds, except where it is capable of proof by specific evidence. It would be just as reasonable to interpret "my food" as "I food." Our own Aryan languages of course do not permit the phrase "I food" as they do allow "my eating," but this circumstance is of no moment in an American tongue. It is saner, if less enticing, to look upon the several series of pronominal forms that many languages possess, as essentially significant only of person, and as primarily undifferentiated as to subjective, possessive, and objective relation. In certain types of language such differentiation of form may serve no purpose and may therefore not occur. In other cases the presence of two or more pronominal elements in the same word, or perhaps other circumstances, may cause the existence of several series of forms to be necessary or advantageous. Whenever, in such languages, a word contains only one pronominal element, as in the possessed noun or the intransitive verb, it must then be a matter of indifference to intelligibility which form is drawn upon. "I," "my," and "me" in the native words for "I eat," "my food," and "bites me" would in such case not mean the same as their Aryan equivalents, but would only be indicative of the first person, their grammatical force being a function rather of their position in the word or phrase, the part of speech to which they were joined, its logical meaning

or some similar circumstance. As a matter of fact there are abundant instances of identity respectively of possessive and objective, possessive and transitive subjective, and intransitive and transitive subjective pronominal forms, which no one would think of explaining by Indo-European analogy.

It may be objected that even in synthetic languages the co-existence of several series of pronominal elements would be impossible except as they originated from a difference in function such as that provided by the subjective, objective, and possessive relations. But the ultimate origin of the several sets of pronominal forms can probably be ascertained in but few languages, and is therefore generally a matter of pure speculation. Even if the original meaning of a form translatable by "I eat" had been, in any particular idiom, "my eating," it would be a grave error to assume, in the absence of direct and positive evidence, that it still possessed that meaning. There is normally little connection, in any language, between the present force of a word or affix and its "original" function and meaning.

Miwok bears on this general question through the fact that at least in certain dialects one of its series of subjective pronominal elements resembles the objective, another the possessive, while the third, differing from both, might be interpreted as distinctively subjective. The form employed depends, however, on the tense and mode of the verb. As it would be absurd to assert, because an essentially objective form is used with the future suffix, a possessive with the preterite, and a subjective only with the present, that therefore the future is impersonal, the past a noun, and the present a verb, it can only be said that there are three sets of pronominal elements which have no differentiation of meaning to accord with their divergence in form.

USE OF THE SUBJECTIVE FORMS.

While at least two of the three series of subjective pronominal suffixes agree closely in several dialects, there is variation in the affixes of tense and mode by which their choice is determined.

| | <i>Northern Sierra</i> | <i>Central Sierra</i> | <i>Plains.</i> |
|-----------------------|--|--|---|
| <i>First Series:</i> | -i, future -si, passive -imi, usitative -uni, potential -ke-ce, <i>keö</i> , past -ce-k, past | -i, future -ke-sö, past -ñe, past or present -teö-sa, <i>teö-ka</i> , recent past -se, past -ke, past | -ca, future -ma, past -tu, past |
| <i>Second Series:</i> | stem, past -ce, past -ke, past | stem, past -na, -ñe-na, past or present | The second series has not been found in this dialect . |
| <i>Third Series:</i> | stem, present -na-ka, past | stem, present -teö, present -ew-añ-ko, negative present | stem, present -ka, past |

Perhaps the most conspicuous difference is that the preterites -ce and -ke require the second form in Northern and the first in Central Sierra. It must be recalled, however, that the forms of the second series are not homologous in these two dialects.

SPECIAL PECULIARITIES.

Central Sierra.—The independent pronouns in full are:

| | <i>Subjective</i> | <i>Objective</i> | <i>Possessive</i> |
|-----|-------------------|------------------|-----------------------------|
| S 1 | kani | kani | kanu-ñi |
| S 2 | mi' | minii | minu-ñi |
| S 3 | [neal | neial | nesu-ñi, nosu-ñi, inisu-ñi] |
| D 1 | masi, otim | masi, otimei | otime-ñi |
| P 1 | otiteik | | otiteiku-ñi |
| P 2 | miko | mikoi | miku-n |
| P 3 | [nekoal, inikal | nekoial, isakoi | noku-ñi] |

The forms given as of the third person are demonstrative, and are derived from the stems ne, no, and ini or isa. The ending

-al has not been found in Northern Sierra, and appears to be animate.

Professor Dixon's material in this dialect brings out the difference between the dual and plural of the first person, which in Northern Sierra could only be suspected from the presence of the two forms *masi* and *itei*. *Itei* does not occur in Professor Dixon's notes, but its characteristic element *te* appears in *oti-tei-k*, as compared with *oti-m*, we two, in which *-m* evidently represents *masi*. The final *-k* of *otiteik* is the suffix of plurality.

It is curious that a language should possess a dual in only one person of the pronoun. It seems reasonable to believe that the true distinction between the two forms is rather one of inclusion and exclusion of the second person, which has happened to coincide in the informant's mind, or in some of the examples given, with the difference between a dual and plural. The strange forms *oti-m* and *oti-tei-k*²⁶ confirm this supposition, as they are evidently both derived from *oti-ko*, two. Further, in many languages that possess a separate inclusive form of the first person plural, this is phonetically more similar to the second person plural than to the first person exclusive. So the Central "dual" *masi*, essential element *m*, parallels *mi*, you, and *miko*, ye.

On the other hand, in Dakota, according to Riggs,²⁷ an inclusive form of the first person is restricted to a dual significance, while the exclusive is plural.

Four of the linguistic families adjacent to Miwok—Wintun, Maidu, Washo, and Yokuts—also show a pronominal dual, and besides these, so far as known, no others in California,²⁸ except Chumash which is in contact with Yokuts.

In the possessive the form for the first person is *-kan*, instead of Northern *-nti* or *-t*. It is certain that a mistake has not been made because Professor Dixon's informant knew the form *-nti*, but gave it as characteristic of the Southern Sierra dialect, which is correct. Evidently the Central dialect, like the Plains idiom,

²⁶ Confirmed by Southern Sierra *otit-i*.

²⁷ *Contrib. N. Am. Ethn.*, IX, 10, 1893.

²⁸ The Shasta dialects nearest to Maidu show dual forms of the pronominal verb affixes only. Dixon, *The Pronominal Dual in the Languages of California*, Boas Anniversary Volume, 80, 1906.

replaces the suffix form -t or -nti, which has parallels in the personal endings of verbs, by a suffixed abbreviation of the independent pronoun kanni. It is curious that adjacent dialects differ, and separated ones agree, in this point.

Usually the order of objective and subjective suffixes is the same as in Northern Sierra: -ni-t, I-thee; -tokni-t, I-you; -t-an, thou-me. There is however one set of forms that seem to place the objective suffix last: -pu-t, -pu-n, -pu-m, -pu-ton, they-me, -thee, -us, -you.

The possessive suffixes are added to verbs which are the object of another verb, the suffix denoting the logical subject of the subordinate verb.

telöteö-ke-t mulli-s, I heard him singing, literally, I-heard his-singing
 söye-ñe-ni-t howata-n, I saw you running, literally, I-saw-you your-
 running
 ne-al söye-teö-t howata-kan, he sees me running, literally, he sees-me
 my-running

The Central subjective suffixes of the first series added to a substantive or interrogative imply the verb substantive.

hayapo-t, chief-I, I am chief
 mana-n, who-you, who are you?
 mini-n, where-you, where are you?

Plains.—An unexplained form -ikam, meaning they-me, occurs in kanni heat-ikam, they will hit me.

The imperative plural shows an ending -te: uce-te, drink! A suffix -k may denote the object of the third person in the imperative: pata-k, strike him!²⁹

Elements similar to the subjective suffixes of the first series are added to the independent pronouns before case-suffixes: maci-mi-te, us; itcu-me-m, with us; kanni-ti-m, with me. This contrasts with the Northern Sierra idiom, in which the locative element follows the pronoun, while the affixed pronominal element is added to this.

Coast.—An ending -t, -it, occurs on transitive forms with pronominal object of the third person: oke-mmi-t, strike him!; k-tcamate-pu-it, I have it; k-oke-ka-t, I struck him.

²⁹ Compare Costanoan: San Juan Bautista, imperative plural, -yuts; Monterey, imperative with object of third person singular, -ñk.

It has been said before that the subjective and possessive elements in this dialect are probably not true prefixes, but accentless particles or proclitics. They are at times audible as final sounds of the preceding word with which they have no grammatical connection.

kenum-unye-s oke-kanni, constantly he hits me
 eke-m-ka-n tcama-no-ni-n cumuki, from where do you take your pipe?
 nit-u-n cumuki, this is your pipe
 eke-to-ni-n huyena-c, where were you born?
 eke-cu-k lanta, where is my bow?
 hōma-k iolum-oti nome, no, I eat rabbits

That these forms are particles is made more probable from the circumstance that they precede the word with which they stand in syntactical relation, while the Interior equivalents are suffixes. It is difficult to understand how a truly incorporated element could change from suffix to prefix, whereas it is readily intelligible that if once a suffix becomes sufficiently detached from the stem to be properly a particle or enclitic, an alteration of idiom without grammatical change may cause it to be preposed.

General.—The *m* which in Miwok is the base of the independent pronouns of the second person is the usual designation of this person in California. *K* for the first person is common in south central California, appearing in Miwok and Costanoan, Salinan, Chumash, the Tübatulabal branch of Shoshonean, and the southernmost or Buena Vista dialectic division of Yokuts. The elements of the Miwok suffixes are on the other hand without parallel: *m* and *t* for the first person, *n* and *s* for the second, and *s* and *k* for the third, are quite unique in California.³⁰

The coexistence of and yet thorough difference between the independent pronouns and the pronominal affixes in the interior dialects of Miwok, is almost without parallel among the languages of California, except Wiyot and Yurok; and even in these the possessive affixes resemble the independent pronoun. The restriction of pronominal affix forms to a suffixed position is also unusual. Most the languages that resemble Miwok in the possession of case-suffixes and in general phonetic character, treat

³⁰ Athabascan *n* of the second person is the only similarity. It is probably necessary to travel as far as the Dakota before encountering *m* for the first and *n* for the second person,—and then as prefixes.

their pronominal elements as independent words, or at most proclitics or enclitics. Even the affixing languages of California, such as Athabascan, Washo, Chumash, Salinan, and Shoshonean, prefix. The only suffixing languages, besides Yurok and Wiyot in northernmost California, which are of quite a different type of structure and phonetics, are Yana and Wintun, which latter further resembles Miwok in that its suffixed series has nothing in common, in form, with the independent pronoun.³¹ The Wintun suffixes are, however, much more restricted than those of most Miwok dialects, being only subjective, and alike in singular and plural.

COSTANOAN CONNECTIONS.

In view of the fact that the Miwok and Costanoan languages now seem more probably than not to be genetically related as one stock,³² a comparison of their pronominal forms is desirable.

It is clear that as the Miwok interior dialects are compared with the Costanoan idioms, there is a fundamental difference in their employment of pronominal elements, Miwok being elaborately synthetic and Costanoan almost purely analytical. As long as the interior Miwok languages were the only ones known, the divergence on this point seemed so insuperable as to render more than doubtful any lexical evidence as to relationship. It appeared that the suffix forms constituted the original pronominal apparatus of the Miwok language, and that its independent pronouns, which are obviously identical with those of Costanoan, had been borrowed from that family.

The acquisition of material in the Coast dialect has however altered the situation, in revealing a language which is undoubtedly Miwok, but more nearly analytic than synthetic in its employment of pronouns. There can thus no longer be objection to a recognition of Costanoan as a branch of Miwok on the score of divergence of pronominal usage, especially as even Costanoan is not absolutely free from traces of synthetic forms.³³ As the two groups of dialects agree in all other revealed points of essential structure, and as they hold a certain lexical element in

³¹ R. B. Dixon, in Putnam Anniversary Volume, 468, 1909.

³² Present series, IX, 237-271, 1910.

³³ Present series, II, 72, 73, 1904.

common, their relationship can not be questioned except on the ground that the etymological identities may appear insufficient in number. In this case the structural resemblances might be explained as due to contact and influence, and common words as borrowed. Both groups of tongues are however still imperfectly known, and as they agree in perhaps one fourth of the words which may reasonably be assumed to have been determined as stems, it is likely that only fuller data are needed to increase this proportion. At any rate there no longer exist any grammatical obstacles to a belief in the genetic unity of the two divisions.

The conditions existing within the larger family as to pronominal matters, may be described thus. The Sierra Miwok dialects have a full array of synthetic forms, and analytic or separate pronouns are superfluous and emphatic. The Plains dialect is also synthetic, but may possess a somewhat reduced apparatus. Coast Miwok is between a synthetic and analytic stage. It lacks most of the Sierra forms, and it is difficult to decide whether its elements are prefixes or particles. Costanoan is distinctly analytic, employing ordinarily only the independent pronominal stems, but it retains vestiges of synthetic forms in the imperative.

It seems most reasonable to consider the Sierra synthetic structure as more original, and to regard this as having been lost in successively increasing degrees, but never entirely, in Plains, Coast Miwok, and Costanoan. Theoretically the opposite explanation is equally logical, but does not fit the facts as well. If the synthetic machinery were a late growth, it would hardly be so uniform. Compare the Coast Miwok second and third persons in *n* and *c*, which are quite isolated in that dialect but recur in the interior. Lexical divergence proves the Coast dialect to have been detached from the interior for a considerable period. Identical forms could hardly have originated independently in two separate regions.

That Coast Miwok *k* of the first person on the other hand has its source in the independent pronoun *kanni* and not in the Miwok affix forms *t* and *m*, proves nothing, for once a loosening of the synthetic system has set in, it is not unnatural that

abbreviated forms of the independent stems should begin to replace the affixal stems even before these have become entirely analytical.

Assuming then, a Miwok-Costanoan family, and the chain of relationship, as established on structural and on the whole confirmed on lexical grounds, to be : Sierra, Plains, Coast, Costanoan, it is evident that the interior Miwok dialects, which have generally been thought to be geographically in closest contact with the Costanoan languages,³⁴ are linguistically the farthest removed from them. The gap is bridged by the Coast Miwok dialects, which lie to the northwest of both. This fact is of primary importance in any speculation concerning the origin or movements of the stock.

It is curious that an analogous situation is encountered among the Yokuts. The Indians of that family lived in parallel and contiguous stretches of mountain and plain, each division possessing its own group of dialects. In the south the foothill and valley dialects are markedly different. As one proceeds north, the divergence becomes less marked, and finally is almost effaced. In this family also, therefore, the chain of relationship revealed by language runs from south to north and back to the south, so that the most divergent dialects are in geographical contact. The Yokuts division into mountain and plains groups, which are linked only at the northern end, can be paralleled by a geographical separation of the Miwok-Costanoan family into an interior and coast division, also united at their northern extremity.

DEMONSTRATIVES.

Demonstratives are developed from three stems: *ne* and *no*, *this* and *that*, and *i-*, appearing as *ini*, *iti*, *ika*, *isa*, which apparently is a radical of reference rather than of direction or distance, and therefore possesses somewhat the character of a personal pronoun of the third person.

Interrogatives and relatives are fairly constant, the principal stems being *man*, *who*, *min*, *where*, and *hi* or *ti*, *what*.

³⁴ They may really have been separated from them by a strip of Yokuts territory embracing the west side of the lower San Joaquin valley.

| | <i>SS</i> | <i>CS</i> | <i>NS</i> | <i>P</i> | <i>C</i> | <i>L</i> |
|-------|-----------|-----------|-----------|----------|-------------------|----------|
| this | ne | ne, ne-al | nei | ne | ni | |
| that | | no | noi | no | no | |
| that | ini | ini | | | it.i | iti |
| | i- | isa- | isa- | i- | | |
| | | | ika- | | | |
| | | imo | ima- | | | |
| who | mana | mana | mana | manti | manti | |
| where | | mini | mini | mini- | eke ⁸⁵ | |
| what | | tinu | ti'nü | hiti | hinti | |

In Central and Northern Sierra all these stems take the plural suffix *-ko*, the objective *-i*, and the possessive *-ñ*, though the latter is added to *ne*, *no*, and *ini* only with the addition of *-cu*: *ini-cu-ñ*. Central *-al* seems to be a separate particle denotive of animateness; it follows case and number endings: *ne-su-ñ al*, *ini-k al*, *ne-ko-i al*.

In the Plains dialect the suffix *-cu* appears in both subject and object: *no-cu*, *no-cu-te*, *i-cu*, *i-cu-te*. Other forms are *no-ko*, objective *no-ko-te*, those; *ne'im*, here, *no-m*, there, *mini-m*, where; *hiti-te*, what, objective.

Coast Miwok *ni-t-u*, this, is perhaps the equivalent of Plains *ne-cu*. Other forms are: *ni-to*, here; *no-to*, *it-i-to*, there; *it-i-ko*, they; *hinti-te*, what, objective; *eke-m*, from where; *eke-to*, at where.

VERB.

The verb formatives, which are all suffixes, show a similar range in all Miwok dialects and in Costanoan, but the individual suffixes used differ in the several dialects. Many of the blanks in the accompanying list can no doubt be filled. The Central material contains no data on causative, desiderative, continuative, or passive, the Northern no noun-agent forms, and the Plains and Coast forms are still more incomplete.

| <i>Meaning</i> | <i>C. Sierra</i> | <i>N. Sierra</i> | <i>Plains</i> | <i>Coast</i> |
|----------------|------------------|-------------------|---------------|--------------|
| causative | | -ne | -nuku | -ne |
| desiderative | | -ce, -kce, -cainö | -caiku | |
| desiderative | | | | (welak) |
| continuative | | -imi | | |
| purposive (‡) | | | | -ukna, mt.o- |

⁸⁵ Compare Wintun *heke*, who, where.

| | | | | |
|----------------------------|------------------|-------------|-----|-----------|
| potential | -ni | -uni, -ani | | |
| negative | -ew-añ-kö | -añu | | |
| negative | -ewa | -cewa | | |
| reflexive | -po-sa | -bo, -bo-sa | | -ne-po(?) |
| past | -se | -ce, -cu | | |
| past | -ke | -ke | -ka | -ka |
| past | | -naka | | |
| past | -kesö | -kcö, cak | | |
| present | -tcö | | | |
| recent past | -tcö-sa | | | |
| recent past | -tcö-ke | | | |
| past | | | -ma | |
| past | | | -tu | |
| past or present | -ñe, -na, -ñe-na | | | |
| present | | | | -up |
| future | -i | -i | | |
| future | | | -ca | -ta(?) |
| passive | | -si, -pa | | |
| intransitive verbifying | -ñe | -ne | | |
| noun agent | -pe | | | -api |
| excessive noun agent | | | | -ak |
| while | -mu—i | | | |
| after | -se—i | | | |

Southern Sierra.—Suffixes of mode and tense are almost unknown. Gatschet gives -t as indicating a preterite, but it is not certain that this is not the suffix expressing plurality of the object. For the future he gives -iku or -eku. His text contains the Central Sierra past suffix -ñe.

Central Sierra.—The “potential” has conditional force:

nöka-ni-s wö-ewa-yi-t, if it rains I will not go
 tokla-ni-t-an howat-it, if you hit me I shall run
 takya-ni-ma-s yöna-im, if he strikes us we will kill him

The interrogative is a, identical in use with the Northern form.

The forms -mu—i, while, and -se—i, after, contain the pronominal suffixes. As these otherwise follow all modal and temporal affixes, the final -i is likely to be the objective case-suffix, used to denote clause subordination. The use of the possessive case for a similar purpose, as in the Northern dialect, is illustrated in the Central text below.

Plains.—The preterite suffix *-wa* of other dialects has in this language a past usitative force. The negative is expressed by the independent preposed particle *ket*, similar to Southern Sierra *ken*, and Costanoan *ekwe*, *kue*.

Coast.—The desiderative *welak* is itself a verb, which precedes or follows the verb which it accompanies. The negative is a preposed particle *ela* or *opu*. The suffix *-ukna*, and the preposed particle *mt-o*, may be purposive, future, or andative, having been obtained with the meaning “to go to” do something. Interrogation is indicated by the particle *op*, usually *op-un* with the pronoun of the second person.

A common suffix, which has not been included in the preceding list, is *-pu*, used only when an object accompanies the transitive verb. It may be pronominal—compare *-pu* of the third person plural in the interior,—or allied to the reflexive *-po*, *-po-sa* of other dialects. The Coast reflexive *-ne-po* seems to contain the same element.

The analytic character of the Coast dialect is reflected in the tense-suffixes as well as in the affixal pronouns. The past *-ka* and present *-up* are commonly suffixed or postposed, but occasionally precede the verb.

nitetei ka-k-etc, yesterday I slept
ka-n-iolum, you ate
manti-ka waya-mi, who gave it to you?
kenum-up-c-yolum, constantly you eat

As *-ka* or *-ke* occurs in the interior dialects, it is clearly an affix which has become an enclitic on the Coast, or an originally separate particle which has been degraded into a suffix in all other dialects, according as the several Miwok languages may have developed in an analytic or synthetic direction.

COMPARATIVE ETYMOLOGY.

Names of groups of people end in *-tei* in the Southern Sierra dialect, in *-umni* in the Plains.³⁶ In the three Sierra dialects derivatives signifying persons are formed from terms of direc-

³⁶ This ending, which appears also in Yokuts and Maidu, has been discussed in the present series of publications, VI, 340, 379, 1908, and in the *American Anthropologist*, n.s., VIII, 662, 1906.

tion by the addition of a vowel, usually -o, accompanied sometimes by modification of the final consonant. In the plural, with the ending -ko or -k in the north, and -ya in the south, such terms become designations of groups of people.

teummate, south; teummet-o, plural teummet-o-ko, or teumet-o, plural teumte-ya, southerner.

damman or dammalin, north; dammul-e, plural dammul-e-k or damlu-ya, northerner.

hisum or hisuwit, hihum, east; hicut-o, plural hicut-o-ko or hi't-o-ya, easterner.

olowit or olowin, west; olowit-o, plural olowit-o-ko or olwi-ya, westerner.

On the Coast the vowel is omitted: kan-win-ko, northerners; compare tamal-ko, bay people.

A diminutive found on such words as boy, girl, old man, old woman, coyote, is -teki, -teu in the South, -ti in Central and Northern Sierra, -tei in the Plains. -mbula occurs with diminutive meaning on several inanimate nouns in Northern Sierra.

In the Southern Coast dialect many nouns in the absolute form or subjective end in -s, which is ordinarily lost in the objective and is lacking from Western Coast and Lake.

man, tai-c, objective tai-t-u
 woman, kulei-c, objective kulei-t. (Maidu küle)
 old man, oyi-s, objective oyi-t.
 old woman, potei-s (Barrett), objective potei-t.
 basket, ewi-c, objective ewi-t.

A noun-ending -s or -c is frequent in several Costanoan dialects.

Adjectives of color consist, in all dialects of the interior division, of monosyllabic stems which are finally reduplicated. To the reduplicated syllable is appended an -i in the Sierra dialects, the vowel of the stem in Plains.

Southern Sierra: yodj-odj-i, red
 tuh-uh-i, black
 Central Sierra: gul-ul-i, black
 gel-el-i, white
 Northern Sierra: wet-et-i, red
 Plains: pud-ud-u, white
 kul-ul-u, black
 wet-et-e, red

Coast adjectives of color end in -ta: ulu-ta, red, mulu-ta or loko-ta, black, pota-ta, white.

Duplication occurs in color adjectives in the Lake dialect: mul-u-mul, black, awa-awa, red. Other adjectival stems appear in duplicated form in all dialects: Plains, wel-wel, good, tcu-tcu-i, sweet; Northern Sierra, tcu-tcu-yu, sweet; Central Sierra, ut-ut-i, large; Lake, tsum-tsum, sweet, koi-koi, bitter; Coast, un-un-i, large, kai-kai, bitter.

PHRASES.

Southern Sierra:

yohe, kill!
 yohu-ma, I kill
 yohu-musu, I will kill you
 kani yoha-k oxxa-i, I kill a woman
 hüñe-mu, hiña-mu, do you see me?
 hüñe-mesu, hiña-musu, I see you
 hilai-ñi-ma, do you fear me?
 hilai-ak-ak, I fear
 hakai-ak-ak, hulwa-k, hungry
 oxxa-ñ utcu-hu, woman's her house
 teuku-ñ utcu-hu, dog's his house
 ne, this, ne-to, here
 ini, that, ini-m, ini-to, there

*Central Sierra:*³⁷

teuku-kan yölla issakö-i naña-i, my dog bit that man
 ne'i naña yöna-na teuku-i-kan, this man killed my dog
 teuku-ñ suki-s, dog's tail-his
 teeak teuku-i-kan sawa-s, I hit my dog with a stone
 sawa-i hata-na-k kikö-m, I threw a stone in the water
 wani utcu-t, in the house
 mana-li onotu-ton, with whom did you come?
 öpö-ti-li onotu-m, I came with my father
 ne al halöñe, he is sick
 halöñe-ke-sö-t, I was sick
 mii ösemö halöñe-i-n, you will be sick
 oti-m halöñe-ewañ-kö-ti, we two shall not be sick
 oti-tei-k tunna-na-ktite, we are cold
 mii tunna-se-n, you were cold
 ösemö tunna-i-ko, they will be cold
 haqai-ñe-ke-m oti-m, we two were hungry
 ösemö haqai-ñe-i-k, he will be hungry
 nawatö-s-a mii, are you tired?
 nawatö-m, I am tired

³⁷ Dr. R. B. Dixon.

sōyō-sa-k mos, I see you
 issakō sōyō-teō-t, he sees me
 hani miko-i tokla-motos, I hit you
 tokla-n, he hits you
 masi tokla-ni-mas, we are hitting you
 masi sōyō-ñe-na-k-ni-mas, we see you
 tekmo-po-sa-s, you are kicking yourself
 tekmo-msi-tos, ye kick each other
 mana-i tokla-na-s, whom did you hit?
 tinu ne, what is this?
 tinu-s takya-na-n, with what did you hit?
 tōye-mu-i wōsa-k, while he slept, I went away
 owō-se-te-i luk-sa-s, after I ate, you came
 mulli-se-te-i tōye-na, after I sang, he slept
 tōye-ku-m, I am sleepy
 tōye-ti, let us sleep
 mii a howatu-n, did you run?
 kani sōi-ñe-na-k ne-su-ñi howata-s, I saw him running
 ne-al sōye-ñe-te howata-kan, he saw me running
 mulli-pe, singer.
 kalaf-pe, dancer

Plains:

tcama-caiku-m, I wish to eat
 tcama-ma-t, I ate
 tcama-ca, he will eat
 icu tcama-mu unu, he eating-from comes
 no-ku uccu-p, they drink
 unu-m uccu-mu, I come from drinking
 ucce-te, drink, ye!
 uccu-ca-tokun, ye will drink
 pata-t, strike me!
 pata-muk, strike us
 kanni pata-cima, I strike you
 heat-nuku-cima, I make you strike him
 heat-nuku-caiku-ma, I want you to make him strike
 icu pata-n, he strikes you
 ket heta-cima, I do not strike you
 tcica-tu-n, you saw
 ket kiwai-m tcico-te, not can-I see
 hiti-te ono-nu, what are you doing?
 umiy-a tcama-te, do you like food?
 ket umiy-im, I do not like it
 manti anit-u-ni, who gave it to you?
 mini-m okicca-tu-n, where were you born?
 lema-ka-p, they used to dance
 hana-ka-p hanepu-te, they used to have a sweat-house
 ütüm-tei, old man
 ole-tei, ole-na, coyote
 haye-m cewole-xnu, near the ocean (at-proximity ocean's)

öcöö-xnö kotca-ic, woman's her house
 cawe-nö haulo-co, friend's his arrow
 teloko-te epali-te, three jackrabbits (obj.)
 öcööc-itc, woman (obj.)
 öcööx-mo, with the woman
 mini-mu, from where?
 mi'-m kanni, you-with I, you and I
 ne-im kanni, he and I
 ata-tei-m-ka, brother-with-my

Southern Coast:

ele'u-api-ko, fishermen
 mit-a-ko-n kotca, Indians' house
 kotca-n wea, inside the house
 kotca-n lile, on the house
 kik hawin-to, near the water
 kik-to, in the water
 hewai-to k-uyeno-ke, I was born at the beach
 k-oni-ni it-i kotca-mo, I came from that house
 luppu-c, with a stone
 kono-su, with a bow
 tumai-to, with a stick
 k-ute-ka-mi, I saw you
 k-oke-ka-t, I struck him
 us-koya-ka, he sang
 akal-utc kon kawul-o-ke, long-ago they used-to-dance
 uc-yolum-up, he eats
 k-welak-op-iolum, I want to eat
 un-hinti-po, what have you?
 k-ucu-pu kik, I drink water
 k-ute-po no-t. kulei-t, I see the woman
 uc-elli-po-mako, he sees us
 oke-mmi kanni-te, hit me!
 elli-mmi kannü, look at me
 miko koya-mmi, sing, ye!
 ule-mi-kan, free me!
 hinti-te-op-un elli, what do you see?
 op-un elli-mako, are you looking at us?
 op-un oke ute-s kawul, can you see at night?
 yolum-api, comedor
 yolum-ak, comelon
 mat-aw-ak, hablador
 kenum-utc-opu-k cukum-welak, constantly I wish to smoke
 (i)kon kawul-ukna awe, van a bailar mañana
 k-unya ok-nepo, I struck myself
 c-yolum-ne-t, he made him eat
 c-kawul-ne-we-ukna-t, he made him dance
 nako-mt-o koya, vamos a cantar

TEXTS.

Dr. Dixon secured a short text in the Central Sierra dialect, which is here given, followed by Gatschet's published specimen of the Southern idiom, and a Lord's Prayer in Coast Miwok. The latter occurs in two versions,³⁸ which however are clearly derived from a single source. They have been combined and translated. Gatschet's text has been slightly systematized and conformed in orthography to the present work; the internal structure of words has been indicated so far as possible by hyphens; and the translation has been rendered somewhat more literally than in the original. Peculiarly, all the existing Miwok texts are very similar in brevity and narrowness of range, and, excepting the Lord's Prayer, even in subject matter.

CENTRAL SIERRA DIALECT.³⁹

| | | | | |
|----------------------------------|-------------------------------------|--|--------------------------------------|---------------------------------------|
| wunutö-sö-t I went hunting | olo-win below | loklo-m to plains | owöya-i deer. | keñe-i One |
| tuku-se-t I shot | owöya-i deer. | itanok Then | hakai-ñe-pa-k I got hungry, | woule-t I came home. |
| keñe-mei Once | wöe-sö-m we went, | kosumoyi-ke-sö-m we fished | tamal-in north | |
| wakal-mö to the river. | töyese-sö-m We slept | motam half way | keñe-i one | kawöle-i night. |
| kaulupa-i In morning | imo-ok from there | wöe-sö-m we went | isak-mö to that. | höya-ke-sö-m We got there. |
| itanok Then | kosumai-sö-m we fished. | ewa-ka-sö-m ⁴⁰ We got none | kosumo-i fish. | hakai-ke-sö-m We were hungry |
| ewa-ñe-pa-k when we got none, | enatosu and | hoiyenon next day | kosumoyi-ke-sö-m we went fishing. | itanok Then |
| wele-sö-m we caught | temoka-i six | kosumo-i fish | enatosu and | wooltu-me-ñ ⁴¹ returned |
| hinsaiemes at noon. | wuntöyi-ke-sö-m We went hunting, | öwöya-i deer | keñe-i one | tökö-tu-me-ñ our-killing |
| ötöti large | oyise-nepai four-prong | sumitö-i fat. | itanok Then | wilu-se-sö-m we were filled. |

³⁸ Duflot de Mofras, II, 391.³⁹ By Dr. R. B. Dixon.⁴⁰ Compare the negative suffix -ewa.⁴¹ "Of our returning."

SOUTHERN SIERRA DIALECT.⁴²

| teumte-ya Chumteya | uteu-pu live | aiye-to on flat | hale-ya-t in mountains. | weyänu Plant | | |
|---------------------------------|----------------------------|-------------------------|--------------------------------|----------------------------|------------------------------|----------------------------|
| maise-i ⁴³ maize, | ken not | weyänu plant | papas-i potatoes, | halgi hunting | uo-po they-eat | |
| hunema fishing. | ne-ok These | natu accurately | tugo shoot. | i-ok They | waka ⁴³ cattle | |
| warai-ko ⁴³ sheep | oni have. | | | | | |
| utu Thick | hiso-k hair | tuhuhi black, | hugu-to-hu on their head. | hunto-ya-hi Their eyes | | |
| tuhuhi black, | nito-hu their nose | teinipitki short | oyani large, | hupeto-ho their neck | | |
| teinipitki short, | laut skin | yutotei brown. | upha Swim | teumte-ya Chumteya | wakalmato-t in river, | |
| oha-ya women | upha swim, | esele-te children | aitu all. | keñe ⁴⁴ Some | onadju fast | |
| huato run, | keñe ⁴⁴ some | hapka climb | lama-i tree. | ne-ok These | ken not | suku paint |
| hawa-t on rock, | ken not | suku paint | laut-ü-i skins. | utu Many | poxau wear | hasanu-i abalone-shell, |
| keñe ⁴⁴ some | kutcöte bone | humna-ho their-bead, | keñe ⁴⁴ some | kumsol shell | ulato long | |
| humna bead, | ulato long | tissö-no finger. | suku Paint | öki-ta-ho on their chin | troxot three | |
| sekea-hu their- (?) | awuha needle | kula coal. | ewuya ⁴⁵ Without | nawasu-hu their dresses | wu go.? | |
| aitu All | pama smoke | kahu-i tobacco. | kanni I | hui-ñe-ma I have seen | miwi people | ken not |
| kotan distant | uteu-yu live, | tolle-m on earth | aitu all | tuye-nu sleep, | oisa four | oyani large |
| huhu-i wood | huyu-t in fire. | oyani Large | uteu-t house-in | uteu-pu they live, | tolle-s with earth | |
| hame-pu they cover, | huyu fire | kaweni-m in-middle, | tulu-ma through hole | haksi smoke | wuksa goes. | |
| keñe-t In one | uteu house | aitu all. | tamu Differently | lu-pu they speak. | | |

⁴² Gatschet, work cited.⁴³ Spanish.⁴⁴ Literally: "one."⁴⁵ Compare Central Sierra dialect negative suffix -ewa.

SOUTHERN COAST DIALECT.

Chocouyem, Rio del Sacramento: Api maco su lileco ma nénas
 Joukiousmé, San Rafael: Apí maco sa liléto manénas

mi aués omai mácono mi taucuchs oyópa mi tauco chaquenit
 mi aues onía macóno michauka oiopa mitauka chakenit

opú neyatto chaquenit opu liletto. Tu maco muye genum ji naya
 opu negato chakenit opu liléto tumako muye quenunje naya

macono sucuji sulia mácono masócte chague mat opu ma suli
 macono sucuji sulia macóno masojte chake mat opu ma suli

mayaco. Macoi yangia ume omutto, ulémi mácono omu incapo.
 mayaco maco yangía ume omut ulemi macono omu in capo.

Nette esa Jesus.
 Netenti Jesus.

TRANSCRIPTION AND TRANSLATION.

| | | | | | | |
|------------------------|----------------------|---------------------|----------------------|---------------------|---------|---------------------|
| api | ma-ko | su | lile-to | manenas | mi | awes |
| father | our | | sky-in, | (sacred) | thy | name, |
| oni-a ¹ | mako-no ² | mi | taukute ³ | oyo-pa ⁴ | mi | tau-ko ⁵ |
| come | our | thy | (rule), | (be done) | thy | (wills) |
| teake-nit ⁶ | opu | wea-to ⁷ | teake-nit | opu | lile-to | tu |
| like | | earth-on | like | | sky-in | |
| mako | muye | kenum | hi ⁸ | waya | mako-no | suku-hi |
| us | all | constantly | day | give | our | , |
| suli-a ⁹ | mako-no ² | ma-sokte | teake-nit | opu | ma | |
| forgive | our | our (sins) | like | | we | |
| suli | ma-ya-ko | mako-i | yañi-a | huma | omu-to | |
| forgive | our (debtors), | us | (lead) | not | bad-to, | |
| ule-mi | mako-no ² | omu | inkapo ¹⁰ | nete | ese | Jesus |
| free-thou | our | evil | | | | |

NOTES.

- 1 The suffix of oni-a reappears below in suli-a and yañi-a, possibly also in oyop-a.
- 2 Perhaps the possessive mako-n, our; the context seems to demand "us."
- 3 Readings taucuchs and chauka; perhaps confusion with following tauko.
- 4 Stem perhaps oyo; a passive suffix -pa occurs in Northern Sierra Miwok.
- 5 Probably plural in -ko.
- 6 Teake mako, asi como nosotros; teake-tu taic, like a man; teake-te hayuca, like a dog; opu recalls the present-tense suffix -op.
- 7 Readings neyatto and negato for ueyato; wea is earth.
- 8 Hi, sun, day.
- 9 Suli is literally to pity. For the suffix -a see note 1.
- 10 Hinkapo, cinkapo, lo hizo.

SUMMARY.

In most respects Miwok is a language of the analytic and uncomplex Central Californian type. This appears in its simple phonetics, simple verb and sentence-structure, the presence and nature of case-suffixes, and the character of the plural in the noun. Adverbial, spatial, and instrumental ideas have not been found to be expressed by affixes to verbs. Complex derivational and etymological processes—so-called polysynthesis,—reduplication, and vowel change, are little developed; the principal structural device being suffixation.

These characteristics are common to all Miwok dialects and are shared by the Costanoan languages, which, on lexical considerations, are probably to be considered as genetically related to Miwok. In pronominal elements of both nouns and verbs, and to a certain extent in the modo-temporal affixes of verbs, there is however a wide difference between the interior Miwok languages on the one hand and the Coast Miwok and Costanoan dialects on the other, the former being suffixing and synthetic, the latter preposing and analytic. The synthetic dialects seem to be more representative of the original structure of the language. Their most pronounced peculiarity is the possession of three distinct series of subjective pronominal suffixes of verbs, each restricted to use in connection with certain suffixes of mode and tense. All Miwok and Costanoan languages are entirely without prefixes.

POMO.

The territory of the Pomo Indians is south of that of the Yuki, and centers about the present Mendocino, Sonoma, and Lake counties, of which it comprises the greater part. It has recently been fully described in a paper published in this series by Dr. S. A. Barrett, who has in this connection also made an exhaustive determination of the dialectic divisions of the family. These are seven in number, with one additional slight sub-dialect. A comparison of vocabularies of the seven dialects shows the following degrees of affinity among them. The Northern and Central dialects, which are but little differentiated, seem to represent most nearly the original form of the language, as the other dialects resemble these two more nearly than one another. Least divergent from the Northern-Central form of speech are the Eastern dialect and a group consisting of the Southwestern and the Southern dialects, with the additional sub-dialect of the latter. The two most divergent dialects, the Southeastern and Northeastern, are spoken in territories most remote from the heart of the Pomo area, and by people in contact with foreign languages. The Northeastern is probably a direct development from the Northern-Central group, and in a different direction from the Southeastern, for the two dialects have less in common with one another than with any others.

The material here presented was obtained in 1902 and 1903 from Raymond Brown and Thomas Mitchell, and is from the Eastern dialect, spoken on the shores of the greater part of Clear lake. Dr. Barrett's vocabularies show that this dialect differs from the Northern and Central almost as markedly in verbal endings as in vocabulary. In fact it seems that we have really to reckon with seven Pomo languages rather than mere dialects.

Pomo belongs to the Central Californian morphological type of languages characterized by structural transparency and failure to use pronouns as grammatical machinery. It resembles Yuki in this regard. The differences between the two linguistic

stocks are however great. Yuki uses only suffixes, Pomo employs prefixes and suffixes. Pomo not only possesses whole classes of affixes that have no parallels in Yuki, such as verbal instrumentals, but uses its affixes with wider and at the same time more concrete meaning than the majority of comparatively vague Yuki suffixes possess. Special features of Pomo, such as a sex gender, are lacking in Yuki. The nature and employment of demonstratives are very different. On the whole the two languages have but few points of structure in common, other than such as are of a general Central Californian character.

Pomo often shows an unexpected richness of structural development. Thus the noun, where we should perhaps first look for it, is ordinarily without any designation of plurality. But a few substantives denoting persons show different stems for the plural. Several others possess a plural formed by a suffix -a. A considerable number of verbs have different stems in singular and plural. Several pairs of very frequently used suffixes of verbs express respectively the singular and the plural of the subject. Relatives by marriage are addressed in the plural as a sign of respect—a trait found also in the nearby southern Athabaskan languages by Dr. Goddard.⁴⁶ The plural is also expressed in animate nouns by the use of certain demonstratives. The pronouns show plural forms. Altogether the expression of plurality is much more developed than might at first sight appear, or than is the case in Yuki, where nouns are better provided with suffixes of plurality. A similar condition exists in regard to the expression of other grammatical ideas.

PHONETICS.

The phonetics of Pomo are simple in that the language contains no sounds that are obscure or that do not occur in a considerable proportion of the languages of mankind, and in that the sounds are little modified by such processes as composition and suffixation. There are no combinations of more than two consonants, and even these quite clearly do not appear in stems.

⁴⁶ P. E. Goddard, *Kato Texts*, present series, V, 143, 1909. See also E. Sapir, *Yana Texts*, *ibid.*, IX, 101, note 150, 1910.

Dr. Barrett has discussed the phonetics of all the Pomo dialects. Certain differences between his statements and those made here are explained by the fact that only one dialect is here presented. Other differences are individual, the result of two independent inquiries, neither of them final, and of slightly divergent orthographies. While Dr. Barrett's renderings are probably more correct, they could have been substituted for the author's only in part; for the sake of consistency it has therefore been necessary in the present account to retain the forms originally written by the author.

The vowels of the Eastern dialect are a, e, i, o, u; e and o being open. The vowels are sometimes short and obscure; never nasalized, strongly aspirated, or organically of doubtful quality.

The most frequent vowel is a, next i. The proportionate occurrences are a 40, i 25, e 15, u 10, o 5, ai 5 times. It will be seen that front vowels are more common than back, and i and u than e and o.

The consonants include series corresponding to p, t, te (English ch), k, and q (velar). The p, t, and te series include surd, sonant, nasal except of course for te, and the stressed or fortis surd represented by a following apostrophe. The k series comprises surd, sonant, and fortis, lacks the nasal, but includes both surd and sonant fricative, x and g', the latter an orthography that has but little justification but which it has seemed best to retain for the sake of consistency and because no more appropriate character is included in the available facilities for printing. The same sounds were written in the q series: q, g, q', X, g'; but it is doubtful whether all actually occur. A t-like Yuki palatal t-, almost intermediate in sound between t and te, also d- and t-', were occasionally heard and written, but must as yet be regarded as doubtful. Ts and dz were also heard, but they may be only te and dj. S and c (sh) bear the relation usual in Indian languages. Their sonants j and z were written, but are denied by Mr. Barrett. R is trilled and sometimes related to t. Ordinary l calls for no comment; l is surd l, not affricative, and is Dr. Barrett's L. Y, w, and h occur; and two sounds written hy and hr seem to represent simple sounds, either

distinct or only occasional modifications of initial *y* and *r*; compare *l*, originally written *hl* and *xl*.

Sonant stops were not heard finally; surds between vowels were frequently heard as sonants: *mib-al* for *mip-al*, *beg-ibax* for *bek-ibax*. These phenomena may partly be due to Indo-European apperception, but they seem to have some Pomo foundation, as *mit* becomes *mir-al*, evidently for *mid-al*. Dr. Barrett also writes no final *g*, *d*, or *b*.

Words most frequently begin with consonants. Three words out of four end in a vowel, which may be taken also as the proportion in stems. This fact alone accounts for much transparency of word structure. At least *k*, *tc*, *t*, *p*, *n*, *m*, *x*, *l*, *r* occur finally.

There is no system of vowel mutations, but the vowel of a suffix is sometimes assimilated to that of the stem, especially in verbs. Thus *-hiba*, preterite, becomes *diko-hoba*, *garma-haba*, *kuhu-huba*, *g'ane-heba*.

Ui, eye, becomes *yu-xa*, eye-water, tears

The accent of words is rather well marked. In nouns it frequently falls on the last syllable: *balai'*, blood, *qala'l*, liver, *cima'*, ear, *xawa's*, chin, *masa'n*, terrible, *musu'*, hair. This would be impossible in Yuki. In verbs the accent is generally on the stem syllable, irrespective of the number of affixes.

GRAMMATICAL METHODS.

Internal modifications of stems do not occur as an expression of grammatical form. Reduplication is either etymological or confined to a few parts of speech, such as verbs, in which it expresses repetition or continuation. Position is pretty well fixed, the verb coming last, the object after the subject, a possessive noun, adverb, or subordinate clause before its grammatical regent. The principal means of grammatical expression is, as in most languages, affixation. Infixes have not been found; suffixes are more numerous than prefixes, but in the verb the latter are both frequent and important. About seventy-five affixes have been determined. Of these a third are verbal prefixes and a third verbal suffixes.

NOUNS.

The noun is formally as undeveloped in Pomo as in most American languages. Its principal affixes are a long series of adverbial postpositions or locative case-endings.

-u, in
 -xam, in, into
 -bai, in
 -kate, at, to, by, near
 -a, -ya, at
 -n, to
 -mil, to
 -l, -alal, -nalal, to, toward
 -awa, from, in
 -w-ina, on
 -yu, under
 -xo-wa, before
 -na-uwa, behind
 -ki, for
 -imak, in company with
 -i, -ya, -iyai, with, by means of

Examples:

me-awa, from here
 ba-y-awa, from there
 me-a, here, at this
 xale-na, on tree
 bihyatsuxai-yai, with fingers
 bo-l, westward
 gayu-l, upward
 dano-nalal, up-hill-ward
 mo-bai, in a hole
 gai-na, on the ground
 xo-xam, in the fire
 xabe-wina, on the rock
 xabe-yu, under rock
 xabe-i, with a stone
 bihya-i, with the hand
 musu-i, with hair
 xai-yai, with a stick
 tee-una, on a chair
 ga-u, in the house
 ga-kate, next to the house
 ga-xowa, before the house
 ga-nauwa, behind the house
 ga-u-wawa, inside, indoors
 ga-u-waki, from in the house
 hegibax napo-mil, to their own town
 wi-wina lok-a, fell on me
 gayu-lal galina-lal, up to the sky

As will be seen, these endings are suffixed also to pronouns, demonstratives and adverbs. When an enclitic demonstrative follows the noun, this particle and not the noun receives the case-ending.

mo-he-bai, in the hole
 xa-he-bai, in the water
 la-he-mak, together with the sun
 xo-he-mil, into the fire
 masan-ek-himak,^{46a} with a white man

Such locative endings as these are common in Central Californian languages, but are usually accompanied by two or three syntactical case-suffixes, as in Yuki, Maidu, Wintun, Yokuts, Miwok, and Shasta. In Pomo, syntactical case-suffixes are absent, except on names of persons and terms of relationship, which share a possessive *-ibax* and perhaps an objective *-al* with pronouns and demonstratives.

wimaca-ibax ga, my father-in-law's house
 sulig'am-ibax ga, Sulig'am's house

A vocative of terms of relationship is formed by *-a*.

mex-a, older brother!
 tsets-a, mother's brother!

Expression of plurality in the noun by a suffix is confined to a few nouns denoting persons. The plural of animate nouns is usually expressed through accompanying demonstrative elements.

person, gauk, pl. hiba-ya
 woman, da, pl. g'ara-ya; ya-g'ara, deserted wife
 old woman, da-g'ara, pl. mag'ateur-a.
 old man, butsi-gi, pl. butsi-a, butsi-yaya
 young man, cela, pl. cela-ya
 relatives, g'ametegi-a

PRONOUNS.

The Pomo pronoun is typically Central Californian. It is never incorporated, has no abbreviated or affix form, is syntactically a noun, and shows a regular development for person, number, and case. As in Yuki, there is no real third person, demonstratives being used.

^{46a} The h of *-himak* probably represents an aspiration of the preceding k. Compare notes 49 and 50.

| | <i>Subject</i> | <i>Object</i> | <i>Possessive</i> |
|-------|----------------|---------------|-------------------|
| 1 | ha | wi, u | wa-x |
| 2 | ma | mi | mi-bax |
| 3 m. | mi-p | mi-p-al | mi-p-ibax |
| 3 f. | mi-t | mi-r-al | mi-r-ibax |
| 1 pl. | wa | wa-l | wa-ibax |
| 2 pl. | ma-l | ma-l | ma-ibax |
| 3 pl. | bek | bek-al | bek-ibax |

Mip and mit are he and she, if distant, invisible, or of indefinite reference; mep and met are used for proximity or visibility.

The pronouns are evidently derived from a stem wa for the first person and ma for the second; diversified by -al and -ibax for objective and possessive.⁴⁷ The singular objective formed by change of a to i is interesting. It may be due to a lack of separate stems for singular and plural and an unconscious desire to express the distinction. Such a feeling seems to have led to the modification of the first person to ha in the singular, and the adoption of the objective mal to indicate the subjective of the second person plural.

As evidenced by the examples already given, pronouns can appear with the locative case-suffixes of the noun. These are added to the objective forms of the pronouns.

As in Yuki, terms of relationship furnish the only exception to the rule that the pronouns are not abbreviated or affixed. The possessive pronouns used with such words are, again as in Yuki, prefixed and apparently objective in form.

With terms of relationship only:

my, wi-, wi-ma-
 thy, mi-
 his, mip-i ha-, mip-i ha-mi-
 our, wa-i ma-, wa-i-
 your, ma-i mi-, ma-i ha-mi-
 their, bek-i ha-, bek-i ha-mi-

⁴⁷ The forms given by Dr. Barrett in volume VI, page 64, of this series show that the Eastern dialect agrees with the others in having ma for the pronoun of the second person. For I and we the normal Pomo forms are a and ya, in place of Eastern ha and wa. Southeastern, the Lower Clear Lake dialect, alone has wi for we. This dialect is also the only one that seems to share with the Eastern the possessive suffix -ibax; Southeastern wibax explains the origin of Eastern wax. The other dialects show a possessive suffix -ke: au-ke, ke, my; mi-ke, m-ke, thy; ya-ke, our. Instead of mi-p and mi-t the usual Pomo forms for he and she seem to be mu and man. Compare the Northern Pomo forms given below.

For instance, *wima-mex*, my older-brother. The ordinary possessives are used only when possession is to be emphasized: two persons, each denying the relationship of the other to a third person, might say, *wax mex ba e*, my older-brother he-is.

DEMONSTRATIVES.

Demonstratives are numerous, frequently used, and important in Pomo. *Me* is this, *u* that. *Ba*, that, is more common and more indefinite than *u*, being often best translated by the English article, though almost always somewhat more specific of reference. It is used alone or added to *u* as *u-ba*. The apparently contradictory form *me-ba* has also been found, perhaps for *me-baya*, this there. An unexplained demonstrative *ku-ba* also occurs. *Me*, this, is the base of the pronouns of the third person singular, formed by the addition of *-p* for males and *-t* for females. For "it," *me*, this, or *ba*, that, is used, if expression is necessary. The original demonstrative form, and probably meaning, of the sex-differentiated forms, are better preserved in *mep*, *met*, indicating nearness; *mip* and *mit* appear to be modifications of these, with corresponding modification of meaning from demonstrative to pronominal significance, as is indicated not only by their expressing distance as opposed to the proximity of *mep* and *met*, but by their being less specifically endowed with deictic reference of any kind. This development of quasi-pronominal forms from the demonstrative expressing proximity is interesting because unusual. In Yuki and Yokuts the indefinite demonstrative of distance fulfills the function of the pronoun of the third person; just as Latin *ille*, not *hic*, grow into Romance *he* and *he*.

The demonstratives not only take the numerous locative and instrumental case-suffixes, but, together with the personal pronouns, are the chief recipients of the objective suffix *-al* and the possessive *-ibax*. This restriction of use of these two syntactical case-suffixes differentiates them in character from the corresponding case-endings of for instance Yuki, Maidu, and Yokuts. The length of *-ibax* makes it look little like a genuine syntactical case. The objective *-al* may be related to the directive-termina-

tive -l or -alal. The possessive has also a benefactive meaning: wa-x is my or for me.

me hee, this one
 ū gai he, that land
 ū-ba gai he, that land
 mēp ba hīkiba, he-is-the-one-who it did
 ū-ba-ya, there
 ū-mip, he, distant
 o-he-mip, he, more distant
 o-ya ba ihiba, there it was
 o-g'ai, that-one too
 me-g'ai, this-one also
 ū-ba-g'a balai ba e, there blood that is
 me ba balai he e g'ida-g'ida-k, that blood is red
 dakir u-ba gauk e, great that man is
 u-ba mi-kate hee, that one by you
 ū-ba-ibax, his
 ku-ba sandia hee dabekmakme, those melons divide ye!

The ordinary demonstratives precede the noun; but he and èk follow and are more or less enclitic. He, or hee, means the or this; its omission makes the noun translatable by its English equivalent with the indefinite article a.

When an animate noun is subject of a transitive verb, he alone is not used with it. Either the personal pronoun must be added, forming a tautological he-mip; or èk, yèk, is postposed. In the plural èk is replaced by the quasi-pronominal bèk, to which it is no doubt related either in origin or by analogy. Bèk is not confined to the subjective, and shows the form bèk-al and bèk-ibax.

o-ba gai he, that land
 o-he-mip, he, distant
 kūi hee, not that one!
 tee hee, which one?
 uba hee, that one
 mibax noaha hee da mi marā, your knife do you like?
 winhawa yèk wi kadakhiba, my friend me cut
 masā'n èk g'ai hi'ntil èk g'ai wa guma kilmawakhiba, white-man
 and Indian we fought-together
 ha bekal kilwahiba, I them fought
 ba masān he mip wi kadakhiba, that white-man he me cut
 me xa hee dakir xa-mò'-e, this water very deep is
 bā' ha masā'n hee gutcia-i pakò'hoba, that I white-man the knife-
 with stabbed
 mex bèk wi marakiaika, my-elder-brothers they me like
 mex milbax èk wi marakiale, my-elder-brothers one-of-them me likes

The enclitic *he* is no doubt related to *hi*, *hi-bax*, *he-k-ibax*, his own, their own. Perhaps the reflexive *k'e-hei*, self, is also related to *he*. *Ba-bax*, his, *bek-ibax*, their, contrast with *hi-bax*, *he-k-ibax*.

mi-p hi-bax gawi di-ko-y-a, he struck his own boy
mi-p ba-bax gawi di-ko-y-a, he struck his (ejus) boy
mi-p mip-ibax gawi di-ko-y-a, he struck his (ejus) boy
bek heg-ibax gawi di-ko-yak-i, they struck their own boy

Hi has sometimes relative force: *ig'anxa gunula hemip hi hõla kidi-l-ba xabe-na pidiakele*, then Coyote he which sack he-carried rock-on broke.

The element *hi* also occurs in combination with *bek* when relatives by marriage (except brothers-in-law or sisters-in-law) are addressed or spoken of. As already mentioned, such relatives address each other throughout with plural forms as a sign of respect. *Bek* would therefore take the place of *èk*; but the form usually found is *hi-bek*, or *hi-bek-al*. Use of singular *èk* or *yèk* implies that the marriage has terminated in a separation. If however the wife has died, her husband continues to address her relatives with the respectful *hi-bek*. Such forms seem even to take the place of personal pronouns: *bekal*, them, meaning you, much like German *Sie*.

wimaca yèkal, my ex-parent-in-law
wimaca hibekal, my parent-in-law, or parent of my dead wife
bèkal hane, parent-in-law, say!
kanhimi mal butsigi hibekal, say, ye old-man them (say, father-in-law!)

Besides *hi*, *u* is sometimes combined with *bek*:

kanhimi ubek, say, my daughter-in-law!
kanhimi wimaca hubek, say, my mother-in-law!

The use of the plural in this connection does not however go beyond demonstrative and inflectional elements. Only singular noun stems and verb stems are used. Thus, *mal da-g'ara hibekal*, ye old-woman them, not *mag'atcura*, old women; *gok-mi*, "*stehen Sie*," a singular stem with plural ending, as compared with *gok-im*, "*stehe du*," and *pilik-mi*, "*stehet ihr*!"

Enclitics or suffixes expressing indefiniteness are *-g'a*, *-lal*, *-ula*, *-laye*. Informants translate these by "kind" or "sort."

Kuyula, others, seems to be kui, not, and -ula, kind. -laye seems to be most specifically indefinite.

haiu-laye wi g'anèhiba, some dog me bit
 daiawal-ula, young women, young-woman-kind
 masā'n-ulu, masān g'omtsa-la, whites, plural of masan, white-man
 kaiu-la mipal g'anèheba, dog-kind them bit
 ha masān-ula-l ganud-ed-elhiba, I a-white-man (or, to-the-whites)
 was telling something.

Other indefinites are mil-bax, one of, selected from; kumu, all; g'omtsa, many; dolema, several, literally four-five, dol-lema. Xon-al is one another, objective.

gau g'omtsa lia, people many died
 gau nudal-dal-a g'omtsa e, persons dead many are (lying about)
 wal gumu lia-y-eg'a, we all shall-die
 dolema pit'ahaba g'araya, several there-were women
 wax haiu mil-bax ek wi g'ania, one of my dogs bit me
 buragal g'ai ha gutā'haba bice' g'ai xote, bice he mil-bax ha gali
 gò'xhiba, bear I saw deer also two, deer of-them I one shot

INTERROGATIVES.

Interrogatives, also used as indefinites and relatives, are am, ki, and tce. Am is who?, what?, something, which, someone, he who. Ki-a is who? Tce-he is which one? tce-a, somewhere, where?

ha ām boolhiba, I something was hunting
 kia da ba, who is that?
 kia da mi kadake, who you cut?
 tce hee, which one?
 me hee, this one
 ām ba da ma marakiala, what-for that you like?
 masān ki ām yeheka, he has done something wonderful
 tce xabe hee da batèn-e, which rock is the largest?
 ha am xadim milbax ha sididigi, I what biting of I swallow
 am gauk da ma gar-k-a, what-kind-of-a person do you see?

ADJECTIVES.

The adjective is more frequently found in duplicated form than any other part of speech. An attributive ending is -k, which is no doubt the same suffix as a -k making nouns of verbs. Adjective stems used as predicates seem to end in -k-i or -e,—which is possibly a slurring of the verbal present tense-suffix -a, sometimes heard as -e. Many adjectives show neither ending.

è, ha haiu g'ida-g'ida-k gar-hiba, yes, I saw a red dog
 wax haiu hee g'ida-g'ida-ki, my dog is red
 haiu pit'au, a white dog
 ha pit'auw-e, I am white
 ga-hiem-k, one who watches a house (compare ga-hiem-xale, house-
 watcher, as a permanent occupation)
 xo batin ha garhiba, fire large I saw
 pit'au-k bawe e, it is the white one
 gili-gili-k, black

ADVERBS.

Adverbs and conjunctions, so far as expressed by separate words, call for little comment. Interrogation is expressed by the particle *da*, at the head of the sentence, or preceding the pronouns. The negative is similarly expressed by *kui*, and not by any affix of the verb. *le* occurs in optative phrases translated by "let us." Conjunctions answering to English "and" and "or" are *g'ai*, postposed, and *he*, preposed. Both often occur in pairs, like English both . . . and, either . . . or. There are no connectives or introductory particles corresponding to those which are so important in Yuki and Washo. This lack of introductory words is so complete as to make it difficult to separate one sentence from the next in texts.

da, interrogation
kui, no, not
è, yes
le, optative
min, thus (cf. me, this)
isa, thus
maco, like
dakere, very (*dakir*, great, extreme, adj.)
si, very, strongly, fast, hard
ikwita, perhaps
bitemayau, always
namk', always, constantly
tibalg'amak, often
co, now
to, now, immediate future
co-a-da-mal, to-day (*da*, sun)
to-a-da-wal, to-day
da-ka, yesterday
duwe-m, to-morrow (*duw-ina*, at night)
dok, long ago, sometime, ever
yu, already
yu-l, a while ago
ya-yu, for a time
yu-pa, again

NUMERALS.

The numerals in all the Pomo dialects have been given in Dr. Barrett's paper in this series, and analyzed in a comparative paper on the numeral systems of California.⁴⁸ The Pomo numeral system seems to be quinary-vigesimal, and the Pomo territory to be the center of an area in northern California over which this system has to some extent spread; but in the higher numbers, on the other hand, the Pomo vigesimal method has in some dialects yielded before the influence of the decimal counting of neighboring people. The adverbial numeral is formed by -nai, "times."

xote-i-nai, twice
lema-nai, five times

VERBS.

The Pomo verb is completely non-pronominal, that is, non-incorporative.

It seems that in most American languages using both prefixes and suffixes, the affixes to the verb, barring pronominal elements, tend to precede the stem when they are comparatively concrete or non-formal in significance, and to follow it as they are more purely grammatical or modal. Pomo is no exception. Adverbial and instrumental ideas are embodied in prefixes, conceptions of tense, mode, and number in suffixes.

Many affixes are readily distinguished as such; but there are some elements whose nature, whether affix or stem, is uncertain. Di and be have the appearance of being affixes denoting singularity or plurality of the object of the verb; but it is more likely that they are indefinite stems, meaning to move one and to move several, which are used in verbal complexes whose specific force is due more to their affixes than to these stems. A similar contrasting pair are -p and -m, appearing to refer respectively to position, pointing, or intransitiveness, and to motion, putting, or transitivity.

⁴⁸ R. B. Dixon and A. L. Kroeber, *Numerical Systems of the Languages of California*, *American Anthropologist*, n.s., IX, 676, 686, 1907.

ha gau-du-di-kil-hiba, I drove-(him)-in-repeatedly
 ha gau-du-be-kil-hiba, I drove-(them)-in-repeatedly
 wa gau-du-di-kima, we drove-(him)-in
 wa gau-du-be-kima, we drove-(them)-in
 mi ha gau-du-di-kil-hiba, thee I drove-in-repeatedly
 mal ha gau-du-be-kil-hiba, you I drove-in-repeatedly
 wi bihya-xam ba ca-di-m-im, me hand-in that shove-through!
 wi bihya-xam ba ca-be-m-im, me hands-in that shove-through!
 bo-l ca-be-p-ki-mi, west point-them!
 ca-di-p-ki-m, move it, point it!
 ca-di-m-ki-m, move it, cause it to travel!

Some affixes occur in contrasting pairs: kul-, gur; di-, co-; di-, ke-; -l, -k; -ma, -ki.

Adverbial prefixes are the most loosely connected with the verb, and sometimes are heard as separate words. Thus ga-u-, or ga-u-, in, into, and ga-l or ga-l, into, to or in the house, are evidently formed from ga, house, and the case-suffixes -u, in, and -l, to. The terminative or directive -l appears also in xo-l, out; compare the adverb xo, out. Ku-l- and li-l-, away, off, probably show the same element. This is the more probable from the fact that, excepting these -l- forms and two prefixes gur- and mar-showing -r-, all ascertained prefixes, whether adverbial or instrumental, end in vowels.

ga-u-, ga-u-, in, into
 ga-l-, ga-l-, in house, to house, into
 xo-l-, out
 li-l-, away
 ku-l-, away
 ku-r, gu-r, toward
 mar-, down
 gayu-, up
 xamal-, back
 tsa-, away
 ca-, through
 ma-, across, opposite

Examples:

gur-uhu-m, come here!
 le xamal-pil-iba, let us go back!
 gal-uhu-i ha, I went home
 ca-t'ol-im, punch it through!
 lil-ani-a, threw it (away)
 kul-ani-m, throw it away!
 me-a gur-ma-hu-m, here come-across!
 o-ya lil-ma-hu-m, there go-across!

dadai xol-pili-mi, on-the-path go-ye-off!
gur-ma-biki-m, face here!
kul-ma-gadi-ba, let us run across to there
mar-pile-li, they went down
gayu-gap-ki, jumped up
gal-oho-le, come home
me-a xol-pili-a, here they-came
bek tsa-pili-a, they went-away

The terms of direction co, east, bo, west, yo, south, kuhu-, north, may be included among prefixes, as they are at times fused with the verb-stem.

ha co-hu-bae, I am going east (uhu, go)

This is however not always the case.

ha bo am boo-l-hiba, I in-the-west something was-hunting

Gayu, up, is also both independent adverb and prefix.

Instrumental prefixes are numerous. There seem to be several that have not yet been positively determined. They specify actions performed with parts of the body, with spatial parts of objects or objects of certain shape, and with objects of certain properties, such as softness. They are of course used almost entirely with stems denoting motion or dynamic actions.

di-, with something round
co-, with something long
pi, with an edge moving broadside (ax)
ga-, with an edge drawn lengthwise
g'a-, with two edges, with the teeth
si-, with the mouth, with the tongue
du-, da- with the hand, with the fingers
mi-, ma-, with the hand, with the foot
ba-, with the head or parts of the head
pa-, with the end, point
ki-, with a hard thing
gu-, with a soft thing
ca-, with the end or point (= ca-, through)

The following seem to denote not the instrument but the object of the action.

di-, a round object (cf. instrumental di-)
k'e-, a long object

In this connection may also be mentioned an element pu-, found in several verbs denoting breathing; though whether it is instrumental prefix or stem is not certain.

Examples:

ha mi xai-yai co-ol-bae, I you stick-with will-throw-at
 co-xa, to saw, cut with a long object
 ha mip-al xabe-i di-ko-hoba, I him stone-with struck
 di-dak-g'a, split, as one stone with another
 pi-xa, to cut with an ax, chop
 pi-t'ap-ki-a, slapped, skinned, chipped off
 pi-dak-g'a, split
 ga-xa, to cut or saw off with a knife
 ga-xar-a, shaves off
 ga-gap-ki, to split by pressing with a knife
 g'a-wa-l-hiba, ate, chewed
 g'a-ne-hiba, bit
 g'a-xa, to cut with scissors
 g'a-tadadak, flatten with the teeth
 g'a-bee-ki, cut off a soft object with the teeth, with scissors, or by
 rolling a wheel over it
 si-g'al-a, licks it off
 si-wor-ki-m, stir it with the tongue!
 du-tadadak, squeeze flat with the fingers
 du-dak-g'a, split with finger-nails
 du-t'a, touch with hand or fingers
 da-g'al-a, rubs off with hand
 du-yi, count, teach, show
 mi-yi, count
 mi-sax-ki-hiba, kicked
 ma-hut-ki, break by pressure of feet
 ma-les-ki, crush with the foot
 ma-tadadak, flatten with the foot
 ma-lat-ki, crush with the hand
 ma-wor-ki-m, stir with the foot!
 ba-ko-hoba, butted, hit with the head
 ba-gap-ki, split with the teeth, by pecking with the bill
 ba-t'a, touch with the head or tongue
 ba-t-a, tell
 ba-qa, tell
 ba-tsan, preach
 ba-yi, teach
 pa-ko, stab
 pa-les-ki, crush as with a pestle
 ki-tadadak, flatten with a stick
 ki-luk-hiba, rubbed it on with a stick or brush
 ki-les-ki, to smear with a hard object
 ki-g'el-a, rubs off with a board
 gu-luk-hiba, rubbed it on with a rag
 gu-g'al-a, wipes it off with skin, rags, paper, or meat
 ca-t'a-m, touch it with the end!

 di-ma, to hold a round object
 k'e-ma, to hold a long object
 k'e-la, carries a long one

A prefix *gado-* seems to denote "with the shoulder," while the noun *kidi*, back, is used both as a prefix and as a verb meaning to carry on the back, much as in English we "shoulder" a burden.

gado-la, carry an object on the shoulder
bihya-xam ba gado-mi, hand-on that hold-ye!
kidi-la, carry an object on the back
kidi-ga, hold on the back
gau-kidi-m, carry it indoors on your back!

Suffixes express tense and mode and make verbal nouns. There are also a transitive, a causative, a frequentative; four suffixes of number; and, strange to say, a suffix with the meaning "around," where one would expect a prefix. It is likely that the real or former meaning of this suffix was modal, not spatial. The suffixes of number in transitive verbs refer to the subject and not the object. The suffixes of tense and mode follow the others. There seems to be no inchoative, the independent verb *bayipki*, begin, being used as an auxiliary. While the fact that the speaker makes his statement on the authority of others is expressed by the suffix *-li*, a particle *xa* usually also accompanies such statements.

-l, singular subject
-k, -aki, plural subject
-ki, singular subject (less frequent)
-ma, plural subject (less frequent)
-mli, -mal, around
-kil, frequentative, continuative
-ki, -xi, transitive
-G'a, -G'era, causative
-a, present, immediate past
-hiba, past
-hi, past, less frequently used
-eg'a, future
-bae, purposive future, conditional intentive
-kima, usitative past, continuative perfect
-ne, -ni, apparentative, "must have"
-nki, putative
-li, quotative, "dubitative"
-kile, past (quotative?)
-aeli, conditional
-m, imperative
-mi, imperative, plural subject
-xale, agent, habitual

- k, agent, verbal noun, attributive adjective
- e, -k-i, predicative adjective
- pi, -pila, if, until
- witca, although
- gaia, after
- mak, have, to be provided with

Examples:

g'a-wa-ik-mi, eat ye!
 wa mai g'a-wa-ik-a, we food eat
 mai ha g'a-wa-l-e, food I eat
 wi mara-ki-aik-a, me they-like
 ha mara-ki-al-a, I like-them
 ba u mara-haba, that me pleased
 lok-a, it dropped!
 lok-ane, it must have fallen
 tee-ami gauk da ma pa-ko-y-aèli, what-kind-of man (interrog.) you
 stab-would?
 pa-ko-yeg'a, will stab
 ha pa-ko-y-aèli-hiba, I would-have-stabbed-him
 wi sinèm-pila, I if-had-been-able
 wi da ma gar-a, me do you see?
 wi da ma gar-ma, me do you (father-in-law) see?
 wa mi gar-ma, we thee see
 ha mal gar-ki-ba, I you saw
 xa am nis yehek-li, it-is-said something evil he-has-done
 wa bici kil-g'a-yaki-hi, we a-deer hang-made
 cik-ma, they say
 ha cik-a, I said
 mip âm boo-l-aèli, he something could-hunt
 mip xa âm boo-li, he it-is-said something hunted
 bèk âm boo-yaki-a, they hunted
 bèk xa âm boo-yake-li, they hunted, they say
 ha kuhul-uhu-bae, I north-go-will
 ha g'ai âm boo-yeg'a, I also something hunt-shall
 mip âm guhu-nki, he something is-reported-to-be-eating
 me-a buci buragal wal-ine, here some-time-ago bear must-have-passed
 guma-kil-ma-wa-k-hiba, fought together
 mal-inki, is going about (without having been seen)
 gaki-g'a, make sit down
 gap-ki-g'a, cause to jump
 guhu-xi, make eat
 kilwa-xi, make him fight
 kil-ma-wa-k-g'a-bae, will make them fight
 yiba-mak, has a tail
 a-mak, it has horns
 pidik-a, it is dark
 pidik-a-yeg'a, it is getting dark, it will soon be dark
 pidi-pida-nki, it looks dark
 wa gap duhye-ki-bae, we jumping cease-will

ha ām boo-l duhye-bae, I hunting cease-will
 ha mi mer-g'a-bae, I you lie-cause-will, I will leave you here
 ha mi ba d.ed.e-l-kil-hiba, I you that told-continually
 wa mi d.ed.e-ik-a, or d.ed.e-yaki-a, we you tell
 wi ām bayi-l-xale, me something teaches-who, my teacher
 wal ām bayi-k-xale, our teachers
 bèk wi bayi-k-a, they me teach
 ha si-hyil-k-hiba, I vomited
 wa pucul-m-a, we blow
 durhig'a-y-aki-a, they cheated
 xo-kidi-mli-m ba, fire-carry-around that!
 da ma wi-nalal gur-ak-ag'a, will you me-to carry-it?
 yowa-l kide-g'a-m, carry it down!
 gaw-uhu-m, enter thou!
 gau-pili-mi, enter ye!
 ha gai-na mer-g'aki-hi, I ground-on lay-down
 è ha yu guhū-hu, yes I already have-eaten
 gamal-kil-hi, he sat continually
 bèk ga-uwa tsa-pili-hi, they home-from away-went
 wi xapid-a-nki, I am sorry
 wi xapid-a-pi, please
 ha xapid-a-ki-al-hiba, I pitied
 wi xapid-a-ki-aik-mi, me pity-ye!
 g'awi yo-g'a-m, boy become-make-yourself!
 mip g'awi yo-kil-hiba, he boy became-always
 kil-a, it hangs
 xale-na ha kil-hiba, tree-on I hung
 xale-na ha teasulem kil-g'a-haba, tree-on I a-rope hung
 xale-na ha k'ehei kil-g'a-ki-hiba, tree-on I self made-to-hang
 ma wi manak-akwi-pila, you me pay-not-if
 wi mara-ki-al-pi mip, toadamal wi hetc-bae, me likes-if he, to-day
 me visit-will
 xa xa mipal-wina ne-mle-li, water it-is-said him-over covered-around
 wi lil-uhu-g'a-m, let me go!
 wi ba-ya lil-uhu-ne-heba, I was going there (said if action was
 invisible, as through blindness)
 ga-hiem-xale, permanent house-watcher
 ga-hiem-k, occasional house-watcher
 da ma hiem-kima, did you formerly-always-watch-it?
 cak-im wax, kill-it for-me!
 ha buragal gox-witca ha com-hiba, I bear shot-at-though I missed
 ha mi manak-bae wi ma baqo-pila, I you pay-will me you inform-if
 ha mi manak-pila, di ma wi baqo-y-aèle, I you paid-if, you me
 inform-could?
 ha pa-sax-ki-gaia ha kul-uhu-huba, I hit-after I off-went
 me-a dad-ui-mal-im, here creep-around!
 wa mi gar-ma-kima-haba xaiumi, we you saw-constantly formerly
 ha dok g'omtsa mel-kil-hiba intca ha butsegi yu e to, I formerly
 much used-to-know but I old-man already am now

Occasionally the tense suffix is detached from the verb and added to the negative *kui* or *akui*.

ha yul buragal com-witca ha kui-hiba gox, I formerly a-bear missed-
but I not-did shoot

The reciprocal is expressed by the plural suffix *-ma*, sometimes with *xon-al* added.

ba ki xonal da-bek-ma-kima, they used to parcel out to one another
xonal wa kil-ma-wa-k-hiba, we fought each other
masan-èk-ǵ'ai hintil-èk-ǵ'ai wa guma-kil-ma-wa-k-hiba, white-man-
and Indian-both we fought-each-other

Duplication is not so common in the verb as in the adjective, but is not infrequent. It indicates repetition or continuation; duplication of only part of the stem—reduplication—does not seem to be usual.

wi ganu-ganuk-im, speak to me!
gauk mudal-dal-a ǵ'omtsa e, many people are dead
wa gumu mudal-dal-aka-og'a, we all shall die.
d.ed.e-l-a, tells
maru-maru-m, tell myths!
mati-mati-ki-m, fill it full!
wi pira-pira-m, fan me quickly! (wi pili-m, fan me!)
da mi xadu-xadum-a, do you dream?
xa-tsibo-tsibok-pila, water-bubbles-if
ha gap-ki-a, I jump! ha gap-gap-ki-a, I make several jumps
wa gap-ma, gap-gap-ma, we *ibid.*

There are instances that resemble incorporation of the noun-object, but they cannot be positively set down as such. The object often immediately precedes the verb; it is unmarked by a case-suffix; and like most words it commonly ends in a vowel and therefore readily runs into one sound-complex with the following verb without actually being united with it.

xo-kidi-mli-m ba, fire-carry-around that!
xai-kil-ǵ'a, stick-hang-make, to institute a dance
xai-bat.en-kil-ǵ'a-yake-le, make a big dance
xai-dakal-ake-le, finished dancing

There are also instances of what appear to be compound verbs, but which are perhaps only two verbs in juxtaposition, the first lacking tense-mode suffixes and in subordination to the second.

sima-negi-m, sleep! sleep-go-to!
sima-mer-hiba, sleeping lay

The following verbs show different stems in singular and plural. There are no doubt others. Those that are transitive are usually used in the plural form if the object is plural. Verbal suffixes of plurality, on the other hand, refer to the subject even in transitive verbs.

die, mudal, plural mudal-dal, lia
 kill, duli, dut., plural cak
 eat, guhu, plural g'a-wa
 stand, gok, yuhu, g'o, plural pil, g'ula
 sit, ga, plural napo
 lie, mer, plural gudem, pid
 hang, kil, plural liki, publi
 give, dig'a, plural sixa, silax
 run, aga, plural gadi
 walk, wal, mal, plural pil
 go, uhu, plural pili
 hold, ma, plural subject, sa

Certain verbs, especially of mental or physiological action, are used with their subject in the objective case unless they are specially provided with the transitive suffix. This is one of the specific features in which Pomo resembles Yuki.

wi mi mara', I like you
 ha mi mara-ki-al-a, I like you
 wi si-hyil-a-eg'a-nki, I feel that I shall vomit
 ha si-hyil-bae, I will make myself vomit

COMPOSITION AND DERIVATION.

The list of adverbs that has been given shows that there is derivation in Pomo. The process is not conspicuous in the language because its function in the verb is nearly filled by the adverbial-instrumental prefixes which have been discussed among grammatical elements, and because in the noun composition appears largely to take the place of derivation. Compounds like *yu-xa*, eye-water, *cima-mo*, ear-hole, *xa-hola*, day-sack, *bihya-tsuxai*, hand-fingers, *xama-tsuxai-hrik*, toe-nails, are frequent. Affixes deriving nouns from substantival or verbal stems, such as are important in Yuki and in many other languages, have not been found. *Hya* is wind or blow, *bati* arrow or shoot, *kidi* back or carry. The order of composition is the most common American one: the determining noun precedes, the determining

verb follows, the regent noun: *xa-t-om*, waves; *xai-t-ada-t-ada-ya*, stick-flat, boards; *q'us-dalutegi*, baby-wrap, placenta. That noun-composition is of much importance, is evident from words denoting parts of the body. *Hya*, bone, *kidi*, back, *kidi-hya*, back-bone; *t'a*, buttocks, *t'a-mo*, anus; *g'o* or *g'o-mo*, navel; *tsi'me*, hair, fur, *ai-tsi'me*, pubic hair, *ui-tsi'me*, eye-lash; *ui-kui*, eye-brow, *ui-mo*, face. *Bihya*, hand, perhaps contains *mi-*, with the hand or foot, and *hya*, bone; *xama*, foot, may contain the element *ma-*, synonymous with *mi-*. *Da-g'ol* is kidney, *ya-g'ol* testicle. *Tsida* is skin, *xa-tsida* mouth, *xa-tsutsu* beard. *Mi-hya-kabo*, throat, suggests *hya*, wind, blow. Names of animals show some reduplication; *gigi*, otter, *ba-zim-zim*, chipmunk. Noun-stems can be used as verbs, and verb-stems as nouns; *maru* is both a myth and to tell myths; *xo*, fire, *xo-ki*, to make fiery, to become angry; *na-sima-gai*, rear-sleep-place-of, rear-bedroom, from *na*, back of house, opposite door, *sima*, to sleep, and probably instrumental *-yai*, of *gai*, earth.

VERB STEMS.

The following verb stems or near-stems have been determined. Some of these can occur without adverbial and instrumental prefixes; others have been found only in connection with these prefixes. Some stems are of quite indefinite meaning, depending for their specific meaning on an instrumental prefix. Thus *ba-ko* to butt, *pa-ko* to stab, *mi-ko* to kick, *di-ko* to strike with a round or square object; *ba-yi* to teach, *mi-yi* to count, *du-yi* to show, teach, or count. Other stems are limited, without any prefixes, to actions performed on certain classes of objects, as *an*, to throw a long or flat object, *ban*, to throw a small or round object. Others which appear to be limited instrumentally, are so probably only in translation: *ak* and *ap*, to carry in the hand and to carry in the arms, probably mean to carry a small object and to carry a long or large one.

| | |
|---|--|
| <i>aga</i> , run (sing.) | <i>ban</i> , throw a round object, put |
| <i>ak</i> , carry in the hand | <i>bar</i> , <i>babar</i> , deceive |
| <i>an</i> , throw a long or flat object | <i>bas</i> , rub, smudge |
| <i>ap</i> , carry in the arms or held | <i>bati</i> , shoot |
| against the body | <i>bayipki</i> , begin |

| | |
|---------------------------------|---------------------------------|
| bee, cut off | gox, shoot and hit |
| bili, suck, eat mush | ma-gox, shout |
| bo', boo, hunt | g'a, gamble |
| bol, pour | g'a, fill, be full |
| bot, shatter, split by throwing | g'ada, hate |
| cak, caka, kill (plur. obj.) | g'al, wipe, rub off |
| cal, visit | g'al, lift |
| cama, say no, dissuade | g'ana, drive |
| cik, say | g'ate, whittle off |
| cok, hear | g'a-wa, eat (plur. obj.) cf. |
| com, shoot at, miss | g'a, full |
| cudim, come | g'a-wim, build house |
| sup'at, jerk off | g'o, gok, stand, be (sing. of |
| dad-ui, creep | inanimate objects) |
| dak, split | g'oki, drink |
| da-ko, catch | g'ula, stand (plur.) |
| dal, break up by pounding | hete, visit, see, look |
| dawi, stuff, put in | hiem, watch |
| deg', take, carry | ho, draw up, bunch |
| didik, stop | hu, do |
| di-g'a, give (sing. obj.) | hut, crack, split, shatter |
| dika, start to | hya, blow, be wind |
| dig', diq, swallow | hyek, end |
| doc, strike | hyil, vomit |
| dop, cut off | kadi, come, reach, go |
| duhye, stop, cease | ki, pick up, lift, carry, bring |
| duix, urge | kia, dance |
| duli, dut., kill (sing. obj.) | kidi, carry on back |
| dur-hi, du-dur, cheat | kil, be hanging (sing.) |
| dut., tie up, roll up | ko, strike |
| d.aq, mash | kul, fear |
| d.ed.e, tell | k'em, be, continue |
| djo, peck | k'iuk, cool |
| ga, sit (sing.) | la, carry |
| gadi, run (plur.) | lat, mash |
| ganuk, speak (cf. ni, nu.) | lekida, glad |
| gap, split | les, smear, flatten, mash |
| gap, jump | lex, melt, dissolve |
| gar, see | lia, die, dead (plur.) |
| gik, jab, strike | liki, hang (plur.; trans. and |
| gubi, put in | intrans.) |
| gudem, lie (plur. of animate | lom, make noise |
| beings) | lox, tie, roll up |
| guden, shoot (plur.) | luk, rub on |
| guhu, eat (sing. obj.) | lok, drop in |
| gule, complete, do entirely | ma, hold (sing. subj.) |
| guta, find, see | ma-bi, ma-yap, face, look |
| ga-ma, ga-ki, sit (sing.) | madi, fill tight, jam |
| godo, roll | maga, search, look for |

| | |
|--|------------------------------------|
| mak, raise a liquid | pusut, cool |
| mal, = wal | qo, tie, make hang |
| mad-u, suck blood | ba-qo, tell |
| mana-k, pay | sa, hold (plur. subj.) |
| maru, tell traditions | sam, make fire |
| maxar, cry | sax, strike, hit |
| me, know | sima, sleep |
| mer, lie (sing.) | sixa, silax, give (plur. obj.) |
| mihyam, be reluctant, stingy | tadadak, flatten, squeeze |
| minam, full, fill | t'a, touch, overtake |
| mondo, pile up | t'ap, slap, skin, chip, split off, |
| mudal, die, dead | whittle |
| mumu, try | t'es, cut off, whittle |
| napo, sit (plur.) | t'ik, remain at |
| ne, overflow, float | tsa, chew |
| ne, bite | ba-tsan, preach |
| negi, nek, go to | tsari, be angry |
| ni, nu, say, speak | tseixki, be sorry |
| nu-wa, urge | tsibok, bubble |
| ok, answer | tsom, finish, die |
| ol, throw at | bi-teu, gnaw off |
| padi, swim | uhu, go, come (sing.) |
| pawil, curl, wrap | wa, chew, eat (plur. obj.) |
| pibak, come, appear | wa, wal, mal, walk, go, pass |
| pid, lie (plur.) | wor, stir |
| pid-ak, pad-ak, break | xa, cut, cut off |
| pi-li, pi-ra, fan | xadum, dream |
| pil, stand, walk (plur.) | si-xal, cry |
| pili, go (plur.) | xapida, pity, be sorry |
| pit'e, full | xar, shave |
| pu-cen, pu-t'am, take breath | xaxak, ask, require |
| pu-cul, blow | xe, sing |
| pu-g'a, whistle | yehe, do |
| pubi, hang (plur. of intrans. subj. or trans. obj.) | yi, teach, count, show |
| pudi, steal | yo, become |
| puhye, slow, slack (cf. hyek) | yuhu, stand (sing.) |

TEXT.

| | | | | |
|-------------------------|------------|-----------------------|-----------------|-------------|
| Dòk | xa | napo'-kil-i | ba-y-a'wa | xa |
| Long ago | it is said | town-continually-was. | That-from | it is said |
| xatunu'dal-g'ai | tara'g'ai | xa | cò-l | bice' |
| a species of lizard and | wasp | it is said | east-ward | deer |
| boo'-iakè-le | duw-i'na | gai | pidi'-k'em-ide | lā |
| hunted (pl.) | night-at. | | Dark continued, | sun |
| wi'axo | baca'latso | g'ai | kui | k'e'm-kil-e |
| stars | Pleiades | and | not | were. |
| | | | | bat-i'-ai |
| | | | | Arrow-with |

| | | | | | |
|---|-------------------------------------|--|------------------------------------|----------------------------------|------------------------------------|
| boo'-yakè-le hunted | bice' deer | xātunu'dal-èk lizard-he | a'g'oldè-le using deer mask (?) | | |
| co'-pil-èli east-went (pl.) | cò'-danu-na East-mountain-on | bice' deer | maga'-ik seeking, | cò'-lila east-far | |
| bice' deer | guta-yakì'-kui seeing-(pl.)-not, | mīnidai'xa at that time | xatunu'dal-he-mīp lizard-he | | |
| cò east | xaā' light | gutā-le saw. | ba-y-awa That-from | xa it is said | qamā'l-pil-èli back-went (pl.), |
| bice deer | boo-ik hunting | baXā'-yaki leaving, | napo'-na town-to | ga'l-pil-èli home-went | |
| hè'g-ibax their | napo'-mil town-to. | hī-ibax His | qaug-ula-l people | xa-dje-dje-li told | |
| cò east | hī he | xaā' day | guta saw. | i'g'an-xa Then | kunū'la Coyote |
| bū'teige old man | | | | | |
| xa-nariwa turtle | qa and (?) | cò'-pil-èle ⁴⁹ east-went (pl.) | xaā'-hòla daylight-sack | ba that | |
| pudì'-bae ⁵⁰ steal-would. | pil-ā'li Went (pl.) | pil-ā'li went | cò east | cò'-pil-èli east-went, | mīn thus |
| pil-ā'li went, | pil-a'li went, | duw-ina night-at | tarag'ay-ek wasp-he | g'ai and | |
| xa-na'riwa-g'ai turtle-and | pil-ā'li went, | ete. . . . | | | |
| kunū'la Coyote | bū'teige old man | he-mī'p he | hi-mara-xa what-desired | yox-kil-e made-always; | |
| cela-yòg'an young-man-became, | gawì'-g'a-yòg'an boy-became | bū'teige-g'a-yog'an old-man-became, | ām what | | |
| ba that | du'rhig'a-l-ba cheat-would. | napu'-na Town-to | xo'-l-pil-èli to (?) went | xanariwa-i-himak turtle-with. | |
| mīn Thus | xa dance-house | marakai to-went. | xo'-l-pil-èli There | bai boy-s | xa gawi-k |
| xote two | napo-le lived | marake-bai dance-house-in. | kunū'la Coyote | he-mī'p he | xa |
| qa'w-ohò-le in-went; | qa'w-uhu-ig'a in-go-would. | g'awi-k Boys | he-bè'k-al them | nīne'Xi-le asked, | |
| guhula-bax north-of | ganu-k-lè spoke | ba-ia there: | wax "My | gawi-k-ula boys, | ām da what (int.) |
| uba that | ki'-l-ā ⁵¹ hangs?" | nì'g'anè-le Said | kunū'la Coyote | he-mip he. | i'g'an-xa Then |

⁴⁹ Heard as cop-hil-ele. Evidently p is well aspirated.⁵⁰ Heard as bap-hudi-ba.⁵¹ The equivalent in Eastern Pomo is here substituted. The original Northern Pomo runs: awì-qawia qota awèl cilinā'.

| | | | | | |
|---|---|--|--|--|------------------------|
| gawi'-k-he-bek boys-they: | wā'-l "Us | kū'i-hiba not | kiba | ba-baqò'-g'-aki tell (pl.); | wa-l us |
| ki-mana-k-pila-ga pay-if, | xa-èle | ba it | wa we | ba-baqò'-yaki-ba tell- (pl.) -will. | mīn Thus |
| wa-l us | nī'k-bek mothers, | ha'rik-bek fathers, | tsè'ts-bèk mothers' brothers, | cè'x-bèk mothers' sisters, | |
| g'ā'ta-bèk mothers' mothers, | gā'ts-bèk mothers' fathers, | wā-l us | bayī'-k-iba instructed." | intcaxa Nevertheless | |
| yu-pa again | kunū'la Coyote | he-mīp he | ninè'-Xi-le asked: | (As above.) | kunula Coyote |
| he-mip he | nini'-ninè-le kept asking. | pucu'i "Shell-ornaments | ca-be-p-ki making-them-move-through | | |
| wa'-l us | cimā'-mo ear-hole | ca-be'-m-pila'-k'axa through-them-put-if-then | wā we | | |
| ba-baqò'-yaki-ba tell (pl.) -will." | ig'an-xa Then | kunū'-la Coyote | he-mip he | hòla-k'alu'l bag-dry | |
| ki-di'-m-du-li carried. | ba'-ibax-ka That-of | pucu'i shells | cimā'-mo ear-hole | ca-be'-m-li put through | |
| gawi-k-he-bè'g-al boys-them | ba-qo-ba tell-would | ām-bai' what-in. | ig'an-xa Then | baqò'-yakè-li told: | |
| kunū'la "Coyote, | hò'la-bai bag-in, | kunula Coyote, | hòla-yai bag-with, | xaā'-hòla light-bag | ba-e that is," |
| nī'nxalòla said | gawi'-k-'e-bèk boys-they. | ig'an-xa Then | kunū'la Coyote | he-mip he | |
| maxar-bayipkè-le cry-began, | hi-bax his-own | gawi-k boys | hola-iyai bag-with | ki-xaā'-hòla light-bag | |
| ki-g'a-g'a-yagi stuff (pretended). | i'za Thus | bā-bakū'min was sorry. | nīn Then | k'è'm-li it-was. | mīn Thus |
| k'è'm-i it-was | xa-duwè'-k-li night-was. | kunula Coyote | butcegi old man | he-mip he | xo-aga-le out-ran |
| napò'-na town-at | gauk people | kū'i-dai not- (?) | xa-èle | xa-dū'we-k-le Night was. | |
| duwè'-k-an-xaki Night-after-then | ma'rakai dance-house | ki-xo'-sam-agè-li fire-built (pl.). | xo-limba Fire-fan | | |
| min-pilī'-ma thus fanned-each-other. | ki-xo'-muhyè-agè-li Fire-cooled (pl.). | xo-pusut-xanXa Fire-cooled. | | | |
| kunula Coyote | butcegi old man | he-mīp he | yò'g'ai made himself | gau-dad-ū'-ile house-in-came. | |
| ga-uwa House-from | xaki then | bat'a-y-agè-le called (pl.): | butcegi "Old man | hee the | da-kò'-me catch-ye! |

| | | | | |
|-------------------|---------------------------------|----------------------------------|-------------------------------------|---------------------------------|
| xo-ba Fire-in | ku'm-bae fall-night. | na-g'oni-mi At-back-lay-him!" | xaki Then | dako'-yagè-li caught (pl.). |
| i'G'an-xa Then | cabè'-yo "Center-post-under | k'a | ha I | mè'r-i-kil-hiba lie-always," |
| yu'-cua | ba-bā'r-hig'a-i he deceived. | ò' "Yes, | ò' yes," | min thus |
| hèg-al them-to | kuma enemy | ma'l-hee ! -the | mee'l-ma-kwi knowing- (pl.) not. | xakilò'le said, |

NORTHERN POMO.

The following grammatical forms of the Northern Pomo dialect have been ascertained:

PRONOUN.

| | <i>Subjective</i> | <i>Objective</i> | <i>Possessive</i> |
|--------|-------------------|------------------|-------------------|
| S 1. | ā | wito, tou | ke |
| S 2. | ma | mito | mii |
| S 3 m. | mou | mowal | mowa |
| f. | man | madal | mada |
| n. | | mul | |
| P 1. | ya | yal | yaa |
| P 2. | mā | | |
| P 3. | pou | | powa |

Before terms of relationship the subjective forms are used instead of the possessive.

CASE ENDINGS.

| | |
|-----------------|-------------------------|
| -nemu, nemi, in | -yo, under (deep, hole) |
| -nemutu, from | -diyi, with, near |
| -qa, to | -wi, with, by means of |
| -mina, on | |

VERB PREFIXES.

| |
|--|
| ca-, with the side |
| pa-, with the end |
| ma-, with the foot |
| mi-, with the hand |
| pi-, by a falling edge |
| ci-, by a drawing edge |
| tea-, teake-, with a severing or scraping motion |
| ka-, with a severing motion into a soft object |

VERB SUFFIXES.

- ta, interrogative, usually enclitic to first word
- m, imperative, singular and plural
- ti, past and present
- tcaddi, future
- da, desiderative
- ka, -kai, causative
- tei, (?)
- ka, (?)
- n, (?)

It appears that while a large proportion of the grammatical elements of the Northern and Eastern dialects are different, the plan of structure is essentially the same in the two languages.

YUKI.

The territory and divisions of the Yuki have been described in previous publications of the Department, especially in Dr. S. A. Barrett's "Ethno-Geography of the Pomo Indians."⁵² This work contains also vocabularies of the four principal Yuki languages. These are the Yuki proper, in the drainage of the Middle Fork of Eel river, that is to say, in the vicinity of the present Round Valley reservation; the Huchnom, on South Eel river; the Coast Yuki on the ocean west of the Yuki; and the Wappo, to the south in the Geyserville-Calistoga region. The Coast Yuki and the Wappo are separated, respectively by the Athabascan Kato and by the Pomo, from the Yuki proper and the Huchnom. Dialectic differentiations occur within Yuki proper and Wappo. Of the four languages, Wappo is the most divergent. The dialect here reviewed is Yuki proper.

PHONETICS.

The phonetic system of Yuki is simple. It lacks velars, but has two classes of t sounds, one being distinctly palatal (t'), almost approximating English ch, the other interdental (t). Tc, equivalent to English ch, is treated by the language as if it were a single sound. In addition there are labials and post-palatals, the latter apparently formed somewhat farther back in the mouth than the ordinary English k sounds. This makes stops in five positions, if the affricative tc is included. For each of these positions there is also a stressed fortis surd, but no sonant stop.^{52a} There are also no fricatives other than s and c. The only nasals are n and m. The k-nasal, ñ, does not occur as an organic sound,

⁵² VI, 1-332, 1908.

^{52a} To be exact, the "surd" stops are weakly aspirated and partially sonant, probably during the explosion, when they are initial or followed by a vowel; but fully surd, and strongly aspirated, when final. Theoretically *g* and *uk'* would therefore be as correct an orthography as *kup* and *uk*. Since "g" and "k'" are however only variations due to position, and are organically the same sound, and as there is no other k in the language except fortis k', the designation of both the initial and final sound by k seems justified. It may be added that exactly the same relation between initial and final stopped consonants exists in the Shoshonean dialects and probably in a number of other American languages.

but is found occasionally before *k* as an assimilation from *m* or *n*. There appears to be only one *n* for the two *t* sounds. An *l* occurs, but there is no *r*. *S* and *c* appear to be two distinct sounds, but are similar.

| | | | |
|-----------|------------|--|-------------|
| <i>k</i> | <i>k!</i> | (<i>ñ</i>) | |
| <i>te</i> | <i>te!</i> | | |
| <i>t</i> | <i>t!</i> | | <i>s, c</i> |
| <i>t</i> | <i>t!</i> | <i>n</i> | |
| <i>p</i> | <i>p!</i> | <i>m</i> | |
| | | <i>l, w, y, h</i> or <i>'</i> , <i>'</i> | |

The vowels are five in number: *i*, *a*, *aⁿ*, *o*, and *u*. They are all full sounds. *O*, which is rather uncommon, is open. *E* does not seem to occur as an original sound, but *i* takes on several varying shades and sometimes comes nearer *e* than *i*. These forms of *i* have been represented, as heard, by *ì* and *e*. All the vowels may occur followed by an aspiration, indicated by *'*, or by a glottal stop, shown by *'*. The vowels when long do not change quality, but are frequently doubled. All double vowels that have been written without an intervening apostrophe or hyphen are equivalent to a single long vowel. Vowels that occur between stems and suffixes to prevent contact of two consonants are sometimes more or less obscure. The sound *i* is most frequently employed in this way.

All the vowels and all the consonants occur both initially and finally. Final *h*, *y*, and *w* result in aspirated vowels or in diphthongs.

Combinations of consonants, and true diphthongs, do not occur at the beginning or end of words nor in stems. Consequently there are no combinations of more than two consonants even in composition and derivation. When consonants are brought in contact by the union of stems, they either remain unmodified, as in *miit-lameiim*, sky-shaman; or there is an assimilation as in *aⁿmmis*, from *aⁿp mis*; or a short vowel is inserted, as in *tat-i-si-mil*. The first process is quite common. The second, where the first two of the consonants is modified, is unusual, occurring chiefly when one of the consonants is nasal. *P-m* becomes *m* or more strictly *mm*. *N-l* and perhaps *t-l* become *l*. *Mk* and *nk* become *ñk*. In accordance with the phonetic character of the language, which is averse to modifications of

stem syllables, these assimilations are however often not made in careful speech, both consonants being pronounced. The third process, that of the intercalation of a short vowel, which is usually *i* or obscure *e*, but occasionally *o* or *u* after an *o* or *u* sound, is also quite common. It occurs before *s*, *n*, *p*, and other consonants; in most cases before verbal suffixes.

Diphthongs are not radical, as no stems have been found containing a diphthong followed by a consonant. Stems ending in a diphthong therefore really consist of a vowel followed by *y* or *w*; *nau^a* is *na^aw*, *iu* is *iw*.

Just as vowels are sometimes inserted between consonants in the process of derivation, so unaccented vowels are sometimes dropped between two mutually compatible consonants; *kam-o^l*, panther, *kam-l-itc*, wild cat.

In rapid speech there are a few contractions, such as of the common preterite suffix *-wi* to *-u*.

There is no vocalic harmony or interinfluence of vowels.

It will be seen that phonetic changes are slight and do little to disguise the structure of compounded or derived words.

The phonetics of Yuki can therefore be characterized as unusually simply and rigid. With all this quality and the predominance of monosyllabic stems, which lead to structural transparency, there is however no approach to a monosyllabic character phonetically. A word of several syllables is usually a distinct unit to the ear, so that the difference between affixes and independent particles is usually not difficult to determine.

GRAMMATICAL PROCESSES.

Practically the only morphological process of the language is suffixation. By this means the language carries on all its grammatical business. Prefixes and infixes do not occur. Reduplication and vocalic mutation are as good as absent. Position or order of words is determined by custom, but can have no grammatical significance, as suffixes are regularly used for every grammatical relation that could be expressed by position. The combination of this unity of grammatical means with the rigidity of phonetics, makes the structure of the language unusually simple.

Composition of independent stems is frequent. Between two nouns, the qualifier precedes the qualified, as in English. When a noun is combined with a verb, adjective, or adverb, the noun-element however invariably precedes. For English round-house Yuki would say house-round. Certain stems are used both as independent words and as suffixes. Such is *mik'al*, around. Similarly the common demonstrative *ki*, that, enters into relative suffixes of verbs.

on-yu, earth-quake
mil-ha^hp, deer-song
kitcil-wok, flint-dance
hul-uk, eye-water
hul-wak, eye-shake (loose woman)
nan-uk, mouth-water
uk-hot, water-large (ocean)
al-kat, wood-flat (board)

While there are noun-deriving and verb-forming suffixes, and while their employment is frequent, the presence of a suffix is not necessary to the use of a noun or verb stem in grammatical construction. Many nouns, such as *on*, *earth*, or *uk*, *water*, are used as naked stems, and verb stems can appear as imperatives and in other constructions without any suffix.

Verb stems can also be used as nouns denoting the action of the verb, as in English. Nevertheless, the distinction between nouns and verbs is clear. All words in the language, except structureless adverbs and connectives, are, grammatically considered, either nouns or verbs, pronouns being functional equivalents of nouns, and adjectives of verbs.

The range of ideas expressed by the suffixes which constitute the one means of grammatical structure in the language, and of which about seventy-five have been determined, is comparatively restricted. Including those that are semi-etymological or derivative, they may be classified into: (1) derivative suffixes of nouns; (2) suffixes expressing number and gender of nouns and adjectives, and suffixes of pronouns; (3) case-suffixes expressing syntactical, instrumental, and local relations; (4) verbal suffixes of a derivative nature; (5) verbal suffixes expressing modal, temporal, and participial relations.

As in Yokuts, the vowels of almost all suffixes are either *i* or *a*.

DERIVATIVE SUFFIXES OF NOUNS.

Derivative suffixes of nouns are not very many, but several occur with great frequency. Some definitely denote the agent or instrument, but others appear to have no specific meaning.

-mo'l, -o'l. A very common suffix denoting the instrument or actor, equivalent to English *-er*, but added to noun-stems as well as to verbs.

pa^hte-mo'l, pencil, "marker"
 lil-yim-o'l, stove, "metal-fire-instrument"
 lo'-mo'l, throat, "cougher"
 nam-mo'l, bed, "lie-er"

-am, a very frequent suffix on both noun and verb stems. Sometimes it means "partaking of the nature of," "that which is somewhat like." More often it has no meaning of its own that can be determined. Most of the stems on which it occurs are not used without it, even in composition or derivation. It is especially frequent on stems denoting animals and parts of the body. It is not unlikely that this derivational *-am* is originally the same as the collective suffix *-am* or *-lam* and the verbal usitative or continuative *-am*. An *-am* found on adjectives is probably also connected.

uk-am, swamp (uk, water)
 ol-am, brush, brushy place (ol, tree)
 on-am, earth-worm (on, earth)
 on-poy-am, mole
 ay-am, buzzard (a'y, glide)
 tit-am, mountain
 cam-am, raccoon
 sum-am, brains
 kate-am, bad
 tat-am, pretty (tat, good)
 k'il-am, striped
 tik-am, smooth
 ha^hte-am, hard, strong, durable

-il.

kite-il, flint

-is.

lop-is, jackrabbit

-nom, people of.

uk-om-nom, Yuki of Round Valley
 lil-cik-nom, a Yuki division (rock-black-people)
 hute-nom, Huchnom, Tatu, or Redwood Indians

SUFFIXES OF NUMBER AND GENDER.

-i, -a, plural. *-i* is the more common, but any noun is always used only with either *-i* or *-a*. No relation between the vowel of the noun and of the suffix is discernible. Nouns taking the objective suffix *-a* use *-i* for the plural. This plural suffix is confined to nouns denoting animals and plants, and to semi-pronominal stems.

mil-i, deer
 su's-i, ducks
 te'op-i, flies
 p'al-p'o-i-l, butterflies (for p'al-p'ol-i)
 mil-i, white-oaks
 cip-i, willows
 hil-i, all
-mac-i, plural of demonstratives
 cup-a, blackbirds
 tok-a, fleas
 koy-a, gophers
 ku's-a, geese
 teup-a, blackbirds

-s, plural suffix of a few nouns denoting persons; also of personal pronouns.

-p, singular suffix corresponding to *-s*.

na-ip, girl; na-es, girls
 iw-op, man; iw-is, men
 mus-p, woman; mus (for mus-s), women
 mi, thou; mo-s, ye
 a^a-p, I; u-s, we

-mac, or *-mas*, is added to the stem of demonstratives in forming the plural.

ki, that; ki-mac-i, these

-am, -lam, collective. It is the regular plural suffix of certain words denoting persons and ending in a suffix. It also forms the usual plural of certain inanimate nouns, such as house, in which the collective or distributive and plural meanings are apt to coincide; and of compound nouns containing an adjective.

ot-is-am, old women (ot)
 iw-is-ma'lam, young men (iw-o-ma')
 ha^a-lam, houses (han)
 pa^ak-am, one each (pa^ak, one)

atc-sil-am, pieces of skin
 ha^w-hot-am, whales (fish-large)
 hi-hot-am, large branches
 ol-hot-am, redwood trees
 titam-hot-am, high mountains
 atwa^{cit} ha^{son}-lam, fierce dogs

-itc, apparently primarily a diminutive, is also a collective, a distributive, and, through idiom, the plural of one noun denoting persons.

k'aml-itc, wild cat (k'amo'l, panther)
 a^s-itc, red (a^s, blood)
 tat-itc, pretty (tat, good)
 nu-itc, also nu, gravel
 su-itc, fish in general
 k'il-itc, fish-roe
 op-itc-am, in two heaps (op-i, two)
 al-k'at-te-am, in each board
 hal-itc, children (sak, child)

-a, animate of numerals and adjectives.

op-a, two
 molm-a, three
 puhite-a, a short person (puhite, short)
 cik-a, a black one

-i, inanimate suffix of numerals. It is used also when the numerals do not refer to any specific objects, or when they refer to nouns denoting animate objects but in the objective case. The stem paⁿ, one, animate irregularly paⁿ-k, inserts w: paⁿ-w-i.

op-i, two
 molm-i, three

-p, reflexive, on demonstratives.

ki-p, himself, from ki, that one, he

-moc, used before the plural suffix in the reflexive demonstrative; perhaps the same as *-mac* similarly used in non-reflexive demonstratives.

ki-moc-ey-at, of themselves

-el, may or may not be used on the word for I.

a^p-el or a^p, I

-in, may or may not be used on the word for my.

it-in or it, my

CASE-SUFFIXES.

-a, objective. Used on nouns, pronouns, and demonstratives, but only when animate. It may be conjectured that this suffix is the same in origin as the animate *-a* of numerals and adjectives, but there is nothing to prove such identity.

musp-a, woman
 hulk'o-a, coyote
 añ-kun-a, my father
 lope-a, jackrabbit
 hil-a, all
 ko'l-a, Wailaki

-c or *-s*, objective case, found only on *mi*, *thou*; the same as the Costanoan and Wintun objective suffix of the personal pronoun.

-at, possessive of nouns, pronouns, and demonstratives, animate and inanimate. It is invariably used.

pila^{at}-at, sun's
 hulk'o-at coyote's
 ki-at, his, that one's
 us-at, our

-ok, instrumental.

lac-ok, with an ax
 kutci-ok, with a knife

-a, instrumental. No difference in meaning between *-ok* and *-a* is perceptible. Some nouns use one and some the other.

mipat-a, with the hand
 on-a, with earth

-la, instrumental of demonstratives. Perhaps related to *-a* as *-lam*, collective-plural, is to *-am*.

ki-la, with that

-op, locative. Precise meaning: "on"; but also used as a vaguer locative "at." Added to verbs, it subordinates them and means "when." "At the seeing" is "when he saw."

hay-op, in carrying-sack
 pi-mo'l-op, with, on, flute
 nihin-a'l-op, at the door
 uk-op, on the water
 han-op, on the house
 on-op, on the ground

-ki, -k, -i, general locative, in, on, at.

ha^ate-ki, on the house floor
 hute-ki, out-doors
 u'-ki, in the water
 teiu-ki, in the acorn-granary
 ki-k, in that, in there

-am, -m, inessive. Used on certain words, such as han, house, and on demonstratives, as a general locative to the exclusion of *-ki*. Most other words take *-ki* but do not use *-am*.

ki-m, there, literally, that-in
 han-am, in the house

-t-a is a locative of wide or indefinite meaning found only on demonstratives. The difference between it and *-m* is not clear.

ki-t-a, there

-pis, ablative.

im-pis, from where

-wit, terminalis, to, toward.

ku'tki-wit, toward the north

-k'il, terminalis, to, toward.

han-k'il, to the house
 k'ol-k'il, to the other side
 no-namliki-k'il, to where he lived

-han, -ha^ahin, subessive, under.

uk-han, under water
 uk-ha^ahin, under water
 lil-ha^ahin, under the rock

-ite-ki, juxtapositive, next to, near. Probably the diminutive *-ite* with the locative *-ki*. A similar *-ite-op* is also found.

lil-ite-ki, by the rock
 mil-teote-ite-op, by the pounded meat

-mik'al, around. Is used also as an independent word.

yim-mik'al, around the fire
 on-mik'al, around the world

-kite, only, resembles the case-suffixes in being added chiefly to nouns, but its function is of course quite different.

cie-kite, only squirrels
 kit-kite, nothing but bones

These suffixes show a complete transition from purely formal or grammatical case-endings, such as the objective, through loca-

tive suffixes such as -op or -ki, to whole stems used as suffixes with prepositional meaning. The employment of all is however exactly alike; so that if the designation of "case" is denied to -mik'al, around, and -op, on, it must also be denied to objective -a and possessive -at.

DERIVATIVE VERB SUFFIXES.

The verb suffixes that are derivative rather than grammatical, in that they affect the meaning of the verb more than its relation to other words in the sentence, form the largest, most difficult, and in some ways most characteristic class of suffixes in the language. It is especially in this class that suffixes of indefinite meaning are numerous. Some of this vagueness of significance will undoubtedly become dissipated by more thorough knowledge of the language. Nevertheless it is quite clear that certain suffixes, whose precise meaning has been ascertained, at times have this their proper force only in a vague degree. It is in accord with this feature of these suffixes that there are almost none with concrete meanings such as describe direction or kind of motion and situation, or the class of object or instrument of action. None of these suffixes indicate that the action is performed with the hand, foot, head, or any other part of the body; none of them refer to the shape or position of objects; and when they refer to motion they do not specifically describe it with such meanings as up, down, towards the center, towards the outside, in a rolling manner, and so on, but indicate that a motion is made to do something, that the action of the verb is accompanied by motion, that there is motion toward, that there is a going to perform an action, that the action is repeated, or that it is involuntary. In other words, such Yuki suffixes are abstract or conceptional, not visual or dynamic. It is not unlikely that this condition is connected with the restriction of these and other affixed elements exclusively to a suffixed position, for it appears that specific and concrete affixes of motion, position, and instrument occur chiefly in those American languages that employ prefixes as well as suffixes, and that at least part of them usually are prefixes. Yuki contrasts with Pomo in this respect as

Eskimo, Shoshonean, and Yokuts contrast with Algonkin, Athabascan, Siouan, Chinook, and Washo.

Many of the derivative Yuki suffixes seem to be used with certain stems as a matter of habit or idiom rather than to serve any definite purpose or to express any specific meaning.

-kut forms an occasional inchoative. This suffix is also an independent stem meaning the beginning or end; *kut-kin* is "root." Possibly *-kut* is to be regarded as an independent auxiliary receiving the tense suffixes and postposed to the stem of the principal verb, rather than as an actual suffix. A more common inchoative is the suffix *-lam*.

o't-kut-mik, will begin to suck

-im, to try to, is an independent verb-stem that similarly appears occasionally as a suffix.

hilyu-si-im-wi, tried to make sick

-lau' has the force of English *can*, and is either an independent verb or a suffix.

aⁿp mis naⁿw-i-lau'-k, I can see you

aⁿp lau'-k, I can

-cilo is a frequent suffix with the meaning "appearing to." Often it can be translated by "as it were," or "it seems."

This suffix often has sufficient stress-accent to furnish some justification for considering it an independent word; but no other words intervene between it and the verb-stem to which it refers. There is usually nothing but accent and phonetic feeling to determine whether such forms as *yiiki-ciloo-wi* are one word or two; the two words if separate would stand in the same position and have the same form, the first being in that case participially subordinate to the second: "playing he appeared." The same can be said of the other elements already mentioned; they may be regarded either as suffixes, as final members of compound binary verbs, or as finite auxiliary verbs governing a participial or stem form of another verb. At the same time the inserted *i* of *yiik-i-ciloo-wi* and *naⁿw-i-lau'-k* seems to show that the forms in question are really suffixes; the verb stems being *yik* and *naⁿw*.

-law has the meaning of making a motion to perform the action indicated by the verb stem.

muk-law-e-tl-wi, moved to seize with the mouth, tried to bite
a'-law-e-tl-u, made a motion to seize

-n, appearing also as *-in*, *-en*, is a frequent suffix whose force in most cases is not clear. Where it has a definite meaning this is generally similar to that of *-law*, the preceding.

na^w-in-ek, goes to see
wiit-in, go to work

-lit is of unknown meaning.

t.auⁿ-lit-in-ma-mil, came to make war on them
yuu-lit-e-y-am, doing foolishly
yi-lit-eya-mil, played together
ham-lit-mil, wanted
na^w-e-lit-ei-mi, saw them
lak-si-lit-in-ia-k-mil, drove him out

-ma denotes motion toward. This suffix has a tendency to follow other suffixes of the derivative class. An *-m*, which transforms the stem *ko*, *go*, into *ko-m*, *to come*, is probably only a form of the same suffix.

kup-ma, come pointing
wo'-ma, coming toward
laⁿl-ma, creep to
un-ma-wi, brought

-k is somewhat indefinite in force. It appears to be used with intransitive verbs to indicate an action, as contrasted with a state, of the conception implied by the verb stem. This suffix must not be confounded with the tense-suffix *-k* or *-ik*, which it always precedes.

cu'-a, remain!
cu'-k-a, sit down!
a^p cu'-ik, I sit
a^p cu'-k-ik, I seat myself

-is, continuative, iterative.

-ak, *-yak*, single action, contrasting with *-is*.

-am, *-yam*, continuative, habitual usitative.

-kil, single action, or repeated action at a single period, contrasting with *-am*.

These four suffixes are very common. In some cases they have the specific force given for each, but often their meaning is

indefinite or connotive and their use largely a matter of established habit. *Li*, to kill, rarely occurs without *-ak*. Most languages would not go out of their way to express the fact that the idea of killing ordinarily implies a single act, one unrepeatable on the same object. As between *-is* and *-am*, the former apparently has more often a definite force. As between *-ak* and *-kil*, the former would seem to denote usually an unrepeatable or instantaneous action, the latter a repeated or longer action but one limited to a single period as opposed to a habitual act.

suup-ak-mil, threw once
 suup-is-u, threw repeatedly
 ha^awai-s-am-ek, eat customarily, use as food
 koo-y-am-mil, walked (about for some time)
 kaa^ak-am-ik, it (continues to) come (to me; for instance, money)
 ha^awai-kil-mil, ate it

-t-il, to cause to, to have for, to make to be, to want to do, to direct to do.

p'oi-t-il, put in (p'oi, in)
 pa^ate-t-il, write (pa^ate, mark)
 cu^a-t-il-mil, made him stay
 ha^awai-t-il-mil, fed him

-sil appears to emphasize the idea of motion without describing it, leaving this to the verb stem.

ti-sil-wi, jumped
 cu^a-sil-mil, sat down (cu^a, be at, sit)
 lak-sil-yak-mil, emerged
 kap-sil-ik, enters

-lil, reflexive or reciprocal action.

ima^a-lil-mil, said to one another
 mis kipat huc-lil-ha, do you like yourself?

-mil, meaning unknown. Not to be confounded with the final tense or syntactical suffix *-mil*.

pi-mil-mil, played flute (pi-mo^al, flute)
 a^ap ko-mil-ik, I am going
 ki-mil-mil, said

-il, meaning unknown.

an-il-ma-mil, brought him there
 ma^at-il, shoot
 wit-il-mil, turned
 lak-il-i, emerged

It is possible that there is some connection between *-kil*, *-t-il*, *-sil*, *-lil*, *-mil*, and *-il*.

-m appears to indicate involuntary, inanimate actions and automatic motions or sounds.

a^{nt}.aiⁿ-m-ik, shoes creak
 k'o-m-ek, flutters
 yu-m-i, is swinging, dangling
 ii yite-m-ik, I tremble
 kan-m-i, it swells
 tima al ha^k-m-i, the wood splits of itself
 woyam lak-m-i-wi, smoke came out

-lam is the usual inchoative or inceptive. *-kut* is also inchoative.

te'u^t-lam-ek, begins to sprout (te'u^t-t-ek, is sprouting)
 in-lam-ha mis, are you sleepy?
 mit ii huuc-lam-ek, I am falling in love with you

-si, *-s*, is the ordinary causative. *-t-il* and *-t-l* are also causative.

a^p tat-e-si-wi, I made it
 hilyu-si-pa, will make sick

-tan or *-ta^{nl}*, negative. This is nothing but the ordinary independent negative *ta^{nl}* used as a suffix. This negative can be used as verb with tense-suffixes: *ta^{nl}-k*, it is not so.

ha^{tc}'am-ta^{nl}, is not strong
 ii hana-ta^{nl}-k, I do not believe it
 t'um-ta^{nl}-k, it is not raining
 wil-ta^{nl}-a-mil, did not fear
 in-ta^{nl}-a-han, though not sleeping
 kotam-tan-mil, did not go

-t-l, transitive, intentional, causative action.

-t, intransitive, unintentional, not causative action.

These two suffixes are very common. Sometimes they are specifically contrasted, in which case the intransitive verb with *-t* is used as it were impersonally, with its logical subject in the objective case, whereas the subject of the corresponding voluntary or causative form is in the subjective. Almost any intransitive verb-stem unaccompanied by a derivative suffix seems to be able to take on *-t* without specially adding to its meaning. In *ko-t*, go, the *-t* is either purely habitual or the result of a desire to parallel the derivative *ko-m*, come.

nam-i-t-mil, dropped, fell down in death
 nam-tl-mil, laid it down
 muk-law-e-t-mil, (involuntarily the hungry Coyote, unable to restrain himself) snapped at it

muk-law-e-tl-wi, tried to seize it with his mouth
 ii o'-t-ik, I vomit (me comes out of mouth)
 aⁿp o'-tl-ik, I spit out (I make come out of mouth)
 teateol-t-ik, is budding
 ko-t-wi, went
 kap-t-mil, went in
 aⁿ-e-t-mil, rolled
 huūu-t-mil, stopped
 huūu-tl-i, stop doing something
 a'-tl-i, seize it!
 lak-tl-mil, throw out (lak, emerge)
 ko-tl-mil, put in (ko, be in)

SYNTACTICAL VERB SUFFIXES.

This class of suffixes express tense, mode, and participial and subordinating relations. As distinguished from the group of derivative affixes just discussed, they may be designated as modotemporal. In their position in the verb, they always follow the derivative suffixes.

-wi, -u, ordinary past time.

-wite, completed past.

-pa, future.

-mik, less common than the last, perhaps expresses an immediate futurity or a future intent.

-ik, -ek, -k, is generally translatable by the present tense of English. It may imply continuance. It makes verbs of adjectival stems.

-mil, lacks specific reference to time, indicating primarily that the verb to which it is attached is modally finite. Many Yuki sentences, especially in narrative, contain several verbs. These may be expressedly relative or participial, or may lack any grammatical suffix and thereby be subordinate to the finite verb which is the last in the sentence. In discourse or quotations this final finite verb bears one of the tense or mode suffixes; in continuous narration or description, whether past or present, aoristic -mil takes the place of such a tense-suffix in the finite verb.

ko-m-wi, came
 li-ak-u, killed

mi'-wite koi, has been there before
aⁿpel ko-wite, I was walking

hilyu-t-pa, will be sick
aⁿp ko-t-pa, I shall go

amis o'-t-mik, I will suck you
amis li-mik, I will kill you
sak-mik, she will have a child

te'uu'-t-ik, is sprouting
la'-t-ik, it breaks
teateol-t-ik, is budding
aⁿp koo-t-ik, I go
ii ham-ek, I wish
hanot-k, is heavy

nauⁿ-mil, saw
koo-t-mil, came

-ha, interrogative.

im-wit mi ko-t-ha, where do you go?
mis yauⁿ-ha, do you think?
tat mi yik-i-ha, did you play well?
maiⁿ mi'-ha, who is?

-es-te and *-am-s*, quotatives. Usually followed by *-ik*. These suffixes specifically express quotation. To indicate that myths and narratives rest on tradition and not on personal experience, a particle *ii* is used instead of these suffixes.

wok-es-te-ik, dances, they say
intcam-es-te-ek, they say, it is said
luwate pok-et-am-s-ik, the gun exploded, we hear
ko-am-s-ik, is coming, they say

-a, the usual imperative suffix. It is used on certain stems, and after *-k*, *-ak*, *-t*, *-is*, and other suffixes. Other stems, and the suffixes *-am*, *-tl*, *-kil*, *-til*, *-lil*, *-sil*, *-il*, and others, express the imperative without any suffix. A final *-i* after *-tl* and other endings seems to be only a phonetic increment, being found also in the unaffixed participial or modeless form of many verbs.

t-an-hil-s-a, make him draw it out!
uk-s-a, wet him!
un-t-a, carry!
koo-t-a, go!
eu'-k-a, sit down!
tii-k-a, jump!
o'-u-k-a, run!

cu'-a, stay!
 mi'-a, be!
 k'i'-a, be quiet!
 ha^awai-s-am, use as food!
 hutop-in, go hunt!
 in-i, sleep!
 wit-il, turn!
 ya^ac-kil, stand!
 haa-t-il, hold!
 a'-tl-i, take!
 wok-tl-i, wok-tl, sing

Subordinate relation is of two kinds, that which is translatable by English conjunctions and that which is translatable by English relatives. Suffixes indicating the first kind of subordination are:

-*op*, the locative case-suffix of nouns, when added to a verb gives the meaning "when."

-*kit*, "while" or "when"; probably derived from the demonstrative *ki*; possibly the demonstrative locative *ki-t-a*, at that, there.

-*ika*, if, when, also seems demonstrative in form.

-*han*, although, even though. This may be the noun-suffix *-han*, under.

ina^ai hil ta^al-op, day all not-at, when there was no daylight
 k'in-ik-op, when crying
 hau-lam-op, shine begin when, at daylight
 al wan-ek-op, when they gathered wood
 wok-si-kit, while dancing
 hap-si-li-kit, when enters
 ko-m-ika a-mis tean-i-pa, if (when) you come, I will give it to you
 ha^awaii-s-am-ika mia caia-lau'-k, if we eat, we can live
 hot-kil-han ha^atc'am-ta^al, although large, he is weak

The relative suffixes are of some length, and although frequent have not become entirely clear. They contain two chief elements: first, *-nam*, followed by *-l* or *-li*; second, *-ki*. Often these two elements are combined. The *-ki* is nothing but the ordinary demonstrative pronoun, *ki*, that. The *-nam-l* element is not so clear. *Nam* is the root for the idea of lying; but no connection of meaning is traceable between this root and the relative suffix *-nam*. The chief relative suffixes found are:

-nam-li-ki, who or which. The verb with this relative ending takes the objective, possessive, and plural suffixes exactly like the demonstrative *ki*.

-nam-li-ki-t-a, *-nam-li-kii-k*, etc., "where," literally "at which."

-mi-ki, "when."

-nam-li, *-nam-il*.

-nam-l-on.

Examples:

| | | | | | |
|---------------------|-----------------|--------------------|---------------|-------------|----|
| k'am-o'l | imei-namli-kii | k'an-hoot. | namli-ki-t-ei | k'an-hoop | ii |
| Panther | spoken-had-who | voice-big, | then | voice-light | |
| | imei-mil | | | | |
| | spoke. | | | | |
| yuu-yam-namli-kii | mil | k'ap-ii-yak-mil | | | |
| As they had done | deer | he killed. | | | |
| t'uu-namli-kii-k | tu-ak-mil | | | | |
| Put-where-was | he put it. | | | | |
| k'am-o'l-iw-ot | nam-namli-ki-a | li-ak-i | | | |
| Panther-man-old | lay-who, | he killing | | | |
| noo'-namli-kii-k'il | an-i-tl-t-i-mil | | | | |
| Lived-where-to | he brought it. | | | | |

SUFFIXES AND STRUCTURE.

The suffixes here enumerated total about seventy-five, and there are no doubt others. Omitting such as are purely etymological, like the noun-suffixes *-is*, *-il*, and *-nom*; those found only on one word, like *-el*, *-in*, and *-c* of the personal pronoun; those like *-mik'al*, *cilo*, and *lau'* which occur also as independent words and might justifiably be regarded as being only unaltered enclitic postpositions or auxiliary verbs; and those which like reflexive *-moc* and non-reflexive *-mac* of demonstratives, and noun-derivative *-am* and collective *-am*, are probably identical; there are however only some fifty or sixty. Even some of these, which are clearly suffixes, like the negative *-taⁿl* and the relative *-ki*, are used also as independent words.

Owing to the reduction of all grammatical processes to one, that of suffixation, it stands to reason that the structure of the

language, other than for a few matters of idiom, position of words, and purely relational syntax, is all contained in the foregoing list of suffixes.

It remains only to review the nature and forms of the various parts of speech by recapitulating the functions of the various suffixes used with each.

NOUN.

The Yuki noun may be a simple stem, a compound noun consisting of two or more stems, a derivative from a verbal stem by means of a suffix, or a simple verb stem like English "trade." Except in terms of relationship it is never united into one word with a pronoun or a pronominal element. It is not reduplicated nor modified for any expression of gender. It is modified only for the indication of ideas related to number and case. There is a plural suffix *-i* or *-a* for names of animals and plants. Several other suffixes have a limited use, on words denoting persons and inanimate nouns, to express singular, plural, collectivity, distribution, and a diminutive. There are two grammatical cases, an objective restricted to animate nouns and a possessive. There are a considerable number of instrumental and local suffixes, varying in character from case endings to postposed prepositions that can also be used as independent words.

PRONOUN.

The Yuki pronoun is grammatically a noun. Except on terms of relationship it is never used as an affix. Its suffixes of number and case are for the most part those of the noun.

The personal pronouns are restricted to first and second persons. The third person, if necessary, is expressed by a demonstrative. There is no dual, but inclusive and exclusive forms are distinguished in the first person plural. As is common in American languages, the inclusive is formed from the stem of the second person. This stem is *m*. The stem of the first person seems to be vocalic.

| | <i>Subjective</i> | <i>Objective</i> | <i>Possessive</i> |
|------------|---|------------------|-------------------|
| S 1. | a ⁿ -p, a ⁿ -p-el | ī | it, it-in |
| S 2. | mi | mi-s | mī-t |
| P 1. excl. | us | us-a | us-at |
| P 1. incl. | mī | mī-a | mī-at |
| P 2. | mos | mos-i-a | mos-i-at, mo-t |

The s in u-s and mo-s is evidently the same as the plural -s in iw-is, men, and other nouns denoting persons. Compare the -mas helping to form the plural of demonstratives. Similarly the -p in aⁿ-p appears to be a designation of the singular, as in mus-p, woman.

Demonstratives are only two, ka, this, and ki, that. Ka specifically indicates nearness. Ki when specific expresses distance. It is, however, more frequently used as a general indefinite demonstrative, as a pronoun of the third person, and as an article. It also forms the base for the reflexive, which is derived by the suffix -p. Finally, ki is used as a relative suffix of verbs.

The demonstratives are used both as substantives and as attributive adjectives. They are not altered to express any distinction of gender or animation. Their case and number suffixes are on the whole those of the noun, with certain differences. In the plural mas or mac is added to the stem before the regular suffix of number -i or the case suffixes. The instrumental suffix is -la, instead of -a or -ok. Certain of the locative suffixes of the noun do not appear on the demonstratives, which possess others, such as -t-a, not found on the noun.

| | <i>Subj.</i> | <i>Obj.</i> | <i>Poss.</i> | <i>Loc.</i> |
|-----------------|--------------|-------------|--------------|--------------------|
| this | ka | ka-a | ka-at | ka-k, ka-t-a |
| that, the, he | ki | ki-a | ki-at | ki-k, ki-t-a, ki-m |
| he himself | ki-p | | ki-p-at | |
| these | ka-mas-i | | | |
| those, they | ki-mas-i | ki-mas-a | ki-mas-at | |
| they themselves | | | ki-mos-i-at | |

Interrogatives and indefinites are:

maiⁿ, who? someone
 haiⁿ, what?
 iyi, iyon, what? something
 haiⁿ-mas, how?
 im, where?

The personal pronouns are more closely joined to terms of relationship, to which they form proclitics or prefixes, than to other words. The objective forms are used to indicate possession. *Mis-k'un*, thy father, is literally thee-father. His before terms of relationship is *kim-*. A few terms of relationship, mostly beginning with *k*, show *an-*, modified to *añ*, instead of *ii* for my.

ADJECTIVE.

The adjective is really a verb. This is clear from its position in compound nouns, where its place is that of the verb after the modified noun, whereas a qualifying substantive precedes the modified one. When used as a verb the adjective usually assumes the indefinite or present suffix *-ik*. When attributive to a noun the adjective is used without suffix. Ordinarily the attributive adjective is not modified for case or number, although occasionally the adjective instead of the noun receives a case suffix properly belonging to the latter. A number of adjectives end in the noun-forming suffix *-am*. An adjective attributive to an animate noun receives the suffix *-a*. When provided with this suffix, the adjective, like the numeral, can also be used as a noun denoting an animate being.

puhite, short
al puhite, short stick
puhite-k, is short
iwis puhite-a, short men
puhite-a, a short person

NUMERALS.

The numeral system is thoroughly quaternary, or more strictly octonary. It has already been published.⁵³ The numeral systems of the other dialects of the family show no trace of this system of counting by fours and multiples of fours, but are quinary, decimal, and vigesimal. There are numeral roots only for one, two, and three. All the higher numerals are composite words descriptive of the method of counting. Above three the numerals do not seem to be used with suffixes. Below three they ordinarily

⁵³ R. B. Dixon and A. L. Kroeber, *Numeral Systems of the Languages of California*, *American Anthropologist*, n.s., IX, 663-690, 1907.

end in -i, for which -a can be substituted when the numeral is used as a noun and refers to animate beings. The animate for one is paⁿ-k instead of paⁿ-wa.

CONNECTIVES.

There are few conjunctions in the English sense of the word except naⁿ, which is used to connect words and long sentences. Subordinating conjunctions are replaced by relative and modal suffixes of the verb, which permit a complicated sentence structure. On the other hand, connective words which cannot be exactly paralleled in English are important.

The most frequent of these connectives are saⁿ and si, which can be used independently or as a base for other connectives. They form a contrasting pair. Saⁿ indicates that the subject of the sentence which it opens is the same as the subject of the preceding sentence. Si indicates a corresponding change of subject. These two particles enable the speaker to narrate at great length complicated and varying reciprocal actions of two persons without any designation of them, by either noun or pronoun, after their first mention.

In narrative in which the "dubitative" ii is used it is added to saⁿ and si.

A number of other elements suffixed or added to saⁿ and si express various shades of meaning of time and sequence. In narrative or description not based on personal experience these forms are further enlarged by the dubitative ii.

-k, forming si-k, saⁿ-k, si-k-ii, saⁿ-k-ii, is about equivalent to "and," implying that the action of the verb in the sentence which it introduces is contemporaneous with the action of the verb in the preceding sentence.

-m, forming si-m-ii, etc., may be translated "and finally." It indicates that the action expressed in the preceding verb, after having continued for some time, is completed, with the implication that something more or less expected is now to take place.

-kit, forming si-kit, saⁿ-kit-ii, etc., is equivalent to "and then." It usually indicates the completion of the action described in the previous sentence. It is not unlikely that this element is related to the demonstrative ki.

-kaⁿ, forming si-kaⁿ, etc., can often be translated as "there-upon," denoting that the action expressed in the preceding sentence still continues in the next.

A stem so- is also used as a base for forming several connectives. The words derived from it seem to indicate the relation of the ideas in two adjacent sentences, rather than the identity or difference of their subjects as expressed by saⁿ and si. So-p is translatable as "and," also "on account of that." So-n is "but." So-m is also found.

There are a number of other connectives, such as kop-han, saⁿ-kop, si-mo-n, si-mo-p, si-k-on, whose meaning is not yet clear.

VERB.

The Yuki verb is by far the most complex part of speech in the language, but its study offers less difficulty than might be anticipated, on account of the scarcity of phonetic changes in derivation and suffixation, and also because the root invariably forms the first part of the word. One other feature makes the verb much simpler than in many American languages: the total lack of any form of incorporation or pronominal affixation. The verb is built up from the stem by suffixes, those nearest the stem being derivative, those at the end of the word modal or temporal. The average verb may be said to consist of a monosyllabic stem followed by one or two derivational suffixes and one or more suffixes of tense, mode, or subordination, with the insertion of phonetic vowels, usually i, between adjacent consonants.

The derivative suffixes do most to characterize the verb. Some of them are ordinary causatives, inchoatives, or intransitives, such as are customary in American Indian languages. Others, however, are either much more indefinite, or convey such subtle shades of meaning, that their precise force does not become apparent even from a considerable number of examples. That this vagueness exists in most of the derivatives whose function is not yet clear, is probable from the presence of this quality in several very common suffixes. Thus -t-l at times is a full causative, at times expresses voluntary or deliberate action, and again at other times merely makes the verb transitive. The -is and -ik pair and -kil and -am pair of suffixes show a similar variability

of definiteness of force. In some cases they specifically indicate repetition, duration, or singleness of action, but in a greater number of cases these ideas are only indirectly or indefinitely implied. It is noticeable that suffixes of this nature usually occur in contrasting pairs. The number of derivative suffixes so far determined is not very large. There are almost certainly others, but it does not seem that the total number in the language can be very extensive.

Final suffixes of verbs may all be called modal or temporal, but form several groups. A number specifically indicate tense, such as the preterite *-wi* and the future *-pa*. The use of any of these suffixes, however, implies that the verb is finite. Another group of suffixes specifically indicate mode, such as the imperative, the interrogative, and the attributive participle. The suffix *-mil* constitutes a third group. It replaces the finite tense endings but is itself indefinite as to time, indicating merely that the verb to which it is added is the principal or finite verb of the sentence. Another class is formed by subordinating modal suffixes, whose force is generally equivalent to that of some English conjunction. Some of these are only case suffixes of nouns, such as *-op*, when, literally at or on. Finally there is a consequential group of relative suffixes. Several elements enter into these, the most conspicuous being the demonstrative *ki*, which is always final. These relative suffixes furnish an important means toward a complex subordinating sentence structure. At the same time the stem, with or without derivative suffix, but free from any suffix of the modal temporal class, is also used as a subordinate verb.

Reduplication is nearly lacking in the verb. There is also no indication of number either for subject or object. Only one case of stem differentiation for number, of the kind occurring in Pomo, Washo, Athabaskan, Shoshonean, and other languages, has been found: *nam-tl*, to lay one object, *pin-tl*, to lay several objects. The two stems may however really mean to lay and to scatter.

An idiom of the language provides the use of the subject in the objective case for a large class of verbs. When such verbs are transitive the object is put in the possessive case. "I hear

you'' is therefore translated "Me hear your." Every verb of mental action belongs to this class of quasi-impersonal verbs. The idea of mental action is however extended so as to include states of the body and conditions of the person expressed by adjective stems, as well as certain actions of the body that are involuntary or conceived of as such. This class of verbs therefore includes those denoting to like, fear, hate, sorrow, rejoice, think, know, be hungry, sleepy, sick, alive, dead, born, provided with, without, hiccup, vomit, be good, large, small, or angry.

ii miit nanak'-u, I knew you
 hulk'o-a ha'l-t-mil, Coyote heard
 a^c-t-mil k'amlitc-a, became warm the wild-cat

SENTENCE.

The Yuki sentence is frequently complex, several participial or relative clauses preceding the finite verb. The relation of sentences is indicated with considerable nicety of expression by the introductory or connective particles. The order of words is pretty definitely fixed, but is only idiomatic, all syntactical relations, except the distinction between inanimate subject and object, being clearly expressed by the grammatical suffixes. The subject precedes the verb. The object may follow or precede the verb. The adjective, whether attributive or predicative, follows the noun. The same relation of order exists when adjective or verb are combined into one word with the noun. Connective particles head the sentence. Subordinate clauses usually precede the principal clause.

VOCABULARY.

With few exceptions the words of Yuki are either monosyllabic or resolvable into monosyllabic stems and suffixes. Many disyllabic nouns whose full etymology is uncertain contain a derivative suffix or a monosyllabic element of known meaning, proving the unknown stem to be also monosyllabic. So many polysyllabic words can be resolved in the same manner that it is difficult to refrain from the conclusion that all the elements of the language are monosyllabic. For example, mil-on-tit-am, elk, is composed of mil, deer; on, earth, tit, high, forming the com-

pound noun ontit, mountain; which in turn is made an adjective, mountainous, by the derivative suffix -am.

A vocabulary comprising the most common nouns of the language has been given by Dr. S. A. Barrett, in his cited paper in the sixth volume of the present series. A list of the principal verb stems determined is appended.

| | |
|--|--|
| a', hold, take | in, sleep |
| a ⁿ , be | |
| ā ⁿ , roll | ka ⁿ , slip on |
| a ⁿ l, contract | ka ⁿ k, become, make |
| a ⁿ pli, trade | kan, swell |
| ac, urinate | kan, kneel |
| at, fasten | kan, ka ⁿ y, talk |
| a ⁿ t.ai ⁿ , creak, squeak | kap, enter |
| aw, lack | kī, leave, release |
| ay, crawl, slide | k'i't, be quiet |
| | kil, say |
| ha, hold, carry | kil, have in mind, be angry |
| ha, flow | k'in, pity, whine, cry, stink, rot |
| ha ⁿ , split | kit, follow |
| ha ⁿ , rub | kit-, slice |
| hā ⁿ , build | kit-, neigh, crow, howl, rattle |
| ha ⁿ l, hear | kiw, ask |
| ham, say, tell, desire | ko, go |
| han, stick on, fit | k'o, be in |
| hana, think, believe | k'ol, die, shrivel |
| hate, sneeze | k'om, resound |
| haw, like, desire | kop, growl |
| ha ⁿ wai, eat | kus, spout, blow |
| ha ⁿ y, search, look for | kut, begin, first |
| hik, go together | k'ute, stretch |
| hil, emerge, draw out, drag | |
| hilyu, sick | la', break, crack |
| him, move | lak, emerge |
| hiw, spill | la ⁿ l, step, go on four legs |
| hok, flay | la ⁿ tc, squeal, crack |
| hu, stop, end, begin | lau', lawh, be able |
| hukol, wash | li, kill |
| hul, spin | lik, swallow, drown |
| hum, glad | lit, touch |
| hum, fly about | lo', cough |
| hue, love | lu, descend, chop |
| hut'op, hunt | luk, project, punch |
| | |
| im, say | mam, grow |
| im, become | ma ⁿ t, shoot |
| im, try | mi, drink |

| | |
|------------------------------------|---|
| mi', be | ca ⁿ -c, bite |
| min, lie, doubt | ca ⁿ -y, chew |
| mit'an-k, hate | ca ^t , split, shave |
| mop, gather | cay, alive |
| mot, gamble | cilo, resemble |
| mot-, join, be pressed | cim, paint |
| muk, bite, seize with mouth | cit, spark snaps |
| muc, laugh, smile | cite, split, whittle |
| mute-u, squeak, titter | ciw, ripple |
| muy, copulate | coy, stuff |
| | cu', sit, stay, go down |
| na ⁿ , press, hold down | |
| naham, crazy | ta, float, drown |
| nanak, know | ta ⁿ , lick |
| nam, lie | ta ⁿ , find, appear |
| naso, roar, sough | ta ⁿ l, menstruate (= not?) |
| na ^w , see | ta ⁿ l, win, beat (= not?) |
| nay, pull | ta-m, enter |
| ni, have cavity | tas, snare, trap |
| no', live | tat, make, good |
| num, smash, mash | ta ^y , tie to |
| | ta ^y , cut |
| o', vomit, spit | ti, cut off |
| o', run | ti, hurt, pain |
| ok'ol, hollow | ti, fly, jump |
| | tik, paint |
| pa, lift, rise | tik, coil |
| pa ^{ky} , shout | tiw, run to, move to |
| pan, hang | tiw, glad |
| pan, fall, stumble | tok, knot, joint |
| pa ^{tc} , mark | top, tie together |
| pi, track | tot, consume |
| pi, whistle | t'ot, slip out |
| pi-it, mark, notch | tot-, fall |
| pit-', close, shut | tot-, play ball |
| pok, burst, crack, pop | t'u, push, lay |
| pohote, contract | tu, brush, comb |
| pul, miss, not hit | tuk, strike, reach |
| pute, blow | tul, perforate |
| | tut, rub off, scrape |
| sa', fail, unable | tute, pound |
| sak, child, bear | |
| sat-, have for | t-a ^k , scrape, shave, clean |
| sa'w, call, sing, cry | t-an, plug, close |
| sa ^y , defecate | |
| sil, tear, rip | tca-k, slap, whip |
| sot-, scratch, cut | te'al, pull |
| sup, throw | tean, give |
| | teate, bud |

| | |
|-----------------------------------|---------------------------------|
| te'i, twist | wim, roar |
| tei, teay, rattle | wit, work |
| teik, roll | wit, turn |
| tein, pinch | wit-, throw |
| teip, squeeze out | wite, knock over |
| teiy, flash, glitter | wo', walk, go |
| te'u', sprout | wok, dance, sing |
| teuk, fall off | wos, bend, stoop, animal stands |
| | wum, stir |
| u, fear | |
| u, bring | ya, climb, ascend |
| u', sew | ya ⁿ , stand, stick |
| uk, bark, howl | ya ⁿ , blaze |
| uc, wrinkle, shrink | ya ⁿ w, think |
| | yi, yik, play |
| wa ^k , pay | yite, tremble |
| wa ^k , disjoint | yo-a, have |
| wan, mix, soft | yu, shake, swing, dangle |
| wa ^{te} , tell, instruct | yu, do, happen |
| wil, pass by | |

The number of homonyms is great. A random example:

| |
|---|
| kil, say |
| kil, angry, bear in mind |
| -kil, verbal suffix |
| -k'il, toward, noun-suffix |
| k'il-, seed |
| k'il, coal |
| k'il-, striped |
| k'il-, crooked |
| k'il, son, daughter |
| k'il, element occurring in words for widower, ghost |

There are very few reduplicated or duplicated words and few that are onomatopoeic. The presence or absence of these two phenomena is usually coincident. Most of the languages of California show a number of onomatopoeically reduplicated words.

TEXT.

| | | | | | |
|-------------|------------------------|----------------------|---------------------|---------------|-----------------|
| k'a'm-l-ite | ii | mil-t'u | yii-k-i'k-am | ii | i'm-pis |
| Wild-cat | it is said | deer-heart | playing, | | somewhere-from |
| hul-k'o'i | na'u ⁿ -mil | sq ⁿ -e'i | ai ⁿ -it | wo'o'-ma | na ⁿ |
| Coyote | looked. | And | gradually | walked-toward | and |
| si-i'i | ki-ma'e-nam-i'l-k | ei | ha ⁿ ca' | a''-ii | su'up-is |
| and | what-he-did, | | again | slope-on | throwing, |

yii-k-i'-mil se-e'i i'm-pis ki hul-k'o'i na'uⁿ-mil
 played. And somewhere-from that Coyote looked.

se-e'i an ki-ma'c-k ii yi'i-k-i-mil se-e'i haⁿye
 And always doing-that, played. And now

ki hul-k'o'i ei haⁿye t'aⁿ-sa-tl-mil si-i'i k'am-l-ite
 that Coyote now made-himself-be-found. And Wild-cat

yii-k-i-nam-i'l-kon ei huu'u-t-mil se-e'i hul-k'o'i
 what-he-was-playing stopped. And Coyote

ki'w-is-mil i'iyi ciñki-mi kup yii-k-i-cilo'o-wi se-e'i
 asked: "What ?-you sister's son play-appeared-to?" And

k'a'm-l-ite i'i-yi aⁿp yu'u-y-am-ha tanhaⁿl-k aⁿp
 Wild-cat: "What I was-doing? Nothing-it-is; I

ka cu'uh-uk ii i'mei-mil taⁿl-k taⁿlk kup
 here sit," said. "Not-it-is, not-it-is, sister's son,

kaiⁿt aⁿp naⁿw-i'-wi i'iyi mi tat-e'ite neyu' ka'i
 long I saw something you pretty smooth

suup-is-u si-ei k'a'm-l-ite ei i'mei-mil i'iyi aⁿp
 kept-throwing." And Wild-cat said: "What I

su'up-is-ha ii i'mei-mil saⁿ-e'i po'-hot- ha'-nam-il-ki'i
 was-throwing?" said. And oak-gall had-which

ei a''-ii ii su'up-ak-mil se-e'i hul-k'o'i taⁿl-k
 slope-on threw (once). And Coyote: "Not-so,

taⁿl-k kup ka'iⁿt aⁿp naⁿw-i'-wi i'mi-ye-kit-
 not-so, sister's-son, long I watched," said-when.

ii kii k'a'm-l-ite ei cu'uh-sil-mil se-ei iiyi yu'
 that Wild-cat sat-down. And: "What makes

ku'up-a iit haik'a'i-ha sak aⁿp mi'hi ku'up-a
 sister's-son me think-foolish? Baby I am, sister's son

ya'uⁿ-ha saⁿ-e'i li's kup kii yi'i-k-a si-kaⁿ'
 regards?" And: "Come, sister's son, that play! Then

aⁿp mis kup na'uⁿ-ni si-e'i haⁿye' kii
 I you, sister's-son, will watch." And now that

k'a'm-l-ite ii haⁿye' kii mil-t'u' ei suup-a'k-mil
 Wild-cat now that deer-heart threw (once)

a''-ei se-e'i hul-k'o'i na'uⁿ-mil se-e'i haⁿca'
 slope-on. And Coyote watched. And again

suup-a'k-mil a''-ei se-e'i ki-pa'uⁿ-kot aⁿ-i'c-t-i ei
 threw (once) slope-on. And back rolling,

hul-k'o'a muk-la'w-e-t-mil sop-ei k'a'm-l-ite
 Coyote involuntarily-moved-to-snap-it. For-that Wild-cat

k'in-i'te-tl-mil saⁿ-e'i haⁿye ha'a-t-il-mil kaiⁿt ii miit
 almost-cried. And now took. "Long I you

| | | | | |
|-------------------------------------|--|--|--|---|
| na ⁿ na'k-u knew." | si-e'i And | hul-k'o'i Coyote: | ta ⁿ l-k "It-is-not-so, | ta ⁿ l-k it-is-not-so, |
| kup sister's-son; | k'on only | a ⁿ p I, | kup sister's-son, | mis you |
| | | | | yi'-miwa'a-tl play-help |
| sai-ki'l-u almost-did" | se-e'i And: | lis "Come, | kup sister's-son, | lis hurry, |
| | | | | kup ei sister's-son," |
| i'mei-mil said | hul-k'o'i Coyote. | sak "Baby | a ⁿ p I | mi'hi am, |
| | | | | ku'up-a sister's son |
| ya'u ⁿ -ha thinks?" | ii | i'mei-mil said. | se-e'i And | ha ⁿ ca' again |
| | | | | ā'-ei slope-on |
| su'up-ak-mil threw (once). | se-e'i And | ā ⁿ -e'-t-mil rolled. | se-e'i And, | ā ⁿ -lam-i ei roll-beginning, |
| mu'k-tl-mil snapped-it. | sa ⁿ -e'i And | ha ⁿ 'tc-tl-mil split-it. | sop-ei For-that | k'a'm-l-itc Wild-cat |
| k'in-i-a'k-mil cried. | se-e'i And | ki-pa'u ⁿ together | ii mote-sa ei pressing | teān-e'-mil gave, |
| sa ⁿ -e'i and: | teò' "Here, | kup sister's-son, | teò' here, | kup sister's son," |
| | | | | i'mei-mil said. |
| sa ⁿ -e'i And | teān-e'-mil gave. | se-e'i And | a ⁿ 'ta ⁿ again | su'up-ak-mil threw (once). |
| se-ei And | ki-pa'u ⁿ -kil back-toward | ā ⁿ -lam-i roll-beginning, | ei ha ⁿ 'ye' now | muk-tl-ki ei snapping-it |
| ha ⁿ 'ye now | lik-i'-t-mil swallowed. | si-e'i And | k'a'm-l-ite Wild-cat | ha ⁿ -k'il house-to |
| k'i'n-t-ii-mil cried. | si-kit-i'i And then | k'o'l-k'il back-toward | hul-k'o'i Coyote | ko'o-t-mil went |
| se-e'i And | k'a'm-l-ite Wild-cat | ki'm-la'n his-own-brothers | ki-mā'e-at of-those | mil-p'i'i-mo'l deer-flute |
| nam-nam-li-ki'i lay-which | ii | ha''-ma taking, | ei p'ii-mi'l-mil whistled | kim-la'n his-own-brothers |
| ki-māc-i those | mil-hut'o'op-in-nam-li-kit. deer-hunt-go-while. | se-e'i And | a ⁿ 'ta ⁿ again | hul-k'o'-a Coyote |
| ha ⁿ 'l-t-mil heard. | sa ⁿ -e'i And | a ⁿ 'ta ⁿ again | wo'o'-ma-mil walked-toward. | sa ⁿ -e'i And |
| han-ku'ut-iy-it. house-back-near | ha'-mil listened. | se-e'i And | kan-u'uk talk-water | p'ii-mi'l-mil whistled. |
| se-e'i And | hamlate-ki smoke-hole-at | ya'-i-t-i climbing | ei ha ⁿ 'ye now | ta ⁿ 'sa-tl-mil showed-himself. |
| se-e'i And | k'a'm-l-ite Wild-cat | ki'w-i-pi'i-mo'l elder-flute | ei ha'-ma'-ñ-kil picking-up | ei |
| p'ii-mil-a'k-mil played (once). | | | | |

PARTIAL ANALYSIS.

- k'am-l-ite**, Wild cat, from **k'am-o'l**, panther, and the diminutive suffix **-ite**.
- ii**, particle used in myths to indicate that the narrative does not rest on the personal experience of the narrator.
- mil-t'u**, deer-heart, composite of two independent stems as in English.
- yii-k-i-k-am**, playing, from stem **yi**, play, appearing usually with an unknown suffix **-k**; **-i**, euphonic, to separate the two **-k** suffixes; **-k**, suffix indicating action, not a condition; **-am**, suffix expressing on verbs a more or less definite continuative. The word is the predicate of **k'am-l-ite**, wild-cat, but lacking a tense or mode suffix is participial and subordinate to **nau^u-mil**, saw.
- ii**, "dubitative" particle described above.
- im-pis**, from somewhere, from **im**, interrogative where, here used indefinitely, and ablative suffix **-pis**.
- hul-k'oi**, Coyote. The composition is not clear: **hul** is eye, **k'oi** is gopher, regarded as the characteristic food of the coyote.
- nau^u-mil**, looked, from stem **na^uw**, to see, here used intransitively, and suffix **mil**, used in narrative in place of tense-suffixes to indicate the finite verb of the sentence, but lacking specific temporal indication.
- sa^a-ei**, introductory particle, composed of **sa^a**, opposed to **si**, and indicating that the subject of the verb introduced is the same as that of the finite verb in the last sentence, and the "dubitative" particle **ii**.
- ai^a-it**, gradually, apparently derived from verbal stem **a^ay**, to glide, by a suffix **-it** or **-t** of unknown meaning, perhaps found also in **kai^t**, long ago.
- woo'-ma**, walked toward, from verb stem **wo'**, to walk, go, and suffix **-ma** expressing motion toward. As frequently, there are no tense or mode suffixes following this suffix, so that the verb is to be regarded as participial, connected by **na^a**, "and," with the participial form **suup-is**, throwing; and with it subordinate to the finite verb **yii-k-i-mil**, played.
- na^a**, and, connecting the participial clauses containing **woo'ma** and **suup-is**; usually only a connective of words.
- si-ii**, introductory particle, composed of **si**, opposed to **sa^a**, and indicating that the subject of the verb introduced is different from the subject of the preceding verb; and the particle **ii**. **Sa^a-ii** and **si-ii** are ordinarily used only at the head of complete sentences, so that they can be translated by introductory "and"; here they head two parts of the same sentence and are therefore connected by the conjunction **na^a**, and.
- ki-mac-nam-il-k**, what he did, relative verbal form; derived by the final tense suffix **-k**, indicating an indefinite present and having verbifying force; and by the relative suffix **nam-li** or **nam-il**, of unknown origin; from a stem **ki-mac**, primarily demonstrative, from **ki**, that, and **mac**, probably meaning in such manner; the combined form having the meaning thus (?) and being used with the plural suffix **-i** as the regular plural, **kimaci**, those, of **ki**, that; but here employed as a verb-stem, as in the form **ki-mac-k** below.
- ei = ii**.
- ha^aca**, again.
- a^a-ii**, on the slope, from **a'**, slope, and locative suffix **-i**, probably a form of **-ki**, at.

suup-is, throwing, from sup, throw, and suffix -is indicating repeated action; without tense or mode suffix, and therefore participial, coördinated with woo'-ma by naⁿ and subordinated to yii-k-i-mil.

ii.

yii-k-i-mil, played, from stem yi with its usual derivative suffix -k, euphonic -i-, and finite suffix -mil.

se-ei, introductory particle indicative of change of subject.

im-pis, somewhere-from, as above

ki, that, ordinary demonstrative, equivalent to "the," "he, she or it," and (when contrasted with ka, this) "that"; here attributive to hul-k'oi, Coyote, and equivalent to "the" or "the before-mentioned."

hul-k'oi, Coyote, subject of nauⁿ-mil.

nauⁿ-mil, looked, from stem naⁿw, as before.

se-ei, introductory particle indicative of another change of subject. The subject of the last sentence having been Coyote, it is Wild-cat in the present sentence. There is no noun or pronoun or any representative of the subject in this sentence.

an, always, constantly.

ki-mac-k, doing that, verbal participle formed by the verbalizing present-suffix -k from the stem ki-mac, from the common demonstrative ki, that; perhaps literally "thus-ing." Compare ki-mac-nam-il-k above.

ii.

yii-k-i-mil, played, as above.

se-ei, indicates change of subject, a return to Coyote.

ha^{ye}, now; possibly from one root with ha^{ca}, again, occurring above.

ki, that, the, as above with hul-k'oi.

hul-k'oi, Coyote.

ei = ii.

ha^{ye}, now, tautological.

t'aⁿ-sa-tl-mil, showed himself, literally, made himself be found. Stem t'aⁿ, find; -sa-, evidently related to causative suffix -si-, a similar form appearing in mote-sa- below; -tl-, frequent transitive-intentional-causative suffix; -mil, suffix of finite verb.

si-ii, indicates change of subject to Wild-cat again.

k'am-l-itc, Wild-cat.

yii-k-i-nam-il-kon, that which he was playing, objective relative participle. Yii-k-i as before, -nam-il, relative suffix of verbs, -kon, final relative suffix apparently in the objective case.

ei = ii.

huu-t-mil, stopped, from stem huu'u, to stop, apparently related to hu', begin, by an unknown process of derivation; -t-, intransitive or involuntary suffix opposed to -tl-; -mil, suffix of finite verb.

se-ei, indicating change of subject.

hul-k'oi, Coyote.

kiw-is-mil, asked, from kiw, ask; -is, frequentative suffix, often of distinct iterative meaning, as in suup-is above, but here apparently merely habitually used with the stem kiw; -mil, suffix indicating finite verb.

iiyi, what, interrogative.

ciñki, meaning unknown; iiyi-ciñki-mi is a frequent interrogative phrase.

mi, you, personal pronoun, second person singular, here somewhat enclitic to ciñki, but as a matter of accent, not construction; grammatically an independent word, subject of the sentence.

kup, sister's son; here an appellation, appositional to mi, you.

yii-k-i-ciloo-wi, appeared to play; from yii-k-i, from usual form yii-k of stem yi, as above; ciloo, to seem, resemble, be like, used as an independent verb stem and more frequently as a suffix with the force of an auxiliary verb, like lau', be able, and im, try; -wi, ordinary past tense-suffix used in direct discourse, its place being taken in narrative by -mil.

se-ei, announcing another change of subject.

k'am-l-itc, Wild-cat, subject of imeimil, said, at the end of the quotation beginning with the following word.

iiyi, what, interrogative, object of the verb yuu-y-am-ha, did.

a^{ap}, I, independent pronoun occurring both in this form and as a^{ap}-el; subject of yuu-y-am-ha.

yuu-y-am-ha, was doing; from stem yu, to do; -y- phonetic glide frequent before the suffixes -am and -ak after unaspirated vowels; -am, suffix usually having a continuative or iterative force, as here; -ha final interrogative suffix, displacing the tense-suffix.

tanha^l-k, it is nothing or it is not so, verbal derivative by the present-tense suffix -k from an enlargement by unknown derivation from the stem tan or ta^l, no, not. Ta^l-k occurs with the same meaning in the next sentence.

a^{ap}, I, subject of following cuuh-uk, sit.

ka, here, strictly "this," demonstrative pronoun of proximity. Ka may in this sentence form a compound with the following cuuhuk, ka-cuuhuk, I sit here; one should expect the usual locative form kat-a, at this, here.

cuuh-uk, am sitting, from stem cu', and present suffix -ik, the u of the suffix being obscure.

ii, dubitative particle, here indicating the cessation of the direct discourse in which it is not used, and the resumption of the narrative.

imeimil, said, predicate of k'am-l-itc above, the entire intervening quotation with three finite verbs being logically the object. Formed by the suffix -mil indicating the finite verb in narrative, from imei, probably composed of stem im- and euphonic -i- to separate final m of the stem and initial m of the suffix.

ta^l-k, it is not so, from ta^l, no, not, and present or verbalizing suffix -k.

ta^l-k, it is not so.

kup, sister's son, appellation.

kai^t, for a long time.

a^{ap}, I, subject of the following verb.

na^{aw}-w-i-wi, looked, was looking, as above. Probably intransitive here, as the following clause, which logically is its object, is not subordinated to it but also contains a finite verb.

iiyi, something, interrogative what? here used indefinitely, object of mi suup-is-u, you threw; possibly equivalent to a relative connecting na^{aw}-w-i-wi and suup-is-u, though such a construction would not be characteristic.

mi, you, subject of suup-is-u.

tat-eitc, pretty, from tat, good, and diminutive suffix -itc; also tat-am; attributive to iiyi, something.

neyu, smooth, in the same construction as tat-eitc.

ka'i, †

suup-is-u, kept throwing, predicate of mi, from sup, throw, suffix -is expressive of iteration or continuation, and final past-tense suffix -wi, as in na^{aw}-w-i-wi, here as often contracted to -u.

si-ei, particle introducing a new sentence which will have a different subject from the last.

GENERAL CHARACTER OF THE LANGUAGE.⁵⁴

The most important characteristics of the Yuki language may be said to be the following: phonetic simplicity, both as regards the limited number of sounds and the absence of accumulation of either consonants or vowels; phonetic rigidity or immutability, evident particularly in the lack of modification of stem or affix elements as these are brought together; a strongly monosyllabic character of the elements of the language, which does not, however, prevent the formation of words of some length; the absence of reduplication; the use of suffixation as the only structural or grammatical means employed; the presence of a moderate number of suffixes but the rigid restriction of these, apart from a few noun-forming endings, to designations of number in nouns, of case and locative relations in nouns, of auxiliary, derivative, and general adverbial ideas in the verb, and of the relations of mode and tense in the verb; the absence of affixes, particles, or classifiers denoting shape, kind of motion, substance, or instrument; complete absence of any form of incorporation or pronominal affixation; a clear distinction of all words into either nouns, verbs, or adverbs,—pronouns and demonstratives being nouns, adjectives verbs; a well developed subordinating sentence structure; the expression of delicate shades of relation between sentences by a series of connectives; and the lack of an absolute differentiation of stem and suffix, as shown by the use of certain stems also in the latter capacity.

WAPPO.

A few phonetic and grammatical notes obtained on the Wappo dialect reveal certain identities with Yuki proper and a number of interesting divergences. Dr. S. A. Barrett has shown that the Wappo language is spoken in five dialects, or more properly sub-dialects, as the differences are scarcely perceptible. The notes here given are on the Northwestern or Russian river sub-dialect.

⁵⁴ Compare Boas Memorial Volume, 64-79, 1906.

Phonetically Wappo is very similar to Yuki, both the constituent sounds and their characteristic combinations being almost identical. The principal differences are the absence of nasalized vowels from Wappo and the presence of a series of sonant stops corresponding to the surds. These have not been recognized by Dr. Barrett. As they had been written in a Wappo vocabulary obtained by the author previous to Dr. Barrett's studies, particular attention was therefore subsequently given to the question of their occurrence, at the time when the information was secured on which the present notes are based. It is however true that the sonants are less different from the surds than is the case in English.

As in Yuki, both ordinary and fortis surd stops occur, *k'*, *t'*, *p'*, *t'* *tc'*, and *ts'* having been heard. Glottal stops are marked and frequent. *E* and *o* are open, but *i* and *u* seem to be close.

The pronouns differ from those of Yuki chiefly in that the possessive, objective, and independent or unsyntactical forms are identical, and somewhat different from the subjective forms. The possessive pronouns are prefixed or preposed. A possessive and objective of the third person singular is *de*. The pronouns so far as obtained are:

| | <i>Subj.</i> | <i>Obj.</i> | <i>Poss.</i> | <i>Indep.</i> |
|------|--------------|-------------|--------------|---------------|
| 1 s. | <i>a</i> | <i>ī</i> | <i>ī</i> | <i>ī</i> |
| 2 s. | <i>mi</i> | <i>mī</i> | <i>mī</i> | <i>mī</i> |
| 3 s. | | <i>de</i> | <i>de</i> | |
| 1 p. | <i>isi</i> | | <i>isa</i> | <i>isa</i> |
| 2 p. | | | <i>misa</i> | <i>misa</i> |

The demonstratives are *he'* and *we'* and thus unrelated to Yuki *ka* and *ki*. Another apparent demonstrative is *tse*. Self is rendered by *mai*.

Nouns show a plural, of persons only, in *-te*. The locative and instrumental suffixes determined are:

- ti*, -*i*, instrumental
- mi*, -*me*, at, in, referring to time
- tu*, -*ta*, at, in, referring to time
- bi*, from, of
- deimu*, on
- ompi*, under

The tense suffixes for the present, past, and future are *-wi*, *-ta*,

and -si. Of these the present suffix has a past meaning in Yuki; the future in Yuki is -pa, not -si; the Wappo past, -ta, is not known from Yuki. The imperative is formed by a suffix -e, either with or without a prefixed or preposed ma. The optative of the first person plural is indicated by the suffix -si, which is probably the future tense sign, with or without the imperative prefix ma. Interrogation is expressed by the final suffix -ha, as in Yuki. The negative is -laxki, la'k. The use of this form is interesting, as it appears to be the Yuki potential suffix or auxiliary verb lau', lauh. A suffix -la, with or without ho preposed to the verb, may be a continuative. Other verbal forms of undetermined significance are -uk and a preposed or prefixed o-

The dubitative or quotative particle ii of Yuki, and the introductory particles or connective words that are so conspicuous in that language, have not been observed. There is no trace of them in the recorded text of a myth.

The general appearance of the verb, place of the pronouns before it, and the relative order of words in the sentence, closely parallel Yuki.

Specimen phrases:

k'u-ye, k'u-w-e, run!
 a ho-k'u-w-ala, I am running, I ran
 mi i nau-e-ta-ha, did you see me?
 a' mī nau-ta-la'k, I did not see you.
 a de hakee-laxk, I do not like him.
 i okani i hakee, my friend likes me
 de a k'ewi naw-i-si, I shall see him to-morrow
 bāta a mi nau-wi, I see you now.
 isi ma-k'u-w-e-si, let us run
 a ma k'u-w-e-hakee-laxki, I do not want to run
 ma-ba-e, eat!
 isi-ba-e-si, let us eat.
 ū a' o-ba-ta, already I ate
 o-ba-uk, eat
 he' utci a' o-ba-e-si, this night I will eat
 i okani o-ba-ta-laxki sumi, my friend did not wish to eat yesterday
 a lel-i mī o-teap-i-si, I will strike you with a rock

WIYOT.

The Wiyot occupied the Coast from the Bear River mountains north as far as to Little river. Inland they held only to the first watershed. Humboldt bay and the lowest course of Eel river were the most important points in their territory, which was one of the most restricted held by any linguistic family in America. The Wiyot call their language Sulatelak. Those about Humboldt bay call themselves Wiki-daredalil, from Wiki, the name of the Humboldt bay district. The Mad river portion of their territory they call Patawat, and the country about lower Eel river Wiyat or Wiyot. Viard, a name that has been applied to them, is a rendering of Wiyot. The Yurok call them Weyet and the Karok use a similar term. They have been erroneously called Wishosk, Wic'ack having been interpreted as the designation given them by their Athabascan neighbors. It is the term which they apply to these Athabascan neighbors, wici meaning interior.

The Wiyot language, which does not appear to be dialectically differentiated, is rather difficult phonetically and grammatically. Material was recorded from six or eight individuals, none of whom proved a satisfactory linguistic informant. Several texts that were secured throw little light on the structure of the language because they are loosely translated, because the informants were unable to render adequate assistance in the analysis of the expressions contained in them, and because the sentences in the texts consist chiefly of independent verbs, so that they present little context.

PHONETICS.

Wiyot is spoken indistinctly and lacks the phonetic clarity characteristic of the three languages previously considered in this paper. The vowels have but little saturation of quality, and are frequently slurred so as to be obscure, a feature which has been indicated by small capital letters. E and o are open. Nasalized vowels and ä, ö, ü do not occur.

The consonants are:

| | | | | | |
|--------------------------------|----|---|---|----|---|
| k | k' | g | | g' | |
| t | t' | d | s | | n |
| p | p' | b | | | m |
| l, L, r, e, te, ts, y, w, h, ' | | | | | |

There are no velars. Surd and sonant stops are easily confused. There are no fricatives outside of the *s* class, except *g'*, which appears to be a final and medial modification of *g*. A nasal in the *k* position does not occur. *S* and *e* (*sh*), as well as *ts* and *te*, do not seem to have sonant equivalents. Surd or lateral *l*, often affricative, is perhaps at other times only a continuant. The *r* is rather soft, though less dorso-palatal than Yurok *r*. It is less trilled than Pomo or Karok *r*. The fortes surds are not very strongly exploded. Glottal stops, ', are frequent. Initial *w* is frequently heard as *m*, *v*, or *b*. It is therefore probable either that *w* is habitually spoken with much less rounding of the lips than in English, or that besides *w* there exists a sound kindred to bilabial *v*. Owing to uncertainty on this point, only *w* has been written, though *v* was often recorded. Yurok *w* approaches *v* in quality, and Karok possesses *v* but no *w*.

Wiyot is of the small number of California linguistic families that permit combinations of consonants both initially and finally and in stems. The variety of such initial and final combinations is however quite restricted, nor are medial combinations conspicuously frequent. Initial collocations are: *kw*, which is possibly a development of a simple sound; *cw* and *sw*; *pl* and perhaps *bl*; *tk*, *tek*, and *tsk*. *Lw*, *tew*, *tw*, *ke*, and *kl* have also been recorded, but so rarely that their occurrence cannot be looked upon as positively determined. Final combinations are *kw*, *tk*, and *tek*. Besides, *tw*, *ks*, and *sk* have been heard once each; *pc* on two names of places in Yurok territory; and *pl* in several instances. The rarer uncorroborated occurrences, both initially and finally, must be considered doubtful on account of the habit of many speakers frequently to slur unaccented vowels.

It is however clear that *kw*, *tk*, and *tek* are found both at the beginning and end of words; and that *k*, *t*, *p*, *te*, *e*, *s*, and *l*, in other words surds, comprise the consonants that occur in first position, and that *k*, *e*, *s*, *w*, *l*, and *L* occur in second place in

combinations. In the interior of words, where composition and derivation bring other consonants into juxtaposition, there is less restriction on combinations, but the component elements are frequently heard separately.

All sounds in the language occur initially and finally, with the following exceptions: Vowels and *n* are not found at the beginning of words, and the sonant stops *g*, *d*, *b*, besides of course *h*, *y*, *w*, not at the end. It should be added that final vowels are not common. There are a few instances of initial vowels, all in words which appear to be of other than Wiyot origin: *ikti'n*, also recorded as *hikti'n* and *kti'n*, Klamath river; *eckape*, Gold Bluff, Yurok *ecpeu*, also in Yurok territory; *itesi*, small shells, perhaps obtained by the Wiyot in trade; *iewetek*, silver. That *n* does not occur initially is connected with a certain relation between it and *r* and *l*. The absence of the sonant stops *d* and *b* from final position is possibly due to imperfect apperception rather than to actual non-occurrence. *g* however seems to become continuant, *g'*, when final. This may be due to influence of Yurok, in which *g* is always a continuant.

R, *l*, and *n* are closely related. Each has been recorded in place of the others.

haluwi, *haruwi*, boat
-helel, *-heler*, on numerals
kac-werar, small house, *rat-welar*, large house
gu-dalew-il, *gu-danow-en*, stand
won-e'l, *wor-e'r*, his arm
meledal, *hi-meredal*, walk
ritwe-lakwil, *ritwe-wacuk-rakwil*, crescent-shaped
lali, *rari*, stream

What seems to be original *n* changes to *r* or *l* when initial, reappearing after a prefix ending in a vowel. The same process seems sometimes to occur finally, but may be a conversion of *r* to *n* before an added vowel.

rawili, right, *ka-nawili*, not right, left
riewom-ot, *kwi-niewom*, kill
-tiar, *-tian-ik*, suffix of possessive pronouns
yi-dar, my father, *dan-e'l*, his father
k-elir, your eye, *w-elin-e'l*, his eye

It is rather striking that vowels are rarely final and never initial.

Phonetically Wiyot agrees with Yurok and contrasts conspicuously with Yuki, Pomo, Karok, Chimariko, Yana, Maidu, Wintun, Miwok, Costanoan, Esselen, Washo, and Yokuts, whose enunciation is distinct and whose stems are free from combinations of consonants. Nevertheless the indistinctness of speech, the slurring of vowels, and the accumulation of consonants, are not excessive in Wiyot, and are more moderate than in certain more northern languages of the Pacific Coast and than in English.

REDUPLICATION.

Reduplication is not abundant. It occurs in certain onomatopoeic verbs, at times in iterative verbs and in adjectival stems, and is occasionally used to indicate rhetorical emphasis. It is thus word-forming rather than grammatical.

da'-da'kwa, snore
 tsi-tsir, sneeze
 da-dakak, thunder
 cak-cakw-il, he is sick, cakw-irak, sickness
 dak-dakw-il, it is crossed
 darū-dalū-i, all
 gabitcirakw tei-wera-wera-wera-kw, it is too bad!

It is apparent that in onomatopoeic verbs the initial syllable is reduplicated as far as the vowel; in other cases an entire syllable or stem is duplicated. There appear to be a few nouns that are normally reduplicated, such as teatcickiri, mud-hen, but there is no trace of reduplication expressing a plural or collective-distributive. Iterative reduplication in verbs is uncommon.

COMPOSITION.

In composition of two nouns, the determining precedes the determined; but any other part of speech determining a noun follows it in composition.

p'lèt-kacamale, rocks-small, Little River
 p'lèta-cawèti, rocks-white, Glendale
 wits-karerer, canine-wild, coyote
 wopl-akatkerà, redwood-branches
 dikwa-motwil, white-man-woman
 ritsowel-ailokwe, night-moon
 wene-welir, sky-eyes, stars
 gatsire-welil, crow-foot

If however a term of direction is united with a noun, it precedes. It seems that such terms are prefixes, and that the process of combination is one of derivation rather than of composition when these elements are added to nouns.

wici-dikwa, inland-spirit
gudatri-gakwil, above-old-man

In a number of compounds only part of the elements can be positively determined.

haluwi-tulaliyutxu, Medilding village at Hupa,⁵⁵ (haluwi, boat)
da-Lak-dale-waiyits, come-in-ship dog, native dog (Lak, ship; waiyits, dog)
cawèt-oc-il, bald-eagle (cawèt, white; -il, suffix of third person)
cawèt-colig-il, brant
dela-bel-il, killer-whale (bel, to fish)
mes-wululel, fire-place (mes, fire)
swaptil-haluwi-lalil, Vance Mill (haluwi, boat; lalil, stream)
ta-boderuc-datige-ralil, Lindsey Creek (boderuc, brodiaea roots)
we-tâpiis, thumb (we's, hand, fingers)
guts-er-ol, fresh water (guts, good, ho'l, water)
gotso-wen, day (go'ts, one, or guts, good, wen, sky)
weni-crenim-il, mole (wen, sky, which according to myth the mole supported)

Formations similar to bahuvrihis or possessive compounds occur.

baLe-ranaLa, Chinaman (baL, hair; rala, long)
twanagit-erowak, sheep (blanket-make)

DERIVATION.

Word-forming derivatives that have been determined are suffixes, except terms of direction, which are prefixed.

-âtc, -hâts, -wâts, diminutive:

bae-âts, small flat basket
hutewâtc-hate, small cooking basket
haluwi-wâts, small boat
p'lêt-wits-hâts, p'lets-wâts, small rocks
raril-wâts, small stream
wêtc-ate, buds
wit-c-ate, small alder-trees
watecwaiaawate-hats, small clam shells used as ornaments

⁵⁵ Medilding means "boat-place" in Hupa, as it is accessible only by boats.

-iar, on terms of color :

- mes-iar-etk, red (mes, fire)
siswa-ial-ewe-Lak, brown (siswa, black)

-Lāk, on terms of color :

- dukap-Lāk, yellow
kika-Lāk, red
mes-iera-Lak-er, red
siswe-Lak-an, black
dukap-Layak-an, green
baduduwi-Lak, dust-color
Limaiūsele re-Lāk-er, blue-jay color-it-is, blue

-gaLet, on adjectives of appearance :

- coyuwo-gelèt, striped
tewetc-galèt, plaid
detcate-galèt, spotted

-lak, language :

- sulate-lak, Wiyot language
wici-lak, Athabaskan language
denākwater-lak, Yurok language
guradaliLrakwe-lak, Karok language

-welel, *-helel*, on numerals above four :

- we's-ag-elel, 5 (we's, hand)
dakLiluk-elel, 6
hālu-welel, 7
hiowita-welel, 8
meceruk-welel, 9
rulok-helel, 10
ritawa-helel, 20
rikwa-helel, 30
rāma-helel, 40
we'sohele-welel, 50
dakLilukhele-welel, 60
hāluhele-welel, 70
hīwitahēle-welel, 80
mecerukhele-welel, 90
gutseswani-helel, 100

From 50 to 90 this suffix appears twice on each stem.

There are several noun-endings :

-wil.

- gu-wil, person (cf. guwi, man)
di-wel-a, di-wil-e, somebody, another

-ir, probably for *-in*.

- wel-ir, eye (wel, see)

-k.

maL-ak, salmon, food (maL, waL, pL, eat)

-s.

we'-s, hand (cf. we-tāpiis)

p'lèt-s, p'lèt-k, rock

-t.

cwa-t, bow (swala, shoot)

-iL, the ending of the third person on verbs, forms numerous nouns. The stems from which these are derived are in many cases undetermined, but seem to be verbal.

tiger-iL, unmarried man

tserar-iL, unmarried woman

kakerāw-iL, woman

gakw-iL, old man

còor-eL, index finger ("pointer")

radapir-iL, glutton

rakwuLir-iL, wolf

kanapel-iL, grizzly-bear ("biter")

cawet-oc-iL, bald-eagle

dakaks-iL, gun

dawilār-iL, glass

dawil-wiw-iL, mirror

kagotsike-iL, lamp

As the last examples as well as several previous ones can show, Wiyot is not at all averse to the formation of new words to denote new objects. The majority of the languages of California tend to adopt Spanish or English words.

Several endings have been found on verbs of related meaning, but it is uncertain whether they are deriving suffixes added to stems or themselves verbs.

-tskarer.

rari-tskarer, shave, plane

bitcewe-tskarer, peel

Leriwoke-tskarer, peel

ci-tskarer, flay

-Layer.

twe-Layer, cut, notch

ka-Layer, whittle

hawe-Layer, mash

gutwaiap-Layer, brush

Terms of direction precede other word-elements, as before stated. To the examples already given can be added :

dat-kasil, top of head
curi-laka, west, ocean

Stems of terms of direction are :

wur, north
at, teate, south
cur, west, across the ocean
tinie, wici, east, interior, upland
dat, up, above

When forming independent words, these are employed with either of the prefixes *rak-* and *wik-*.

rak-wur, north
wik-teate, wik-at, south
wik-cur, west
rak-tinie, wik-tinie, rak-dat, east

PRONOUN.

The Wiyot pronoun is incorporated, to use the customary terminology. In other words, it is not a pronoun at all but a pronominal element which is normally affixed to other stems. The independent pronoun occurs only unsyntactically, as in answer to questions, or emphatically, when it is used in addition to the pronominal affixes and is syntactically superfluous.

The possessive elements are chiefly prefixed, and show some similarity to the independent pronouns. The subjective and objective elements are always suffixed, and differ entirely both from the possessive and independent forms and from each other. The objective element precedes the subjective, thus standing nearer the stem of the verb.

| | <i>Subjective</i> | <i>Objective</i> | <i>Possessive</i> | <i>Independent</i> |
|----|----------------------|------------------|------------------------|--------------------|
| 1. | —, -u, -ow | —, -u, -ow | ru-, yi- ⁵⁶ | yil |
| 2. | -it ⁵⁷ | -as | ku- | kil |
| 3. | -iL | -a | (hu-)— e'l | — |
| 1. | -itak ⁵⁷ | —, -u, -ow | (hu-)— ik | hinār, winār |
| 2. | -itawa ⁵⁷ | -aswa, -wa | kiluwa ku- | kiluwa |
| 3. | -iL | -a | (hu-)— e'l | — |

⁵⁶ yi- only before terms of relationship.

⁵⁷ -at, -atak, -atawa are also found.

The independent pronouns of the first and second person, *yil* and *kil*, have evidently been influenced by mutual analogy. Comparison with the possessive prefixes *ru-* and *ku-* makes it appear that *l* or *r*, representing *n*, is the original element of *yil*, and *k* of *kil*. In this case the pronominal stems would agree with those of Yurok, where *nek* and *qel* are I and you but the possessives *ne-* and *qe-* shown *n* and *q* to be fundamental.

A form *yil-il*, me, has been found.

There is no independent pronoun of the third person, and the possessive is indicated by the suffix *-e'l*.

The first person subjective and objective is often indicated by absence of suffix.⁵⁸ An *-u* or *-ow* also occurs. The second person is *-it* or *-at*, subjective, and *-as* objective. The third person is respectively *-il* and *-a*.

The plural is variously formed. In the third person it does not differ from the singular. The second person uniformly adds a suffix *-wa*; thus, *kil-u-wa*, independent; *kil-u-wa ku-*, possessive; *-it-a-wa* or *-at-a-wa*, subjective; *-as-wa*, sometimes merely *-wa*, objective. The independent form of the first person is *hinār* or *winār*. The possessive is a suffix *-ik*, which reappears in the subjective *-itak* or *-atak*, of which the first element resembles the second person *-it-*. The plural of the first person objective is the same as the singular.

Neither the subjective, objective, nor possessive series possess any common elements which may be interpreted as indicative of these relations. It is probably analogizing that has led subjective *-it* and *-il*, objective *-as* and *-a*, and possessive *ru-* and *ku-* to share respectively the vowels *i*, *a*, and *u*.

kilwa-ya wul-al-itwa, were you (pl.) walking?
gul-ag't-it-ya, are you going back?
hi-gelaw-a, I beat him
cu waL-itak, let us eat!
do-pL-il, he is eating
hi-wel-a, I saw him
hi-wel-aswa, I saw you (pl.)
hinār hi-wel-ū-L, he saw us
hi-wel-as-iL, he saw you
Le hi-wel-uw-ituwa, you (pl.) have seen me

⁵⁸ In Mohave the first person is also denoted by absence of pronominal affixes.

bokin-ow-it, you hit me
 wu-bokin-as, I will hit you
 wi-kanap-is, I will bite you
 wi-t-as, I will feed you
 garewack-il, he is bad
 winār wa-kale-wal-u, we will not eat
 le hi-kanap-a-it, did you bite it?

The suffix -a-, him, plus -it, you, seems to be usually contracted to -èt: hi-wel-èt, you saw him.

A suffix -il is sometimes found before subjective suffixes of the first and second person. It occurs also between the objective of the first person -ow and the subjective -il of the third person.

raL-el-at, you are large
 hi-wel-ow-il-il, he saw me
 makL-erakw-il-atawa, you (pl.) are large

The first person possessive shows an exceptional yi- instead of regular ru- before certain terms of relationship. This yi- appears to be an abbreviation of the independent pronoun yil. It will be recalled that Pomo and Yuki have been found to use a separate class of possessives with terms of relationship.

In the case of body-parts, there are also certain peculiarities. Many such words begin with an m or w, which seems to be a pronominal element denoting indefiniteness of possessive reference. In some of these terms the first and second persons are expressed by the addition of the prefixes ru- and ku- before the m or w. Such are welil, foot, we's, hand, wec, vagina, magoks, brain. In other terms initial m- disappears before r- and k- of the first and second persons: m-a'n, pubic hair, r-a'n; m-elak, testicle, k-elak; m-elir, eyes, k-elir, w-elin-e'l.

Other body-part terms show an initial element wat-: wat-hel, tail, wat-hewet, head, wat-wi, heart, ra-wat-kai, skin, wat-kerat, bone, wat-melok, ear. This element is also retained with the personal prefixes: ra-wat-kerat, my bones, hu-wat-kerat-i'l, his bones.

Still other words denoting parts of the body show neither initial m- nor wat-: sakwer, lungs, dgat, penis, baal, hair.

A few words show unexpected forms: m-etere, nose in general, detere, my nose, kil detere, your nose, detere-'l, his nose; kawik, wat-kawik, blood, r-atkawik, k-atkawik, my, your blood; haluwi, boat, ru-d-aluwi, ku-d-aluwi, my, your boat.

DEMONSTRATIVES.

Demonstratives are *gie*, this, and *guru*, *gur*, or *gu*, that. As in Yuki, the term for that has also some use as a demonstrative of reference, without idea of distance. *Gie* is used only to express specific proximity. When attributive the demonstratives are proclitic to the noun. A third form, *gwilel*, occurs with the meaning of he.

gün, he, she
gie, this one
gu-tem-il, the one sitting there
gu-dalew-il, that one standing there
guru waiyits, that dog
guru gudatri-gakwil, that above-old-man
gie-garewackil, this bad one
gwilel hu-waiyits-e'l, her dog
gwilel kanap-el-il, he was biting

Teiwa means thus, so, that, he who. A related form *teigon* or *teigur*, him, them, that, appears to be objective. There always appears to be implication of previous reference.

teiwī anel-il, that is what he said
teiwī dalow-il, she lives there
kil-ia teiwira ha-tsitsir-il, you-was-it who sneezed?
teiwa daretw, I think so
yil-il teiwā-hakil, to me he did it
teiwa-wil delaker, always did thus
kiluwa-ya dicgaam-et teigon, do-you (pl.) like him?
teigur hi-wel-a, them I-saw

Interrogatives are *ciwa*, *duwa* or *dawa*, and *kwalwa* or *wule*, meaning what and where, how and why. The ending *-wa* of these interrogatives occurs also in the demonstrative *teiwa*; the stems are therefore probably *ci*, *da*, and *kwal* or *wul*.

ciwa, what?
duwa, what?
duwa kil ka-wol, where is your house?
duwa wulal-il motwil, where went the woman?
duwa deklelalil, where is the chief?
ciwa kac-welan ka-wol, how small is your house?
kwalwa riewom-ot-ogam, with what did you kill him?
kwalwa wule mil kale-wal-e, why do you not eat?

“Another” is *hikele'l*, or *diwile*, somebody. *Hikele-e'l* perhaps bears the possessive suffix of the third person.

All is *daru*, preposed to the verb. More frequently however *ru-* enters as a prefix into the verb-complex.

NOUN.

The Wiyot noun is scarcely affected by grammatical considerations. It is not reduplicated, and is free from the expression of number, gender, or case, excepting only one general locative suffix -akw.

p'lèt-wakw, on the rock
 pak-akw, on the ocean
 mes-akw, in the fire
 halowi-wakw, in a boat
 datheri plèt-wakw, on top of the rock
 peL-wakw, place in a house beside the door
 wal-akw, in the morning
 wiril-akw, to-day

VERB.

Pronominal elements are always suffixed to the verb. On the other hand temporal, modal, and adverbial relations are expressed by prefixes. Similarly the independent adverb precedes the stem. Adverbial prefixes generally follow temporal ones. The scheme of the verb is thus: prefix of tense, prefix of manner, stem, objective pronominal element, subjective pronominal element.

Prefixes express several past tenses, a future, and a continuative; a conditional, a subordinate mode, and one form of imperative; the negative; the idea of all; and probably several designations of motion. Suffixes, which predominate in word-formation and in indications of person, are less important in verb structure. Those determined express a causative, an imperative, an instrumental, and a reflexive. Several other suffixes occur on intransitive and adjective stems, and seem to serve to render these respectively predicative or attributive. There appear to be several prefixes of motion that have not yet been fully determined; but in general there is little specific expression, by means of affixes to verbs, of kind of action, location, or instrumentality.

PARTICLES.

gitga is an adverbial particle indicative of futurity and probably of intention. It usually follows the verb.

wa-keL-am gitga, I will look for him
 kanap gitga, I will bite
 rogal-ia gitga gul-ow-at, soon will you come back?

The interrogative is an enclitic particle, *ia* or *ya*, always attached to the first word of the sentence.⁵⁹

kil-ia diegām-at guru guwi, you, do you like that man?
 gur-ia deklalalil, is he a chief?
 kūna-ya hi-les-at, yesterday did you go by boat?
 diegāw-it-ia, do you like me?
 yil-ya bokin-ew-it, me, did you hit me?
 kiluwa-ya diegām-et teigon, ye do you like him?
 Le l-it-wal-et-hia, are you sleepy?

cò or *cū* is an optative particle, always at the head of the sentence.

cò gaw-ak-o, let us start
 cū wala, I wish I had it
 cū wirate, let me drink
 cū gawitwadak, let us go to sleep

cū, or *cuku-*, has negative optative force without the employment of the usual negative prefix.

gila,uku-laliswu, enough, let us stop singing!
 cu pugakwilini, do not touch it!
 cu ratse-tsaw-inik, kLet, do not touch it, it is hot!
 uku-kawi gila, stop working!
 uku-rerir, you must not do it any more!

Le, sometimes heard as *La*, expresses the completed past. It always precedes the verb, and is sometimes heard as a separate syllable, sometimes as a prefix. It is therefore probably a proclitic particle.

La-wit, I have slept
 ciwa La-gira-gerak, what have you done?
 winār Le-ru-ge-da-pl-o, we have all finished eating
 Le hi-kanap-et, did you bite it?
 La-gera-le-wel-as, I did not see you
 Le-rewalā, it is day
 Le-kilowa Le-wal-e, have ye eaten?

PREFIXES.

hi- is the prefix of ordinary past time.

hi-ow-il, he came
 hi-wel-as, I saw you
 hi-esatal, I met
 hi-rakcem-il, she pursued him
 kūna hi-les, yesterday I went by boat

⁵⁹ In Miwok and Ute-Chemehuevi the interrogative is *-a* and *-ia*, and is also the second word in the sentence. Yuki has a verbal suffix *-ha*.

na- seems also to denote past time.

na-do-pl-et, you have been eating
 na-yu-wel-as, I saw you
 na-Le-werate, I have drunk already

wi-, wa-, indicates the future.

wi-kanap-is, I shall bite you
 wa-detigeliswiw-il, he will swim
 wi-gera-dilegana, I shall not become angry
 wi-letkalegal-il, he will fall
 kil-ia wo-bel-at, shall you fish?

do- is a continuative.

do-bel-il, he fished
 do-pl-a, I am eating
 do-low-il, they are hanging
 daru do-pl-il, they are all eating

ta- or *da-* occurs often. Its significance is uncertain. In many cases it seems to be frequentative, iterative, or usitative.

da-laLäl-il, he jumps about
 da-lakwet yil, I was coughing
 da-digwidiwiri, I am sitting
 hinär da-ridipu, we live together
 ta-hokawowelul, whenever a whale stranded
 da-kul-ow-il, always returned
 ta-weldelaker, always whipped him
 da-kictawil-il, constantly asked for food
 da-wuwokwiwi, have you been training yourself?

kul- means back, again, return. It is placed between the tense-prefix and the verb stem.

hi-kul-ow-il, he came back
 kul-ag-il, went again
 la-ka-kul-aker, did not do any more

dal- is of undetermined meaning. It occurs in several verbs implying repeated motion.

dal-an-il, dal-anew-il, buzz, hum
 dal-adeler, ring
 da-dal-ak-wer, works

hil-, perhaps *l-*, is undetermined.

hil-ag-il, went
 hil-uluwu, takes

gawel-, undetermined.

gawel-alak, I will move away
 gawel-ag-il, they went
 hi-gawel-uw-il, they came

let- apparently defines motion in some way.

let-kaleg'al-il, roll
 dak-let-athanagat, boil violently
 let-kalegal, fall

ru-, occurring also in the independent word *darū*, all, has the same significance when a prefix. It usually refers to the subject, but also to the object. As a prefix it follows the tense prefixes.

winār Le-ru-ge-da-pl-ō, we are all done eating
 hinār ru-raL-el, we are all large
 ru-rat-er gowil, all the people are large
 ru-ga-pl-u, will eat
 wi-ru-bokina-wa, I will eat you all

gawe- is inchoative.

gawe-rowetger-il, it is becoming dry
 gawu-betser, it is becoming dry
 gawe-rewaLar, it begins to be day

gera-, *g'ra-*, *ga-*, or *ka-* makes the negative. It also follows the tense-prefixes.

gera-lit-waLa, I am not sleepy
 g'ra-la-waL-i, I do not want to eat
 gwa-gets-Lak, it is not cold
 g'ra-diegā-gem yulewe-tsk, I do not like the white ones
 wi-gera-dilegana, will not be angry
 La-gera-le-wel-as, I did not see you
 gera-lu-de-diegā-ge, I do not like him
 ka-diegaw-ir-ia miL yil, don't you like me?
 wi-gera-t-as-a, I cannot feed you

ka-, prefix, combined with *-iLyā*, suffix, forms an occasional imperative.

ka-wa-detigeliswiw-iLyā, swim!
 ka-Lal-iLyā, jump!
 ka-lakwet-ere-iLyā, cough!

ka-, neither negative nor imperative, is a frequent prefix of entirely undetermined force. It does not seem to be temporal.

ya-, *yaya-* makes the protasis of conditional sentences.

ya-kau-kanap-il, if you do not bite me
 yaya-kwa-dawikw-il, if you do not visit me

The demonstrative *gu*, and probably *kic* also, are used as prefixes to a verb that is subordinated to another.

yu-wel-as gu-bokin-ew-it, I saw you hitting me
 La-gera-le-wel-as kic-l-ow-et, I did not see you coming
 gu-dalew-il wi-bokin-awa, him standing there I will strike
 g'ra-wilrekwa-wi gu-kanap-it, I feel sorry that you hit me

The imperative does not seem to be regularly formed. Some verbs show the *ka—ilya* mentioned, a few *-i*, a few *-ig'* or *-ag'*, and others the stem, as *kanap*, bite!

ka-le-waL-i, eat!
gul-ag'-ig', go home!
swala-g'-ag', shoot!
waL-ag', eat!

SUFFIXES.

-ātho seems to be causative.

hi-da-tem-ātho, made him sit
tem-āthu, made them sit
du-tem-atho, name of the isosceles triangle element in basket patterns; the Yurok is *werèq'èn*, sitting.

-wi, *-wiwi* is reflexive. A more or less pronominal character may be the cause of its final position.

iwowok-wiw-iL, trained himself
dicgāw-iw-iL, he likes himself
kil-ia wi-dukL-wiwi, did you look at yourself?
dawil-wiw-iL, looking-glass

What is probably the same suffix occurs normally on a number of verb stems. On some of these its force is clear, on others less intelligible.

hie-wi, eat (transitive)
gos-wiwi, swim
de-tigelis-wiw, swim
weta-wi, satisfied
rakwa-wi, pity
tawik-wi, visit
gidid-iw, digwidi-wi, sit
dale-wi, dano-wi, stand

-ut denotes that the action of the verb is performed with an instrument. It is added to the verb, but has the force of an instrumental case on the noun denoting the instrument.

hi-swale-wut ewat, I shot him with a bow
kwaLwa riewom-ot-agem, with what did you kill him?
dagakeiL riewom-ot, a gun I killed him with
bumpel da-haka-wut hi-niewu, a knife with I killed him

-er, *-erer* occurs frequently on numerals, adjectives, intransitive verbs, transitive verbs without an object, and nouns. It appears to have something of the force of a verb substantive.

guts-er, rit-er, rikw-er, one, two, three
 ra't-er, he is large, they are large
 detel-er, stab
 gawu-bets-er, it is becoming dry
 kacam-er, small
 Lelewit-er, round
 botegawin-er, scratched
 ka-wiluw-er, is hollow
 gatslag-erer, end
 wits-kar-erer, coyote

-erakw, -rakw, -nakw has similar force.

makL-erakw-iL, he is small
 gots-herakw gu-tigeriL, he is a good-looking young man
 ru-magoks gots-herakw, my brain is good
 guts-erakw-iL, good
 ga-bite-irakw-iL, he is bad
 guts-hi-nakw, is good
 guts-ka-nakw, is not right

-pt has been found on color adjectives, apparently when they are attributive.

hi-yu-wel-a yulewa-pti hòlakw', I saw a white deer
 siswa-pt waiyits, black dog
 hòlakw' riewom siswa-pt-ile, deer I killed a black one

-tk, or tsk, seems to make adjectives predicative or substantive.

herowedi-tk, the moon is shining
 kike-tk, kike-tsk, red
 mes-iare-tk, mes-iare-tsk, red
 p'lètk belè-tk, rock is flat
 hiwana-tk, square
 yuwetke-tk, five-cornered
 siswa-tk, small black seeds
 diegaame yulewe-tsk, I like the white ones

-u, of uncertain force, also occurs on adjectives.

siswa-u, black
 ra'L-a-u, long, high (ra't, ra'L, large)
 kacew-a-u, short (kacam-er, small)

-nim, meaning unknown.

tawakwili-nim-iL, pushed him
 hi-tiekwa-nim-iL, broke him

-ikwal, unknown.

da-tem-ikwal, sat down
 gul-ag'-ekwal, went home
 akome-tal-ikwal, go back
 ha-maL-ekwel gitga, we shall eat

ADJECTIVES.

Stems translatable by English adjectives offer more complexity than is usual in Californian languages. They appear quite regularly with suffixes, among which have been mentioned -er, -erer, -erakw, -rakw, -nakw, verbifying or equivalent to the verb substantive, -tk and -tsk, predicative or substantive, -pt attributive, and -u. There are also a number of derivative suffixes, chiefly found on adjectives of color and appearance, such as -iar, -lak, galet. There are other complications. Thus the stem ra't, large, appears under the following forms: ra't-er, or ra't-ekw-il, he is large, it is large, they are large; ra'l-el, ra'l-el-at, I am large, you are large; p'lètk ra't-etk, large rock; ra't-eter, large (redwood tree); ra'tsè, largely, much, very; ra'lau, long; ra'lau-il, it is long; ra'le-, much, on verbs. Adjective stems are not usually reduplicated, as is often the case in Pomo, Miwok, and other Californian and American languages.

NUMERALS.

As already stated, the numerals from five to ten and from twenty to forty bear the suffix -helel or -welel. On fifty, sixty, seventy, eighty, and ninety, the suffix is repeated. The numerals from one to four usually end in -er, whether used in non-syntactical counting or qualifying animate or inanimate nouns. One occurrence without this suffix is of gō't, ritwe, rikwō, one, two, three, denoting persons, instead of the usual gō'ts-er or gū'tser, rit-er or ritw-er, rik-er or rikw-er. When years are referred to, the numerals have a suffix -eu or -ayu; for days, -āk or -wāk: gū'ts-ayu, ritw-eu; rikw-eu, ramāk, we's-agele-wāk. These suffixes are of significance as evidence of the existence of numeral classifiers, such as are abundant in Yurok.

ORDER OF WORDS.

The order of words as regards noun and verb is not fixed. Both subject and object at times precede and at times follow the verb. Adverbs, interrogatives, and pronouns precede the verb and usually open the sentence. The interrogative particle ia is always attached to the initial word.

ALPHABETICAL LIST OF AFFIXES.

PREFIXES.

- cu-, on verbs, prohibitive, negative optative
 cuku-, see cu-
 cur-, west, across ocean
 da-, see ta-
 dal-, on verbs, undetermined
 dat-, up, above
 do-, continuative
 ga-, see gera-
 gawe-, on verbs, inchoative
 gawel-, on verbs, undetermined
 gera-, on verbs, negative
 g'ra, see gera-
 gul-, see kul-
 gu-, that, the, demonstrative; on verbs, subordinating
 hi-, on verbs, past
 hil-, on verbs, undetermined
 hu-, sometimes accompanies the possessive suffixes of the first person
 plural or third person singular and plural
 ka-, see gera-
 ka-, on verbs, undetermined
 ka-, with suffix -ilya, on verbs, imperative
 ku-, possessive of second person
 kul-, on verbs, back, again
 let-, on verbs, undetermined
 la-, see le-
 le-, particle, with verbs, completed action
 m-, indefinite possession, on words denoting body parts
 na-, on verbs, past
 rak-, on terms of direction
 ru-, on verbs, all
 ru-, possessive of first person singular
 ta-, on verbs, perhaps usitative or iterative
 tinie-, east
 teate-, south
 wa-, see wi-
 wat-, etymological, on some body-terms
 wi-, on verbs, future
 wici-, east, inland
 wik-, on terms of direction
 wur-, north
 ya-, on verbs, if
 yaya-, see ya-
 yi-, possessive of first person singular on terms of relationship

SUFFIXES.

- a, on verbs, third person objective
- ag^t, see -ig^t
- ak, on numerals, denotes days
- akw, on nouns, general locative
- as, on verbs, second person singular objective
- aswa, on verbs, second person plural objective
- at, see -it
- atak, see -itak
- atawa, see -itawa
- ātho, on verbs, causative
- ate, diminutive
- ayu, see -eu
- e'l, possessive of third person
- er, probably equivalent to verb substantive
- erakw, see -er
- erer, see -er
- eu, on numerals, denotes years
- gaLet, derivative, on terms of appearance
- hats, see -ate
- helel, see -welel
- i, on verbs, imperative
- ia, enclitic particle, interrogative
- iar, derivative on terms of color
- ik, possessive of first person plural
- ikwal, on verbs, undetermined
- il, before subjective suffixes of first and second person
- il, on independent pronoun of first person, perhaps objective
- il, on verbs, third person subjective; also agent, and noun formative
- iIya, with prefix ka-, imperative
- ir, derivative noun-ending
- is, see -as
- it, on verbs, second person singular subjective
- itak, on verbs, first person plural subjective
- itawa, on verbs, second person plural subjective
- k, derivative noun-ending
- lak, derivative, denoting language
- Lak, derivative on terms of color
- nakw, see -er
- nim, on verbs, undetermined
- ow, on verbs, first person singular subjective, singular and plural objective
- pt, on adjective stems, perhaps attributive
- rakw, see -er
- s, derivative noun-ending
- t, derivative noun-ending
- tk, on adjective stems, perhaps predicative or substantive
- tsk, see -tk

- u, see -ow
 -u, on adjective stems, undetermined
 -ut, on verbs, instrumental
 -wa, ending of demonstratives and interrogatives
 -wa, denotes the plural on suffixes of the second person; also itself used
 for -aswa
 -wak, see -ak
 -wakw, see -akw
 -wats, see -ate
 -welel, on numerals from five up
 -wi, on verbs, reflexive and medial
 -wil, derivative noun-ending
 -wiwi, see -wi
 -ya, see -ia

TEXTS.

CROW.

| | | | |
|---|-----------------------------------|------------------------------------|------------------------------------|
| gatsir Crow | wule-bā'iakriL relative-in-law | curi-la'kau (across) ocean | wule-ba'iakriL relative-in-law |
| hi-wū'l-ag'-iL he went to. | curi-la'kau (Across)ocean | hi-lè's-iL he went by boat. | tša'ki Children |
| dol-òl-o'w-iL he took | ri'kar two. | woperagà'tek'c-iL He put them | p'le't-wakw on the rocks. |
| kerawaga'tkari Porpoises | wuperaga'tske-iL he put. | hi-kol-ò'w-iL He came back. | |
| diwe-rū'lakame "What did you do with | tsèk the children?" | katsir-ie'l-iL Crow said: | go'tsker-e'l "Their grandmother |
| da'kw-darū'dakw they are with." | gatsir Crow | dil eagle | wī'wa-l his wife (?) |
| gul-ū'w-iL came back | tsèk a child. | gatsiri Crow | gōdam-i'L ran off. |
| gu-ra'tcetck that boy. | gwā'tc-el His mother | yā'gitemò't-iL he told: | di'le Eagle |
| dewū-tem-ā'lēl he put." | hi-la'g-iL He told (?) | dil Eagle. | da'wim-iL asked |
| hi-wò'kura-lè'kanem-iL She caught him. | gatsiri Crow | hi-rā'kcè'm-iL She pursued him. | dil Eagle |
| d'ane'r-iL did it. | mes-akw In the fire | hi-da-tem-ā'tho she put him. | da't-kasiL The top of his head |
| mesi-da'lidaks she put | mes-a'kwi in the fire. | hi-ka'-tawā'l-iL He died. | |

PELICAN.

| | | | |
|-----------------------------------|--|---|--|
| tcawerā'tciL Pelican | do-be'l-iL fished | dagī'weg'iL with dip-net. | dīwi'l Others |
| dū'-bel-iL fished. | tcawera'tci Pelican | kawu'kamer-iL stole. | dīwi'le The others' |
| dakanewò'wi he stole | gū'ts-āyutā'yeg'er-akw for one year. | sò | dī'le Eagle |
| hi-ò'w-iL came. | ina'g'-iL He thought: | gūts-ka'-nakw "It is not good." | ina'g'-iL He thought: |
| wā-keLā'm "I will look for him | gī'tka I will, | dā'kiyiwoi fishing with a dip-net." | dil' Eagle |
| iy-ū'w-iL came | | | |
| yitawa'ne "Why do you do it?" | cuku-re'rir Do it no more!" | tcawera'tci to Pelican | hanèw' he told. |
| sò | | | |
| dil Eagle | hi-lā'k-iL went to him. | tcawerā'tci-ika'n Pelican he seized. | hi-t'ki'n He pulled, |
| yò'ckan he tore, | da-g'a'tgè'negeL he tore him to pieces. | tākwīya'kw'ter He made fire. | hi-nī'ewa-k He killed him. |
| sò | kā'-pel-iL Fished | dī'wila the others, | hi-kā-kuwèye'l-iL were not afraid any longer. |
| gū'ts-hi'nakw He was good. | hamā'-pe'l-i Fished | dile Eagle's | rawerā'miL relatives. |
| hi-kāwe't-ò He gave them food. | gā'-pel-iL They fished. | tcawerateci Pelican | ka-guwā''-pe'l-iL no longer fished. |
| guts-hi'nakw He was good. | | | |

SKUNK.

| | | | |
|-----------------------|---|--------------------------------------|--|
| bò'tewi Skunk | tcewā'-rakw thus did, | darā'kw sick | sak-sā'kw-iL sick. |
| piLwa'tkotii Flies | wa-wè'tom-iL went to get | mī'l-iL medicine-man | tcīwa that |
| me''lakw Elk | | | |
| rā'ter large. | bò'tewi Skunk | dā'herakw was sick, | sak-sā'kw-iL sick. |
| bò'tewi Skunk | | | |
| reg'i'L anus (?) | o-si'lakw-e'l his-pain | tcewā'-dākw-reg'-iL there was in. | mè''lakw Elk |
| hi'lew-iL danced, | dakdī'skew-iL went to the other side of him, | kana''p-iL bit (sucked). | bò't-iL Wished to kill him |
| bò'tewi Skunk. | hi-nieyaw-er He killed | mè''lakw Elk. | hi-ewi'welā'kw-iL Rubbed their hands in joy |

| | | | |
|--------------------------------|-----------------------------------|---------------------------|------------------------|
| piLwa'tkotii Flies. | ha-mā'L-ekwel " We eat | gitka shall | mē'lakw Elk, |
| hi-mī'w-akwel eat | wi-rī'ewaw-er the killed | mē'lakw Elk." | bò'tewi Skunk |
| rer-ī'L did it, | bò'tewi Skunk | kuwe'notw-iL was well. | piLwa'tkotii Flies |
| hi-kā'waw-iL They cut it up | bu'mi'pel with a knife, | piLwa'tkotii Flies, | witā'w-iL rejoiced. |
| yi'wāl-iL They ate. | hi-kū'l-ag'-iL They went home. | | bò'tewi Skunk. |

VOCABULARY.

No Wiyot vocabulary has been published since the three printed or reprinted in Powers,⁶⁰ which suffer from faulty orthography and imperfect acquaintance with the language. As no other studies of Wiyot have since that time been undertaken, the author's material is here given, in spite of its no doubt frequent inaccuracies, in order to render available for comparative purposes, at least until some more thorough study of the language shall have been made, a more extended body of words than are now accessible.

NOUNS.

Persons :

kowil, gawil, person⁶¹
kòwi, gūwi, man
motwīL, kakerāwiwīL,
kawotc, woman⁶²
gākwiL, old man⁶³
cerūki, old woman
tīgerīL, young man, bachelor
tserārīL, young woman.
ratcetek, boy
watcer, girl
tsèk, teik, tsak, child
hetca, baby

wise-pelei, married man
wisīL, married woman
gwatw, widower, widow
wakawe, divorced, separated
woman
dèkLelālīL, chief
mīlīL, dānelātwiL, medicine
man
cokwirak, cirawāk, ghost,
dead ancestor⁶⁴
dikwa, tikwa, white man,
poison, spirit
kèlòmīL, weramīL, relative

⁶⁰ Tribes of California, Contrib. N. Am. Ethn., III, 478, 1877, Appendix, Linguistics, by J. W. Powell.

⁶¹ Cf. diwile, another.

⁶² Cf. motw, woman's front dress. Kawotc perhaps means wife.

⁶³ Probably from gakw, to know.

⁶⁴ Cakw, sick, die.

dār, dān-, father; son
 gwate, mother
 rekā, daughter
 dōk, dārewerekere, brother,
 sister
 bitcōtcker, grandfather
 gōtcker, grandmother
 agōLek, grandchild
 wetsarakw, son-in-law
 māiakrit, relative by mar-
 riage

Body-parts:

metere, detere, nose
 melir, welin-, eye⁶⁵
 melūl, mouth
 mēpt, teeth
 wat-melok, ear
 mit, tongue
 djipLil, beard
 melokal, throat
 wat-wet, head
 hāl, pāl, hair
 we's, hand
 mokèc, fingers
 we'tāpis, thumb
 cōr-el, index finger
 tsewawil, little finger
 metkan, nail
 wō'r, wō'n, arm
 dāletokeru, elbow
 taLeokra, shoulder
 welil, foot
 tekate, leg
 lawèl, knee
 mèl, body, flesh
 meweril, flesh, fat
 watswetsaa, breast
 weser, woman's breast, milk
 dāu, tāu, belly
 doguganakw, navel
 hodilere, umbilical cord
 dūwerec, buttocks
 dgat, penis

melāk, testicles
 bec, vagina
 cāk, clitoris
 hatāgeril, womb
 ma'n, pubic hair
 watw, heart
 tcegèl, liver
 hēl, intestines
 māgoks, brain
 sākwer, lungs
 wat-kerāt, bone
 kawik, wat-kawik, blood
 wat-kai, skin
 hāpLakw, sinew
 bōkaweril, tendon
 hīl, urine
 me'l, excrement
 betsakw, semen
 wetsāl, saliva
 walept, fur, feathers
 wat-hèl, tail
 wat-ōtk, fin
 wat-ilat, shell
 merār, horn
 wat-ūdatkawi, egg
 talkanoi, breath
 hālōkie, -tālōkie, shadow
 teiwarin, name
 silak, pain

Mammals:

me'lakw, elk⁶⁶
 hālakw, hòlakw, deer⁶⁶
 tā'wila, buck
 büt-cawèti, white deer⁶⁷
 tsetsgeruligerer, bear
 māk, kanāpelil, grizzly
 bear⁶⁸
 rākwliril, wolf
 witskererar, wītkal, coyote⁶⁹
 wāiyits, wāiyèts, dog
 hālikwilil, fox
 sekseswil, otter
 dikwagāwi, fisher⁷⁰

⁶⁵ Wel, to see.

⁶⁶ The ending -lakw is common to these two terms.

⁶⁷ Cawet is white.

⁶⁸ Kanāp-el-il is biter.

⁶⁹ Witskererar is wild dog. Cf. wild cat below.

⁷⁰ Dikwa is poison, white man.

ra'rawèic, tewèLig'atcātcī,
raccoon
gò'miri, mink
teigerèLāriL, civet-cat
bòtcwi, bũtcwi, skunk
datgacāniL, datkaLāniL,
panther
datsgagererar, wild-cat
tsugatLaiugoner, weasel
wĩt'hòt, gray squirrel
seles, beedũliL, chipmunk
Letc, wood-rat
tseretshigarer, wood-mouse
yacũcagātc, gopher
weni-crēnimit, mole⁷¹
da'kere, sea-otter
gũmāyòliL, sea-lion
mātswaptĩsire, seal
kerawagatkari, porpoise
delabeliL, killer-whale⁷²
kĩmak, dayugele, whale

Birds:

tsũtskic, bird
di'l, eagle
cawètociL, bald eagle⁷³
catāoc, condor
butsera, buzzard
gulètsol, tcānite, gokwera,
bletsul, hawks
gatsir, crow
rānātũuloiyòkit, raven
tcakakerLhĩtcātc, blackbird
tcerā, Limayũsele, bluejay
pĩtānatinu, metsig'e, robin⁷⁴
tsigwatsharawi, kingfisher
tseweLĩksi, swan
tcāiuweteg, goose
katgerāgĩL, cawetcoligĩL,
brant⁷⁵
tcatecitekiri, mud-hen
pāne'r, crane
gugitectek, gull
mā'g'es, shag
tcawerātci, pelican

Other Animals:

gateũ, rattlesnake
hāretc, garter-snake
hālunasi, red snake
tcitegiweteg, turtle
mātakwiL, lizard
kwakw, frog
māLak, salmon
gò'taw, lamprey-eel
hũt, surf-fish
tcāpteuc, halibut
tegerĩts, flounder
tāu'gel, rock cod
witiwĩnuwi, herring
wi'welĩL, gawũi, small fish
mò'er, shark
cāgĩtsrer, dogfish
rĩt, mekār, gatewāc,
tsayũnuwateke, clams
wuletāt, razor clam
hĩwaklegak, cockle
hĩwat, haliotis
tsār, mussels in bay
witeac, mussels in ocean
bituwècānāgĩL, salt water
snail
butcātc, land snail⁷⁶
tcòmack, large slug
pĩLwatkotĩ, fly
gats, bee
bĩe, mosquito
tcirawāukw, butterfly
swālen, dragon-fly
teklarè, grasshopper
spina'g'aralu, larva of locust
dakLā'lin, flea
hēikw, louse
botkanawiyuc, spider
gĩLèswal, spider-web
yòtu, maggot
kwèkiplakarer, centipede
mireL, angleworm
Lwuregat'i, crab
gĩ'bas, small red crab

⁷¹ Wèn, sky, which according to myth the mole supported.

⁷² Bel, to catch fish.

⁷³ Cawet, white.

⁷⁴ Cf. mes, fire, red.

⁷⁵ From maL, waL, pL, eat. MaLak also means food.

⁷⁶ -atc, diminutive.

maLäkel, sand-worm
 wutwucil, squid
 daegalwagigatekarer, jelly-
 fish
 wudüuwètk, sea-urchin⁷⁷
 tkayükis, star-fish
 miplatk, cuwatpiyag'apkwī,
 holothurian or sea-anemone

Plants:

wänäk, tālewil, tāleg'il,
 tree
 māti, wood
 hawīg'erak, grass, herbs,
 medicine
 gutcwerātc, plètkapleiwun,
 leaves⁷⁸
 wètcate, buds⁷⁸
 dakw, pitch
 mukweti, pine
 dāp, dak, spruce
 mopel, wopl, redwood
 wīt, alder
 tigel, willow
 legolès-wèl, hazel
 himene-wèl, *Xerophyllum*
tenax grass⁷⁹
 tigwametsha-wèl, *Wood-*
wardia fern⁷⁹
 sòpitk, tule
 we'taw, salmon-berry
 mīp, blackberry
 mò'kel, huckleberry
 mīkwel, salal-berry
 kiwātkokwere, thimble-
 berry
 bōderüc, *Brodiaea* roots
 weL, blòkat, bokitchere,
 rapeaue, edible roots
 kätserā, soap-root

mòt, acorn
 gā'mak, acorn-soup
 rakwiyidāg'eral, wild oats
 Lòkai, ecerāwen, mokerits,
 raladethen, edible seeds

Nature:

wèn, wirudala, sky
 kèk, clear sky
 gotso-wèn, day⁸⁰
 tām, gitca-i-ailokwe, sun
 ritsowel-ailokwe, moon
 ritsowal, night
 wène-welir, gūmeratek,
 dārūtīwī, stars⁸¹
 gutcètégucil, Pleiades⁸²
 wai'were'il, morning star
 liptāu, cloud
 dalālwāla, rainbow
 dalilak, lightning
 dadākak, delalāter, thunder
 tāmteikere'l Lakūluwīl,
 sun-dog⁸³
 hèkw, snow
 bō'ware, rain
 ho'l, weratē, gutser-ol,
 water⁸⁴
 pāk, salt water, ocean
 walā, hot water
 hiegawi, cold water
 hā'lak, steam
 lalil, raril, stream, river
 raril-wāts, small stream⁸⁵
 betāw, spring
 bātwar, freshet
 mes, wes, fire
 bi'wur, smoke
 lag'erak, lō'erak, land
 pātūt, earth, soil
 tetwūka, mud

⁷⁷ Said to mean round.

⁷⁸ -ātc, diminutive: for plètkapleiwun cf. p'lètk, rock, bel, flat, blaiatek, wedge, mi-platk, holothurian.

⁷⁹ -wèl may refer to use as basket material.

⁸⁰ One-sky, or good-sky†

⁸¹ Wène-welir, sky-eyes; gūmeratek, cf. gomera, soft, weak.

⁸² Cf. ratcetek, boy; the Pleiades are thought to be girls.

⁸³ Sun his boy holds.

⁸⁴ Guts-er-ol, good water; werate, drink.

⁸⁵ -ātc, diminutive.

letkak, sand
 plètk, p'lètk, rock
 rakdat, tanatgak, ralitgat,
 mountain⁸⁶

Objects:

mol, house
 kac-werar, small house⁸⁷
 hikawa, sweat-house
 mes-wululel, fireplace⁸⁸
 hãlòwi, hã'lüwi, boat
 dâl, ship
 men, paddle
 hutewâte, cooking basket
 hutewâte-hate, small cooking basket⁸⁹
 gî, woman's basketry cap
 râel, bitwelil, open-work basketry plate
 bäs, large flat close-woven basket
 bac-äts, same, smaller⁹⁰
 kãluwò, conical open-work carrying basket
 kiwelãul, basketry dipper
 bitu, basket mortar
 dilul, storage basket for acorns
 dali'lèn, small storage basket with cover
 hitwokwakerawil, flat sifting basket
 cwat, bow⁹¹
 tsãpi, arrow
 kuluwü, quiver
 bumi'pel, knife
 mel, ax

blaiätck, elkhorn wedge⁹¹
 betgî, stone maul
 tül, stone pestle
 wãlawinewok, slender stone pestle
 wetsècrawel, metsecakerawil, slab mortar
 gamak-watkar, cooking stone⁹²
 gaweldtgalewil, digging-stick
 watk, tule mat
 dewi'pen, dewi'pelil, string, twine
 mãtop, netting shuttle
 kas-wel, mesh-measure⁹³
 da-giweg'il, a dip-net
 rathè-giweril, a dip-net for surf-fish⁹⁴
 tcawerate, dõ'iw, dip-net for salmon in streams
 güt-wera, dip-net for lamprey-eels⁹⁵
 gucager, gill-net for herring
 cagatagere, gill-net for salmon
 hephãgwãr, gill-net for trout
 dãlòsun, gill-net for sturgeon
 ha'ker, hakere, woman's back dress
 mõtw, rewunakwil, woman's front dress⁹⁶
 rulen, clothes⁹⁷
 twanagit, woven blanket
 kèswakl, steatite
 gwãgeretna, black obsidian

⁸⁶ Cf. rak, prefix of terms of direction, dat, up.

⁸⁷ Kac-, small.

⁸⁸ Mes, fire.

⁸⁹ -âte, diminutive.

⁹⁰ Cf. swala, shoot.

⁹¹ Cf. bel, wide, flat.

⁹² Gã'mak, acorn-soup.

⁹³ Perhaps kac-, small.

⁹⁴ Evidently large-giweril; ra't, large.

⁹⁵ Cf. go'taw, lamprey-eel.

⁹⁶ Cf. mõtw-il, woman.

⁹⁷ Cf. rulen, nulen, undress.

tsägawila, red obsidian
 bôteu-caweti, white flint⁹⁸
 kräl, blue rock
 reni, dentalium shell currency
 gutserakw, small dentalia used as beads
 käg, shell disk beads
 itesi, Lüm, small univalve shells used as beads
 dikwä-lenewil, glass beads
 siswatw, yew-seed beads
 gutcicakwi, pine-nut beads

wipac, gatsèpi, gambling sticks
 dòpcèr, gambling bones, of Southern type
 maLeL, pipe
 kakwesiw, medicine-man's feather head-dress
 wat-welät, medicine-man's swallowing feather⁹⁹
 dikwa, dikwa-g'eL, poison
 lätsik, myth
 waLeL, path, road, trail
 tceg'ak, corner
 guts-ewan, one fathom¹⁰⁰

VERBS.

Human Relations and Occupations:

tsew, give
 tawik-wi, visit
 gamerate, play
 rulen, -nulen, undress
 wunakwa, steal
 dabor, lie
 himan, mark, write
 bel, catch fish
 niewom, kill
 swa-la, shoot
 t, give food
 laliu, receive food
 kictawil, beg
 da-wim, ask
 anitw, pay
 we'la, buy
 halewu, olewu, dolewu, dance¹⁰¹

Mental Action:

inag', think
 daretw, twa, think, remember
 gakw, know
 dicgam, like
 wet, satisfied
 rag, want, desire

dilegana, angry
 rakwa, sorry, pity
 wil, fear
 kilat, hurt, pain

Senses:

athera, smell
 Lephai, taste
 tsaw, pugakw, touch
 kwace, hear
 wil, wel, see
 dukL, look at
 keL, look for, seek

Performed with Organs:

hanew, iel, anel, delani, atel, say, tell
 tsowes, shout
 bawerats, whisper
 lalisw, sing
 waL, maL, pL, eat
 hie-wi, eat something¹⁰²
 werate, drink
 beLokel, spit
 kanap, bite
 tsitsir, sneeze
 da'kwa, snore
 lakwet, cough
 likw, rikw, cry, weep
 gakwiLet, sweat

⁹⁸ Cawet, white.⁹⁹ Cf. wat- on body-part terms.¹⁰⁰ Cf. guts-es-wani-helel, one hundred.¹⁰¹ Cf. dale-wi, stand.¹⁰² -wi reflexive-medial suffix.

Bodily Condition:

datw, alive
 cakw, sick, die
 tawal, dakw, dead, die
 it, wit, nit, sleep, dream
 watap, resemble
 kawi, make
 aki, do, affect

Bodily Position and Motion:

dikwel, lie
 dale-wi, dano-wi, stand¹⁰²
 tem, gididwi, digwidiwi,
 sit¹⁰²
 ak, ag', a'l, go, move
 ow, owi, yowi, ohwi, come
 les, travel in boat
 hilak, enter water
 gos-wi, tigelis-wi, swim¹⁰²
 rakecm, pursue
 gudam, flee
 Lal, jump
 atkag'an, creep
 unas, crawl
 takerawac, kneel

Bodily Action:

yock, ack-ar, tkin, tear, pull,
 rip
 ti'n, wakw, push
 tiar, meet, strike

bokin, da-kwicile, hit, strike
 da-tele, stab
 da-kwage, slap
 kiedal, take, pick
 otw, bring¹⁰³
 wolew, get¹⁰³
 kanew, catch¹⁰³
 olowo, uluwu, catch, hold¹⁰³
 tawi, wawi, butcher
 cits, flay

Dynamic and Spatial:

musaw, gadawal, stick
 pelal, cawat, tiekwa, break,
 open, cut
 pawal, split
 dokap, dokaw, crack
 welu, wilu, hollow
 butc, scratch
 lawil, scrape
 kaleg'-al, roll, turn
 wayit, bend
 cwik, move
 low, dakwes, komal, hang
 komat, blow
 picar, swell
 twel, tweric, letka-, fall,
 descend
 nole, rise, lift
 lip, extinguish

ADJECTIVES.

ra't, ra'l, large, long
 kac, kacam, small, short
 guts, good
 gare-wack, ga-bite, bad,
 rough, strong¹⁰⁴
 leg, heavy
 ca'p, light
 badag'a, hard
 gomera, soft, weak
 kLet, hot
 gets, cold
 bel, flat, wide

gatselak, sharp
 capo, straight
 Le'pi, rotten
 pitag', bitter
 wukagiw, rich
 cawanakw, ga-gitgakw, poor
 mes-iar, kika, red¹⁰⁵
 cawet, yulewa, white
 siswa, black
 dukal, dukapl, blue, green,
 yellow

¹⁰³ Perhaps contain suffix or stem -ew.

¹⁰⁴ Gera-, ga-, negative prefix.

¹⁰⁵ From mes, fire.

ADVERBS.

| | |
|------------------------|---|
| hè, yes | at, teate, south |
| kia, no | cur, west, across the ocean |
| wai, is that so? | wic, tini, east, interior, up- |
| tawil, always | land |
| swawi, very, extremely | dālil, indoors |
| rogal, soon | geru, gat'galil, outdoors |
| wigil, now | kūna, yesterday |
| wa, far | gowāi, to-morrow |
| dat, up | wiril-akw, to-day ¹⁰⁶ |
| tewi, behind | wāl-akw, in the morning |
| wur, north | gāu-kūna, in the evening ¹⁰⁷ |

PRONOUNS.

| | |
|------------------|---------------------------|
| yil, I | tei-wa, that, so, thus |
| kil, you | ci-wa, du-wa, what, where |
| hinār, winār, we | kwal-wa, wule, how, why |
| gie, this | diwile, hikel-, another |
| gu, guru, that | |

NUMERAL STEMS.

| | |
|---------------------------------|-------------------------------|
| gō't-, gū'ts-, one | dekli-luk, six |
| rit-, ritw-, two | hālu, seven |
| rik-, rikw-, three | hiowita, eight ¹⁰⁹ |
| riaw-, rām-, four | mece-rok, nine ¹¹⁰ |
| we's-ag't-, five ¹⁰⁸ | ru-lok, ten |

¹⁰⁶ Perhaps related to wèn, wiru-dala, sky, day.

¹⁰⁷ Cf. kūna, yesterday.

¹⁰⁸ From we's, hand.

¹⁰⁹ Perhaps related to four.

¹¹⁰ Cf. -rok of mece-rok, -lok of ru-lok, and -luk of dekli-luk.

YUROK.

The Yurok inhabited the coast from the mouth of Little river to Wilson creek, six miles north of the mouth of the Klamath river; and the Klamath from its mouth to about six miles above the inflow of the Trinity. There are sometimes said to have been four Yurok dialects, that talked along the Klamath being numerically the most important, while three coast dialects, differing in increasing degree with the distance from the river, were spoken in the vicinity of Gold Bluff, Orick, and Trinidad. The coast Yurok have suffered great diminution of numbers and are now much mixed with river Yurok. A final determination of the coast dialects has therefore not been made, but such material as is available seems to show only one divergent dialect on the coast from Stone Lagoon south to Trinidad, and this not very different from the speech along the river. The present account is based on the river dialect.

The Yurok have been visited and investigated by the author at various times between 1900 and 1908. A considerable body of texts has been recorded, but there has not yet been opportunity to elucidate from these the grammatical principles governing the language. The account here given therefore consists only of such grammatical notes as were made incidentally to the recording of the texts, and is introduced principally to enable a comparison of Yurok with Wiyot. To the ear the two languages are more similar than any others adjacent, and the suggestion was long ago made¹¹¹ that they might be genetically related. The preparation some years ago of a comparative paper on the Native Languages of California,¹¹² revealed a morphological resemblance between Yurok and Wiyot in most of the points then considered. This structural similarity is extended by the examination made here, and is undeniably close.

Whether the two languages are related is however another question. A running acquaintance with both reveals but few

¹¹¹ Latham, *Trans. Philol. Soc. London*, 1856, 84. *Opuscula*, 343.

¹¹² R. B. Dixon and A. L. Kroeber, *Am. Anthr.*, n.s. V., 1, 1903.

words that are similar. Such are *mes*, *mets*, *fire*; *welir*, *welin*, *eye*; *go'ts-er*, *qo't-* or *qo'ts-*, *one*.¹¹³ This number is so small that unless it is materially increased by further comparison, the resemblances must be regarded as due either to accident or to borrowing. A systematic comparison cannot be made until both languages are farther analyzed and the stems and elements of words, which in most cases are complex, are determined. For instance *Wiyot welir*, *eye*, is undoubtedly connected with the stem *wel*, to see; but in *Yurok welin* fails to correspond with *ne'g'wò*, *see*; so that borrowing is suggested in this instance. That two languages belong to the same morphological type or group, does not by any means prove them genetically related in America. A common origin can be asserted only on the basis of lexical correspondence. Loose unification of languages that may be entirely distinct, based only on general or partial grammatical similarities, is unwarranted. The structural resemblances between *Yurok* and *Wiyot* are however so close and often so detailed, as will be seen, as to create a presumption that lexical and genetic relationship may ultimately be established; and if not, to make it certain that morphological interinfluences between the two languages have greatly modified one or both.

Yurok, more properly *yuruk*, is a *Karok* word meaning *downstream*. The designation *Weitspekan* is derived from *wè'tspekw*, more properly *wè'tspuc*, now *Weitchpec*, one of the numerous villages of the *Yurok*. The *Yurok* have no name for themselves other than *òL*, *people*.

PHONETICS.

In the phonetic determinations, assistance was rendered by Professor P. E. Goddard with mechanical experiments, by Mr. T. T. Waterman, and by Dr. E. Sapir.

Yurok vowel qualities are very shifting and often indeterminate. There seem to be six vowels, all of peculiarly broad or open quality.

I is so open as to be often heard as *e*. *E* is also very open, so much so as to be at times the aural equivalent of *ä* in English

¹¹³ It is tempting also to compare *Wiyot rit-*, *two*, and *rik-*, *three*, with *Yurok ni-* or *nä-*, *two* and *naxke*, *three*, as initial *n-* becomes *r-* in *Wiyot*.

bad. A, often written ä, is usually between the two sounds as pronounced in father and bad by Americans, but may be heard as either. O is near English aw, sometimes with even more of an a quality. U is also very open. Close vowels do not occur.

The sixth vowel is a vocalic r, here represented by er. In its formation the tip of the tongue is bent upward; the tongue meets the palate farther back than in English. Like the related consonantal r of the language, this sound is not trilled and possesses the peculiar quality of English r, as compared with the various forms of continental r, in an exaggerated degree.

Unaccented e and o are often hard to distinguish and one is frequently replaced by the other in Coast Yurok as compared with the river dialect. E is often followed by a glide, e'. Analogous is ä^u, in rapid speech o.

Glottal stops are abundant. In many stems they are organic. In addition they frequently appear after vowels which close syllables, whenever such syllables are stressed or articulation is forcible. In rapid continuous speech these stops disappear. Thus tinica, what is it, may often be heard as ti'ni'ca' when emphatically uttered. An organic stop gives the impression of distinctly doubling the vowel which it follows: pa', water, is heard as pa'^a or pa'a.

A complete cessation of sound formation in the middle of words is not infrequent: wec,ona, world, ololekwic,o'l, person, we'n,t^akc, woman. It seems likely that such pauses mark etymological divisions.

There are two series of stops, both surd, the ordinary and the fortis. English surd and sonant stops are pronounced alike by the Yurok. The ordinary surd stops are more aspirated when final than when followed by a vowel: nepui, but almost nep'. The fortes, or stops accompanied by glottal stop, are of only moderate strength.

K and q, palatal and velar k, both occur, but it is uncertain whether they represent organically different sounds or are divergent formations of the same sound influenced by adjacent vowels. In any case k is most frequently audible before i and u, q before e, a, o. K^u or qw is frequent, and is felt as a simple sound.

T is formed against the lower edge of the teeth and sometimes is clearly interdental.

There is one s sound, written c, intermediate between s and sh, perhaps nearer the latter. In ts, which is the equivalent of a simple sound, the s element appears to be more pointed than in the usual c. Yurok g is always a continuant, but not harsh. X, the surd continuant corresponding to g', is limited to combinations with following surds, such as k, p, c, and has not been observed initially or finally. It is distinctly harder than a mere ordinary aspiration, h or ', but appears to be only a parasitic development before certain surds: naxkeiL, Woxpekumeu.

There are three l sounds: l, l, and L. The first, l, is sonant and audibly similar to English l, but a mechanical analysis by Dr. Goddard indicates a suddenness of approach in the formation of the sound, which is found also in Hupa l.¹¹⁴ The second, l, is a not very common surd continuant found after glottal stops: qo'lqolatswin, ohonecqwetso'l. The third, L, is a surd affricative. In some instances the t-approach is weak, and the sound is almost wholly continuant. Wiyot L was also often heard with this quality.

W is sometimes produced with less protrusion or rounding of the lips than English w. It therefore has something of the quality of bilabial v, and initial unaccented we and wo are often hard to distinguish from o or u.

Surd m, n, and r occur finally after glottal stops.¹¹⁵ Consonantal sonant r has the peculiar quality already ascribed to vocalic er. N, m, y, and h require no comment.

The sounds of the language may be represented as follows:

| | | | | | |
|---|----|-------------------|----|----------------|--------|
| | | i, e, ä, o, u, er | | | |
| | | ì, è, ä, ò, ù, er | | | |
| q | q' | (x) | g' | qw | |
| k | k' | | | k ^u | |
| t | t' | c | n | n | ts ts! |
| p | p' | | m | m | |
| | | r, r, l, l, L | | | |
| | | w, y, h, ('),' | | | |
| | | pause (,) | | | |

¹¹⁴ Present series, V, 9, 12, 1907.

¹¹⁵ Compare *ibid.*, 10.

The stress accent of words is often well balanced between several syllables and often marked on one or two. Accent is however less a matter of intensity or loudness of sound, than a rise in pitch and a holding of the accented syllable, which is manifested in lengthening of the vowel or doubling of the preceding or following consonant. Accent is however not determined by organic length of vowels, and often falls on syllables that are intrinsically short. The dwelling of the voice, and its rise of pitch, on the accented syllable, give a peculiar and pleasing quality to Yurok speech.

Doubling of consonants is frequent, but whether it occurs only in connection with the accent or also organically, is not certain. In place of *ww* and *ll*, *g'w* and *ll* seem to occur.

Initial consonant combinations occur, but their scope is limited. The principal observed initially are *tsp*, *tsq*, *kn*, *kr*, *pr*, *tm*, *ck*, *ct*, *cr*, *cl*, *cm*, *lm*, *lq*. These give as the first member of initial combinations *q*, *k*, *ts*, *t*, *p*, *c*, and *L*, or surds only; and as the second, *q*, *k*, *t*, *p*, *r*, *l*, *n*, *m*, or stops, nasals, and *r* and *l*. *Ts* and *qw* are to be regarded as simple sounds. Final combinations do not occur except with *c* as second member. This is found most frequently after *k*, so that *kc* may represent what is to the Yurok a simple sound like *qw* and *ts*. The imperative suffix *-c* is however added to stems ending in *p*, *n*, *r*, and other consonants. Endings like *ern*, *erm*, *erL*, *ert*, consist of the single consonants *n*, *m*, *L*, *t*, following the single vowel here represented by *er*. Yurok initial combinations are more numerous than those of Wiyot, but Wiyot possesses more that are final.

Vocalic assimilation occurs to some extent: *ne-crääts*, my quiver, *wo-cròots*, his quiver; *yots*, boat, *ne-yots* or *ne-yets*, my boat; *erner-hel*, at Erner, *wo-cròots-ol*, in his quiver, *pa'a-il*, in the water, *okäpol-il*, in the brush. Other instances will be found among the numerals below. There is a particular tendency for *er* to assimilate other syllables to itself. Most words in which *er* occurs contain it in from two to four or in all syllables: *qerxtsper'*, *neryerwert*, *cermeryer*. When one vowel of a word changes to *er*, most the others usually become *er* also: *lo'og'e*, *ler'erg'er*, black.

STRUCTURE.

Reduplication is less marked than duplication: qots-qots, worm; tseix-tsei-uc, mosquito, compare tseix-keni, small; mus-mus, cow; we-tseq'-tseq'-oa, striped pattern. In connected texts neither reduplication nor duplication is frequent.

Composition and derivation are abundant. Adjective stems precede noun stems in composition: pelin-tsiek, large-dentalium. In accord with the pronominal structure of the language, compounds containing a possessive are common: qoqonewul-wetspeg'a, long his ears, mule. Words are also compounded or derived with nouns as first element: nepui-cnec, otter, nepui, salmon; Lqeliqera, mole, Lqel, earth; merwuci-clei, a species of lizard, which is thought to bite the navel, merwuci. Derived nouns, as in most languages, are formed by suffixes: nep, eat, nepui, food, salmon. Terms of direction are always prefixed, as in Wiyot, Athabaskan, Karok, Pomo, Wintun, and perhaps other languages of northern California: petskuk-ceg'ep, up-river coyote; puleku-qwerek, down-stream sharp; woxpe-kumeu, across-the-ocean widower; pets-ucla, up-river throw.

PRONOUN.

The Yurok pronominal elements, like the Wiyot, are incorporative, the independent forms being emphatic or non-syntactical. Also as in Wiyot, possessives are prefixed, subjective or objective forms suffixed.

The independent pronouns are nek and neka', objective nekats, for the first person, qel or qela', objective qelats, for the second. There appears to be no pronoun of the third person.

The possessive forms are ne-, no-, my; qe-, qo-, your; we-, wo-, o-, his; m-, someone's, indefinite. The plural seems to be the same.

On intransitive verbs the subject is indicated by -k in the first person and -m in the second.

In transitive verbs the combined objective and subjective elements determined are -tsek, I you; -ck, I him; -tso, I you; -co, I them; -xpa, you me; -m, you him, you them; -xpen, he me. It

would seem from these forms that the objective elements are -p, -ts, -c and the subjective -k, -m, —, for the three persons respectively.

The pronominal elements thus are :

| | <i>Independent</i> | <i>Possessive</i> | <i>Subjective</i> | <i>Objective</i> |
|--------|--------------------|-------------------|-------------------|------------------|
| 1. | nek | ne-, no- | -k | -p |
| 2. | qel | qe-, qo- | -m | -ts |
| 3. | | we-, wo-, o | | -c |
| Indef. | | me-, m- | | |

The possessives indicate n and q as the essential elements of nek and qel. The Wiyot radicals are evidently the same. Q not occurring in Wiyot, k, in kil and ku-, is the equivalent. Initial n not being permitted in Wiyot, yil and ru probably represent original n. The pronominal forms of Yurok and Wiyot agree in the following points:

They are incorporative. Elements added to nouns are prefixed, those added to verbs suffixed. The prefix and independent forms are similar to one another, the suffix forms entirely dissimilar, also differing completely among themselves according as they are objective or subjective. The objective suffixes precede the subjective, which are identical whether transitive or intransitive. There is a form, used with body-part terms, denoting indefiniteness or absence of possession; it is m- in both languages. The fundamental elements of the possessive and independent forms in both languages seem to be n for the first person and k for the second,—the former common, the latter exceptional in American languages and therefore significant. The suffix forms in the two languages however show no similarity.

Demonstratives show two stem forms, yo and ki. Iyo is this, iyolko these. Yok is also found. Ku and ki are that, the, denoting reference rather than distance. Ki is also used relatively: ki ololekwic,o'l eq!axlkome, what men tread-on, the world. With ku and ki compare Wiyot gu-r and gi-c.

Kuc and tin are interrogative. Kuc is what, where. Tin-ica is what, what kind; tin-pa, which one. The interrogative particle is hec, postpositive. It is used with verbs; also independently, when it has the meaning: what is it, is it so.

NOUN.

The Yurok noun like the Wiyot lacks all designation of number or syntactical case. There is a general locative suffix -iL, -aL, -eL, -oL, corresponding to Wiyot -akw. In addition a locative -ik has been found in mets-ik, in the fire, lqel-ik, in the ground, below, hierk-ik, north, lep-ek, in the house, pets-ik, up stream, pul-ik, puleku-k, down stream. Another locative is -ic: mets-ic, in the fire; wonoyek-c-ume, sky-in-girl; turip-c-atsin, inhabitant of Turip. Terms of direction themselves are suffixed like locative cases: erner-hiqo, opposite Erner; qenek-pul, down stream from Qenek. Finally there is a suffix or enclitic -meL, by means of, with, on account of, for. This is however used in verb complexes as well as on nouns: tetamoc-ek meL tikwoxpen-ek we-yots, angry-I because broke-I his-boat.

VERB.

The Yurok and Wiyot verbs are similar in function and structure. Both are distinctly the center of the sentence. In both prefixes predominate except for the expression of pronominal relations. Adverbial, modal, temporal, and subordinating ideas are expressed by prefixes. There are also verbal suffixes, but their significance is for the most part not yet clear. Even independent adverbs are to some extent drawn into the verb-complex, which often assumes great length. Such adverbs always precede the verb stem. Many prefixes cannot be distinguished from conjunctive or adverbial particles placed before the verb. They usually precede the verb immediately and are spoken as one word with it. At other times they are separated from it by nouns, adverbs, or numerals.

ki-nä'eli-hoxkumek, shall two-houses I-build

ki-naxkcemi-wanu'layo, shall three-times I-jump-up

qölo-'öL kits-keno-atsiyùuk, it-seems-a-person has-sat-down-indoors

These constructions evidence a compact grouping of the other constituents of the sentence in the verb-complex, but at the same time seem to show that at least some of the modal, temporal, or adverbial elements connected with the verb stem are

not so much actual prefixes as preposed particles closely linked with the verb which is the central factor of the sentence.

When the subject and object are independent nouns not brought actually into the verb-complex, they regularly follow it. This marks them off from nouns whose general relation to the predicate is adverbial, which normally precede the verb, thus opening the sentence. The general "appositional" nature of the sentence is obvious.

The significance of only a part of the verbal prefixes and suffixes that have been determined in Yurok has become clear. Such are:

kits-, completed past
 ki-, future
 tsa-, imperative
 nimi-, nimok-, negative
 kowits-, negative
 wikiLne-, negative
 kinek-, when
 matseki-, kitatse-, if
 alukumi-, because
 conini-, because
 kit-, he who, when, participle
 wictu-, wiit-, that is who, what, how, relative
 qolo-, as if, like, appears to
 tsyu-, all

Of suffixes, the following are apparent:

-c, imperative
 -kwilek, verb substantive, similar to Wiyot -er and related endings.

Prefixes of undetermined meaning are wil-, menex-, numil-, tukwile-, kwileki-, niko-, qem-, yokitsnini-, qem-kits-minolini-, ol-, yikun-, pikoxtsi-, mokwile-, okome-, tsigol-, ca-, ala-, qet-, me-, ha-, moc-, kuni-.

Suffixes are -yeg'o or -heg'o, -melek, -exkwun, -pimo, -kwetsok, -wertsek, -uts, -noxpe, -'m.

The adjective shows a difference for animate and inanimate.
 montse, white, animate monterer
 cokoto, red, animate cerkerter
 lo'og'e, black, animate ler'erg'er
 pleli, pelil, large, animate plerer

Altogether a more extensive occurrence of subordination is visible in sentence structure than in Wiyot. It may be that this difference is due to the fact that the Yurok texts obtained are a

better representation of normal speech and that the sentences in the Wiyot texts are unduly abridged through the informants' inability or unfamiliarity in dictating.

NUMERALS.

Numeral stems are used with a variety of classifying suffixes. This is a feature not recorded of any other Californian language except Klamath-Modoc, though not uncommon farther north on the Pacific. The observations made on Wiyot reveal at least the presence in that language of similar suffixes, though their extent is undetermined. The following list probably does not exhaust this class of suffixes in Yurok.

- iL, in counting
- epir, separate dentalium shells¹¹⁶
- etani, strings of dentalium shells¹¹⁶
- er, woodpecker scalps¹¹⁶
- erpi, obsidian blades¹¹⁶
- eriL, white deerskins¹¹⁶
- o, months, dollars
- emoiL, nights
- en, days, also pernekr hand-measures
- emoi, fathoms
- ixteli, boats, wagons, conveyances
- eli, houses, sweat-houses, nests
- emi, times, occasions, years

In the addition of these suffixes to the numeral stems there are some apparent irregularities and certain phonetic alterations, including several instances of the vocalic harmony, or assimilation from suffix to stem, characteristic of the language.

| | 1 | 2 | 3 | 4 |
|---------------------|--------------------|-------------|--------------|------------|
| Counting | qoore ^a | ni 'iL | naxkceiL | tsooneL |
| Dentalium-shells | qooxtepir | nä 'äpir | naxkcepir | toonepir |
| Strings of dentalia | qootani | nä 'äitani | naxkcetani | toonetani |
| Woodpecker scalps | qererxter | ner 'erxker | nerxkcer | ta 'erner |
| Obsidians | | ner 'erpi | nerxkcerpi | |
| White deerskins | | | nerxkceriL | |
| Months, dollars | qoxto | no 'o | naxkeo | toono |
| Nights | qoxtsemoiL | nä 'ämoiL | naxkcemoiL | tsoonämoiL |
| Days | qoore ^a | nä 'äin | naxkceen | tsoonen |
| Fathoms | qoxtsemoi | nä 'ämoi | naxkcemoi | tsoonamoi |
| Boats | | nä 'äixteli | naxkceixteli | |
| Houses | | nä 'eli | naxkceeli | |
| Times | | ne 'mi | naxkceemi | tsoonemi |

¹¹⁶ Objects of value and mediums of exchange.

As will be seen, the vowel of the stem for two varies between ä, i, e, o, and er; in four and one t and ts replace each other; x before t and k is parasitic, and qoore^u, the independent word for one, corresponds to a stem qot-.

How many is expressed by *kuc tsāmeL*; how many months by *kuc tāmawo*; dentalia, *kuc tamopir*; woodpecker scalps, *kuc termerwer*; obsidian blades, *kuc termerpi*.

TEXTS.

WOXPEKUMEU.

| | | | |
|--|---|--|--|
| qè'nek-ic At Qenek | ho'ʔ he was. | tu-qwè'nomet-ic Outside the sweathouse ¹¹⁷ | atsyeg'ù'qwin he sat. |
| tu-nò'L-pu'lukitsrò'tep The sun was low. ¹¹⁸ | | | kits-hawe''-wo'o'me'pek He had sweated in the sweathouse. |
| wic-tu-awetsyù'qwin then he sat down | | qwenome't outside the sweathouse. | tu-wic-tu-nòL There he used to |
| atsyeg'ù'qwin sit. | | wit!i'ni-oqw He kept | ki-we-tsye'g'wolo that his flute |
| lepò'nòL under the ridge-board. ¹¹⁹ | mo-nò'L-puluki'tsrò The sun was low. | | ì'yeger'er'xcerper' He beat his hair dry. ¹²⁰ |
| mo-wit-ki'ts-weno'omo'keiL Summer had begun, | | numi-wo'g'ik it was the middle | uki''cèn of summer. |
| kits-numi-mì'keo'to'm It was the very middle | | uki''cen of summer | kits-wic-o'locòn that he did this. |
| kits-o'-numi-wic-tu-co'to Thus he liked to do. | | uqeg'e'camewolek He was very sorry for those | kièònin-hò'l'em who would be |
| ki-ò'L men. | tu-wic-tu-e-meL-qe'g'ecamewol Thus he was sorry for them | | niki'meltsmeyò'qciL when it began to be evening. |
| tu-nò'L-wic-tu-e'-meL-rura'wò' Then therefore he began to play ¹²¹ | | | wic-tu-e'-meL-tsig'uwolo the flute on account of that. |
| OLO'm He took | we-tsye'g'wolo his flute. | | wi'c-tu-e'-meL-ru'rawò' Therefore he played. |

¹¹⁷ qwenomet is the place outside the small exit of the sweathouse.

¹¹⁸ puluk is down-stream, which at Qenek is nearly west. "The sun was in the west."

¹¹⁹ leponoL is the curved board, usually the gunwale of a broken boat, that covers the ridge of a sweathouse.

¹²⁰ her'erxcerp is a stick with which the hair is combed or beaten dry after a bath such as follows sweating.

¹²¹ rurawo usually means to sing, but evidently refers to any music.

PULEKUQWEREK.

| | | | |
|--|---|---|--|
| pè'kwan At Pekwan | qò'li-atyü someone sat. | kūc-ki-lā'ek "Where shall I travel?" | wa'iqowo'opo-c "Cross the river here. |
| nòl-hig'-wòon Up hill some distance | witòkwi-ni'ü live two. | witso-lā'ya Travel there. | hèl-to-ki-ne'wòm Then you will see |
| o'lo'mèL a house. | kowitso-mèL-nò'xpew'-m But do not enter it." | ta'o' "Very well, | ta'wi-ki-lāek I will travel there." |
| nòl-o-ne'wom Then he saw | o'lo'mèL a house. | o'le'm He said: | i'-ki-còot "I will go and see. |
| ätskahò'ritse She is making a basket, | qò'lin the other | äts-kä'c,ä is pounding. | qolo-ni'mok It seems not are |
| wè'lin their eyes." | tae-kit-ekui "When it is good | ki-käc,ä'-wòk that which you are pounding, | hèl-weno'o-c give it!" |
| ts'è'xwar "Here!" | nimo'oxk ^u "There is nothing ! | hèl-weno'o-c Give me | qè'mq'o' more !" |
| qòlo-'òL "It seems a person | kits-keno-a'tsiyùuk has sat down indoors." | Lo'ope-c "Catch him !" | |

BUZZARD.

| | | | |
|---|--|---|---|
| wi'ctu'-co'neq ^w Thus he did. | qetqwò'leg'ò'llekwòL He was still a person. | wictu-hocò' ⁿ Thus he used to do, | |
| nù'mitsyù-nne'p he ate everything. | pule'ku Down stream (i.e., north) | werherpqe'rixqe'rni at the head of the river | |
| mèL-ho'pke'tso he started from. | tu-wictu-me'g'wometsò'L From there he came. | tu'nnumitsyü Whatever | |
| hä'k ^w c he found, | lè'yolè'k ^c gartersnakes, | lmèye'pir rattlesnakes, | Lqer'wer'c salamanders, |
| Lqwer'ter'q ^w c frogs, | kitòmè'nnik of every sort | ki-nuwoce'g'onawoni different kinds | tu'-nä'p he ate. |
| niki'tsyü Everything | cò'k he ate, | tu-nä'p and also those | emeik'i-wenā' ^t the fetuses |
| qe'yur many | tu-qol-o'nneu that he saw | wo'pu into the river | i'nillòlik that were thrown. Those |
| ki-wer'erg'eriyerwerni the young girls, | we'n,tsa' ^u ke women, | umeyò'mäik pregnant, | |
| i'mi-ekewò'k-ci'-mèL because they did not like | ki-qò'lic-uqò'mtsu'mek anyone to know | ku'-umeyò'moik that they were pregnant, | |
| wit then | wò'xpuk-c into the river | olò't'-ni' threw them. | ku-ù'ke The child |
| | | | kits-qo'leo' ⁿ dead, |

| | | |
|--|--|---|
| pi'e-tu-wi'ctu-one'p-qām then he ate it also. | nùmitsyù'-nnep Everything he ate. | tu-nò'-llā'i He travelled on. |
| we'k'-tu-nò'-llāi Here he travelled | co-pè'ts up-stream. | tu-nò'-llā'i He travelled. |
| o'hone'cqwetso'l-ni'cònin he arrived. | ki-nemer''wermeri' From all the streams | tu-ni'cònini thus |
| wictu-co''n he did, | tu-nù'mitsyù'-nep he ate everything, | ketse'g'inù'weceg'o'nnowoni things of all sorts, |
| kitse'g'inewocò'k of any kind. | | |

SUMMARY.

The Yurok language is of the type known as appositional, in that pronominal, modal, temporal, adverbial, and other elements are attached to the verb stem, which serves as the center of grammatical construction, the other words of the sentence being syntactically connected with it through these affixes. The verb is therefore complex, the pronominal elements are essentially affixes, and the grammar of the noun and substantival pronoun is reduced to a minimum, while the adjective is a verb. The pronominal elements are suffixed, but most other relations, including those of manner and time, are expressed by prefixes to the verb. The possessive prefixes of the noun, and the emphatic substantival pronouns, show no similarity to the pronominal affixes of verbs. Number and syntactical case-relations are not expressed. Numerals are provided with classifying suffixes. Derivation is by suffixation, and many nouns are based on verb stems. The sounds of the language show considerable specialization of quality, vowels tend to be indeterminate, and accumulations of consonants are radical. In all these respects Wiyot agrees with Yurok, though the words of the two languages appear to be dissimilar.

KAROK.

The Karok language is spoken on the Klamath river above the Yurok, extending from Red Cap creek to the vicinity of Clear creek. The largest groups of villages were about Orleans, the mouth of Salmon river, and the mouth of Clear creek. The language is uniform, except in the Clear creek region, in the uppermost part of the territory of the stock, where an unrecorded dialect is said to be divergent. The Karok have no name for themselves other than arara, people. Karok, more properly karuk, in their own tongue means up stream; they occasionally designate themselves as karuk-v-arara, up-stream people, but chiefly with reference to the Yurok or yuruk-v-arara.

The following notes were obtained from several informants, especially Mrs. Bennett and her sister, Miss Jeannette Horne. Only the readily observable traits of the language are presented, a more thorough study being in progress.

PHONETICS.

The phonetic system of Karok is simple, and presents few difficulties to a European tongue.

The sounds are:

| | | | | |
|----------------|------|---|---|---|
| u | o | a | e | i |
| ū | ò | ā | è | ì |
| k | x | | | |
| (k·) | (x·) | | | |
| t | s | | n | |
| p | f | v | m | |
| c, tc, r, y, h | | | | |

The vowels are of distinct quality. E and o are open. Short vowels are sometimes touched so lightly as to be scarcely audible.

K· and x· are pre-palatal, and perhaps organically different from k and x. S approximates English th, while c lies between s and sh. F and v are bilabial, but differ little from the European labio-dentals. F occurs elsewhere in California only in Esselen and in two Pomo dialects. Karok r is trilled and very different

from Yurok *r*. The absence from the language of sonant stops, lateral sounds, stressed consonants, and *w*, is notable.

All the sounds of the language occur in all parts of words, except that *r* is not initial. *E* and *o* are rarely final.

There is little contraction, elision, or euphonic modification of sounds. *A-u* sometimes becomes *o*. Short or "neutral" *i* may become inflected by preceding *u*: *ki'ri*, *u'-kuri*. *R* and *n*, as in *Wiyot*, are often equivalent. *R* becomes *n* before consonantal suffixes: *ni-psimtarar-ec*, *u-psimtaran-ti*. Similarly final *v* changes to *m*: *av-aha*, *am-ti*; *kiv-uni*, *kim-cur*.

Initial and final combinations of consonants do not occur except in a few doubtful cases. It seems therefore that *Karok* agrees with the majority of Californian languages in possessing only alternations of consonants and vowels in the elements of its words.

Altogether the phonetics of *Karok* are as different from those of *Yurok* and *Wiyot* as they possibly could be. There is more superficial resemblance to *Shasta* and *Chimariko*.

STRUCTURE.

Suffixation is the principal grammatical method. Prefixes are limited to pronominal forms. Reduplication is scarcely grammatical. Neither ablaut nor umlaut nor other internal modification of stems occurs.

The noun lacks syntactical cases and the pronominal forms are incorporative. This general fact is the chief resemblance *Karok* bears to *Yurok*.

Both derivations and compositions are found frequently. Most words are tolerably long, and the verb stems that have been recognized are more frequently polysyllabic than monosyllabic.

The commonest derivative suffix is a diminutive *-ite*. *Yuki*, *Wiyot*, *Hupa*, and *Yokuts* also show diminutives in *-ite* or *-ate*.

puf-ite, deer
pihnêf-ite, coyote
apxan-tini-ite, hat-wide, American
kit-ate, granddaughter
omuk-ite, near

teu-ite, narrow
 ac-axna-ite, shallow
 anama-te, small
 tunuè-ite, small
 yam-ate, pretty (yav, good)
 kêm-ite, old (kêm, bad)

Very common is -an or -ar, denoting the agent or instrument.

kivip-an, runner
 xuc-ar, thinker, thoughtful
 kirih-an-c, fishermen
 imafunv-an-c, beggars
 teivteak-ar, door, the thing for shutting
 xuskam-ar, gun
 ac-iktav-an, woman, water-carri-er

Other deriving suffixes are:

-ip, on names of trees.

isar-ip, fir
 civir-ip, yellow pine

-ic.

kêm, bad, kêm-ic, evil thing, monster

-aha.

av, eat, av-aha, food

-ram.

kiri-vi, sit, kirivi-ram, house

-kirak.

kiri-vi, sit, kirivi-kirak, stool

-vapu, born at, person belonging to.

aksiphirak-vapu, the one born at Trinity Summit

-v-arara, people.

yuruk-v-arara, down-stream people

-kâm, large.

axup-kâm, large stick

-kunic, forms adjectives, especially of color, from nouns.

imeaxu-kunic, pitch-like, soft
 teanteaf-kunic, foam-color, white

-ipux, lacking.

xuc-ipux, thoughtless

-ruk, is added to the stems of the five commonest terms of direction. It suggests the locative ending -ak.

yu-ruk, down-stream
 ka-ruk, up-stream
 ca-ruk, towards the stream, down
 ma-ruk, away from the stream, up
 sie-ruk, across the stream

In composition these words and stems always precede: sieruk-pihiriv, across-the-water-widower; ka-timin, up-stream-dam; yur-ac, down-stream-water, ocean.

NOUN.

The noun is ordinarily without designation of number. Certain nouns denoting persons, or derived from verbs by the agent-suffix -an, and certain adjectives, express the plural by -c.

kunih-ara-c, arrows
 imafunv-an-c, beggars
 tunuèite-ic, small ones, children
 arara-c, relatives
 tipa-hivi-c, brothers
 kustar-ivi-c-oe, older sisters
 aca-kam-c keite-ic pa-c, the large rocks

There are no subjective, objective, or possessive case-endings, but a series of local-instrumental suffixes:

-ak, in, at
 -keu, in
 -ava-kam, on, over
 -curuk, under
 -pimite, near
 -os-kam, before
 -vasi-kam, behind
 -muk, with
 -xakan, in company with
 -kus, on account of

Examples:

isarip-ak, on the fir
 ic-ak, in the water
 nunu-avakam, above us
 axup-muk, with wood
 yux-keu, in the ground
 aca-curuk, under a rock
 aca-pimite, near a rock

Possessive pronominal elements are prefixed to nouns. A possessive relation between two nouns is expressed by the prefixion of the pronominal element of the third person to the noun denoting the possessed object.

aciktavan mu-kiriviram, woman her-house

PRONOUN.

The pronominal forms are:

| | <i>Independent</i> | <i>Possessive</i> | <i>Subjective</i> | <i>Objective</i> |
|------|--------------------|-------------------|-------------------|------------------|
| 1 s. | na | nani- | ni- | na- |
| 2 s. | im | mi- | i- | -ap |
| 3 s. | um | mu- | u- | |
| 1 p. | nu | nanu- | nu- | kin- |
| 2 p. | im-kun | mi-kunu- | kik- | kik—ap |
| 3 p. | um-kun | mu-kunu- | kun- | |

The independent forms are used as the subjects of predicate nouns and adjectives and for emphasis.

All other forms, except objective of the second person -ap, are prefixed.

A suffix -un denotes plurality: ni-mah-un-at, I saw them.

The regular use of the subjective prefixes of the third person even after a noun subject, evinces the feeling of the language for "incorporational" structure of the appositional type.

That the incorporative tendency is however not very strong, is shown by the fact that subjective and objective prefix elements are not used together in one verb.

The form nu- denotes that the first person acts on the second: I-thee.

The substantival possessive pronouns are formed by -upi: nani-upi, mine.

The commonest demonstrative is pa, indicating reference, not distance or direction, and nearly with the function of an article. From it are derived the more specific demonstratives pa-ipa, this, and pa-ik-u, that. Here and there are o-k and paik-u-k, whose -k seems to be the locative ending. Kān also means there.

VERB.

The Karok verb is comparatively simple. The subjective or objective pronominal element is prefixed to the stem; a suffix indicating spatial relation often follows the stem; and the word ends in a modal or temporal suffix, or sometimes two. Other

modal and temporal ideas are expressed by particles which precede the verb without forming part of it. Instrumental prefixes are lacking, and the causative, compulsive, transitive, inceptive, benefactive, and similar affixes common in American languages are scarcely represented.

Suffixes expressing spatial relations, either of position or of motion, are :

- ura, up
- uni, down
- fak, down
- varak, down-stream
- arup, -ripa, out
- amni, in, into
- kuri, into
- kiri, into fire, in fire
- furuk, into house
- tako, on
- harav, through
- ka, to
- ra, toward
- cur, off

Modo-temporal suffixes are :

- ti, imperfect, present
- at, -it, -hat, past
- ec, -ic, future
- vani, reflexive
- c, imperative (as in Yurok)

Interrogation is denoted by -um or hen-um, which appear to be enclitic particles, as in so many other American languages, since they are attached to other words as well as the verb.

Preposed adverbial particles are :

- ip, completed or past action
- ta, probably indefinite or imperfect time
- teimi, tei, teu, optative, future, inceptive, imperative
- xatik, tikan, optative
- puran, reciprocity
- pu, negative

Examples of verb forms :

- im-um i-apunmu-ti, you, do you know?
- n-aknap-hen-um, did you slap me?
- ni-seinati-hec, I shall have woodpecker-scalps
- nani-hirò-hec, will be my wife, I will marry

pasakhi-c, kneel!
 tcimi piftcak-c, open it!
 tu ne-kim-tako, I fell on
 u-pas-ura, he threw up
 virax-cur, lick off
 mara-kuri-hat, ran down into
 no-pas-kiri-hec, I will throw you into the fire
 pip-arup, break out
 u-ari-furuk, he rushed indoors
 ok i-siuru-ra, pull it here
 ta ni-kuni-fak, I shoot down

ADJECTIVE.

The adjective resembles the noun rather than the intransitive verb. It is used predicatively with the independent pronoun, whereas the verb is employed with subjective prefix: *na keite*, I am large, and *na aciktavan*, I am a woman, but *ni-kivip*, I run.

Adjectives and nouns are both subject to the diminutive suffix *-ite*. The plural suffix *-c* is also shared by nouns and adjectives.

The word for small is *anamate* when attributive, *ninamite* when predicative.

NUMERALS.

The numeral system is quinary to ten, from there on decimal.

| | | | |
|---|---------------|---------------------------|-----------------------|
| 1 | <i>yisa</i> | 6 | <i>kirivkir</i> |
| 2 | <i>axak</i> | 7 | <i>axa-kinivkir</i> |
| 3 | <i>kwirāk</i> | 8 | <i>kwira-kinivkir</i> |
| 4 | <i>pis</i> | 9 | <i>trop-atieram</i> |
| 5 | <i>trop</i> | 10 | <i>trahiara</i> |
| | 11 | <i>trahiara karu yisa</i> | |
| | 20 | <i>axak-a trahiara</i> | |
| | 30 | <i>kwirāk-a trahiara</i> | |

Trop and *trahiara* have also been heard *tirop* and *tirahiara* and *kwirāk* as *kuyurāk*.

Distributive numerals are formed by the suffix *-mate*; *axak-mate*, two each.

Numeral classifiers have not been noted.

TEXT.

| | | | | | |
|----------------------------------|----------------------------|--------------------------------|------------------------------|---------------------------|-------------------------------------|
| ipacna'van-itc | kān | u'-kuri ¹ | ku'kum | imān | |
| Cat-owl | there | he lived. | Again | tomorrow | |
| tu-a'kun-var ² | ka're-xac | pū'fite | tò'-ik-a'r ³ | xac | |
| he-hunting-went. | And then | deer | he killed. | Then | |
| caruk | tò-siu'ru-fak ⁴ | stip | xac | mu-vè'cur-ak ⁵ | |
| down | he-dragged-(it)-down | (to) the shore. | Then | its-horns-on | |
| tu-pi-knivi-tāk-i'c ⁶ | ni'hate | xac | pa | pū'fite | |
| he-sat-on | gently. | Then | the | deer | |
| tò-u-kpo'u-va'rak ⁷ | xac | tò-siuru-ri'pa | xac | tò-ef'ri | |
| floated-down-stream. | Then | he-dragged-(it)-out. | Then | he-skinned. | |
| ka're-xac | kān | a'rar | tò-kuma'rihivik | a'raa'ra | |
| And then | there | person | he met, | person | |
| pa-mū'av ⁸ | a'pap | u-a'v-ac-hu'ni-va ⁹ | xac | a'pap | |
| that-his-face | one side | water ran down, | then | one-side | |
| u-pi'ric-hu'ni-va ⁹ | ka're-xac | pa | pū'fite | tu-è's-ep | |
| there was brush down it. | And then | the | deer | he-took. | |
| xac | pa | ò'nu-itc | kietc | tu-pas-i | xac |
| Then | the | kidney | only | he-threw. | Then |
| tò-u-pu-vā'ram ¹⁰ | xac | tò'mnic | pa | u'nu-itc | xac |
| he-home-went. | Then | he-cooked | the | kidney. | Then |
| tu-ā'u ¹¹ | ku'kum | imā'n | tu-p-akun-vara ¹² | ka're-xac | |
| he-ate. | Again | tomorrow | he-hunting-went. | And then | |
| kān | u-ū'm | è | ica'vac | ò'uk | ta-ni-a'ho ¹³ |
| there | he-arrived. | "Oh, | cousin, | here | I-have-come. |
| no'yuka're-ec ¹⁴ | pa | in | pū'fitei | i | i-è's-a-yi'p-vuti-hat ¹⁵ |
| We-will-kill | the one | deer | who | you-has-deprived-of." | |

NOTES.

¹ Stem *kiri*, live, sit, be.

² *Tu-* and *ti-* are at times found for *u-* and *i-*, he and you; *akun* is the stem; *var*, more fully *varam*, to go, is used both as an independent stem and as a suffixed auxiliary.

³ *Tò-*, for particle *ta* and pronominal prefix *u-*.

⁴ *Tò-*, the same; *siuru*, stem; *fak*, spatial suffix, down; the object as well as the tense are not expressed.

⁵ *Mu-*, possessive prefix of third person; *-ak*, locative case-suffix.

⁶ *Tu-*, subjective prefix, third person; *pi-*, meaning unascertained; *knivi*, for *kinivi*, equals *kiri-vi*, sit, from *kiri*, as in note 1; *-tak*, for *-tako*, on, spatial suffix; *-ic*, seems to be the future suffix *-ec*, *-ie*, though the context calls for a preterite.

⁷ Tò- for ta influenced by following u; u-, he; kpou, float, swim; -varak, spatial suffix, down-stream.

⁸ Pa-, that, the, customary with the possessive prefix of the third person mu-.

⁹ U-, subjective pronominal element, third person; av, doubtful; ae, water; -huni, usually -uni, spatial suffix of verbs, down; -va, doubtful. In u-piric-huni-va, piric is brush, grass.

¹⁰ To-, for ta, before u; u-, he; pu-, uncertain; varam, to go.

¹¹ Au for av, am, to eat.

¹² Compare tu-akun-var before; for the prefixed p-, see notes 6 and 10.

¹³ Ta, preposed particle, probably temporal; ni-, I; aho, come.

¹⁴ No-, more often nu-, we; yukare, stem, to kill, altered from ik-ara by the u-quality of the prefix; -ec, future suffix.

¹⁵ I-, you, object; ès, stem, to deprive, take; -yip, for -ip or -cip, seems to denote motion away—compare ès-ep, above; -vuti, a common suffix, apparently temporal; -hat, suffix of past time.

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April 4, 1910.*