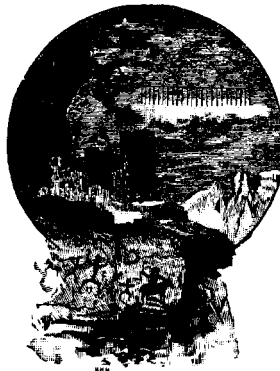


SMITHSONIAN INSTITUTION
BUREAU OF AMERICAN ETHNOLOGY
BULLETIN 78

HANDBOOK
OF THE
INDIANS OF CALIFORNIA

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WASHINGTON
GOVERNMENT PRINTING OFFICE
1925

HANDBOOK OF THE INDIANS OF CALIFORNIA.

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CHAPTER 1.

THE YUOK: LAND AND CIVILIZATION.

Quality of civilization, 1; radius and focus of the civilization, 5; towns, 8; town names, 10; organization of towns, 11; political and national sense, 13; directions, 15; population, 16.

This history begins with an account of the Yurok, a nation resident on the lower Klamath River, near and along the Pacific Ocean, in extreme northern California (Pl. 1), surrounded by peoples speaking diverse languages but following the same remarkable civilization. The complete aspect of this civilization is un-Californian. It is at bottom the southernmost manifestation of that great and distinctive culture the main elements of which are common to all the peoples of the Pacific coast from Oregon to Alaska; is heavily tintured with locally developed concepts and institutions; and further altered by some absorption of ideas from those tribes to the south and east who constitute the true California of the ethnologist.

This civilization, which will hereafter be designated as that of northwestern California, attains on the whole to a higher level, as it is customary to estimate such averaged values, than any other that flourished in what is now the State of California. But it is better described as an unusually specialized culture, for the things in which it is deficient it lacks totally; and these are numerous and notable.

QUALITY OF CIVILIZATION.

In inventions there was no marked superiority to the remainder of aboriginal California; but most arts were carried to a distinctive pitch. Manufactured articles were better finished. Many objects which the central and southern Californians fashioned only as bare utility demanded were regularly decorated with carvings in the northwest. Often the identical object was made of wood in one re-

gion and of antler or stone in the other. A new technical process is scarcely superadded by such a substitution. As regards the mere list of knowledges or faculties, the two cultures remain at par. But the northwestern preference for the more laborious material evidences a different attitude, an appreciation of values which in the ruder central and southern tracts is disregarded. That this difference is deep seated, and that it is manifest at almost every point, is evident when the slab house of the Miwok or Yuki, the canoe or maul of the Modoc, the pipe or acorn stirrer of the Pomo, the netting shuttle and spoon of the Maidu, or the obsidian blade of the Wintun, are set by the side of the corresponding utensils of the Yurok or their northwestern neighbors. It is only among the far-away Chumash that technological activities were granted a similar interest and love; and this localized southern culture has long since perished so completely as to make a comparative evaluation difficult.

The implements that are made only in the northwest—the stool, pillow, box, purse, and the like—are not very numerous. They are at least partly balanced by central and southern devices which the northwesterners lack; and they do not in any instance involve a process or mechanical faculty of which the more typical Californians are wholly ignorant.

Much the same holds of wealth. Money is prized and establishes influence everywhere in California. It certainly counts for more in private and public life among the average Californian people than among the tribes of the plains or the settled and unsettled tribes of the southwestern United States. But whatever its influence in southern or middle California, that influence is multiplied among the Yurok. Blood money, bride purchase, compensation to the year's mourners before a dance can be held, are institutions known to almost every group described in the present work. The northwesterners alone have measured the precise value of every man's life or wife or grief. Every injury, each privilege or wrong or trespass, is calculated and compensated. Without exactly adjusted payment, cessation of a feud is impossible except through utter extirpation of one party, marriage is not marriage but a public disgrace for generations, the ceremony necessary to the preservation of the order of the world is not held. The consequence is that the Yurok concerns his life above all else with property. When he has leisure, he thinks of money; if in need, he calls upon it. He schemes constantly for opportunity to lodge a claim or to evade an obligation. No resource is too mean or devious for him to essay in this pursuit.

If such endeavors are to be realized, there are needed an accurately computable scheme of economic valuation, and an elaborate and precise code of rights. The northwesterner has both. His law is of

the utmost refinement. A few simple and basic principles are projected into the most intricate subtleties; and there is no contingency which they do not cover. The central Californian has his law also. But it is neither rigid nor ramified. Margin is left for modification according to personality or circumstance or public opinion. There are phases of life in central California into which neither money nor legality enter.

With all this savoring so strongly of Kwakiutl and Haida custom, the Yurok is wholly Californian in his lack of any visible symbolism to give emotional expression to the economic values which are so fundamental with him. He is without crests or carvings or totems; there are no separately designated social classes, no seats in order of rank, no titles of precedence, no named and fixed privileges of priority. His society follows the aims of the societies of the North Pacific coast with the mechanism of the societies of middle California.

Property and rights pertain to the realm of the individual, and the Yurok recognizes no public claim and the existence of no community. His world is wholly an aggregation of individuals. There being no society as such, there is no social organization. Clans, exogamic groups, chiefs or governors, political units, are unrepresented even by traces in northwestern California. The germinal, nameless political community that can be traced among the Indians of the greater part of the State is absent. Government being wanting, there is no authority, and without authority there can be no chief. The men so called are individuals whose wealth, and their ability to retain and employ it, have clustered about them an aggregation of kinsmen, followers, and semidependents to whom they dispense assistance and protection. If a man usually marries outside the village in which he lives, the reason is that many of his coinhabitants normally happen to be blood relatives, not because custom or law or morality recognize the village as a unit concerned with marriage. The actual outcome among the Yurok may, in the majority of cases, be the same as among nations consciously organized on an exogamic plan. The point of view, the guiding principles both of the individual's action and of the shaping of the civilization, are wholly nonexogamic. Such familiar terms as "tribe," "village community," "chief," "government," "clan," can therefore be used with reference to the Yurok only after extreme care in previous definition—in their current senses they are wholly inapplicable.

Shamanism takes on a peculiar aspect in northwestern California in that the almost universal American Indian idea of an association between the shaman and certain spirits personally attached to him is very weakly and indirectly developed. Shamanistic power resides in control of "pains," small animate objects, nonanimal and

nonhuman in shape, which on the one hand cause illness by entering the bodies of men, and on the other endow the shaman with power when he brings them to reside within himself, or rather herself, for practically all shamans are women. The witch or poisoner is usually a man and operates by magic rather than shamanistic faculty. In the remainder of California the distinction between the maker and the curer of disease is almost effaced, the shaman being considered indifferently malevolent or beneficent according to circumstances, but operating by the exercise of the same powers.

Concepts relating to magic are as abundantly developed among the Yurok and their neighbors as shamanism is narrowed. Imitative magic is particularly favored and is often of the most crudely direct kind, such as performing a simple action or saying the desired thing over and over again. The thousand and one occasions on which magic of this rather bare volitional type is employed reveal a tensivity that usually seems brought on consciously. This emotional tautness, which contrasts glaringly with the slack passivity and apathetic sluggishness of the average California Indian, is manifest in other matters. Thus, restraint and self-control in manner and in relations with other men are constantly advocated and practiced by the Yurok.

Northwestern religion is colored by the cultural factors already enumerated. The idea of organization being absent, there are no cult societies or initiations. Symbolism is an almost unknown attitude of mind except in matters of outright magic: therefore masks, impersonations, altars, and sacred apparatus, as such, are not employed. The tangible paraphernalia of public ceremony are objects that possess a high property value—wealth that impresses, but nevertheless profane and negotiable wealth. The dances are displays of this wealth as much as they are song and step. All life being individualized instead of socialized, the ceremonies attach to specified localities, much as a fishing place and an individual's right to fish are connected. In the remainder of California, where stronger communal sense exists, the precise location of the spot of the dance becomes of little moment in comparison with the circumstances of the ceremony.

The esoteric element in northwestern dances and rites of public import has as its central feature the recitation of a formula. This is not a prayer to divinities, but a narrative, mostly in dialogue, recounting the effect of an act or a series of acts, similar to those about to be performed, by a member of an ancient, prehuman, half-spirit race. The recital of this former action and its effect is believed to produce the identical effect now. The point of view is distinctly magical. Similar formulas are used for the most personal purposes: luck in the hunt, curing of sickness, success in love, the accumulation

of wealth. These formulas are private property; those spoken at public ceremonials are no exception: their possessor must be paid, though he operates for the good of all.

Yurok mythology is woven in equally strange colors. Stirring plot is slighted; so are the suspense of narrative, the tension of a dramatic situation—all the directly human elements which, however rude their development, are vividly present in the traditions of most of the Californians and many other divisions of American Indians. A lyric, almost elegiac emotion suffuses the northwestern myths and tales. Affection, homesickness, pity, love of one's natal spot, insatiable longing for wealth, grief of the prehuman people at their departure before the impending arrival of mankind, are sentiments expressed frequently and often with skill. Events and incidents are more baldly depicted, except where the effect of the action recounted is the establishment of an existing practice or institution; and in these cases the myth is often nearly indistinguishable from a magical formula. Tales that will interest a child or please a naïve stranger of another civilization do not appeal to the Yurok, who have developed refinedly special tastes in nearly everything with which they concern themselves.

RADIUS AND FOCUS OF THE CIVILIZATION.

The Yurok shared this civilization in identical form with their neighbors, the Hupa and Karok. The adjacent Tolowa, Wiyot, and Chilula adhere to the same culture in every essential trait, but begin to evince minor departures in the direction of less intensive specialization. A peripheral series of tribes—the Shasta, Konomihu, Chimariko, Whilkut, and Nongatl—show the loss of a number of characteristic northwestern features as well as some elements of culture that are clearly due to the example of exterior peoples. To the south the diminution of the northwestern cultural forces can be traced step by step through the Sinkyone and Lassik until the last diluted remnants are encountered among the Wailaki. The next group, the Kato, belong wholly within the civilization of central California. The progressive change from Hupa to Kato is particularly impressive in view of the fact that all members of the chain are of common Athabascan speech.

To the north a similar transition into another civilization could presumably have once been followed. But the societies of southwestern Oregon have long since perished, and the information about them is only sufficient to show the close similarity of the Takelma and Athabascans of Rogue River to the Yurok, and their civilizational inferiority. Southwestern Oregon was culturally dependent on northwestern California.

Eastward, similarities to the northwestern culture appear for considerable distances—almost across the breadth of the State and into the northernmost Sierra Nevada. These are, however, highland tracts of rather thin populations, to whom the typical culture of central California could not easily penetrate in full form, so that they were left open to random influences from all sides.

Furthermore, it is doubtful whether the institutions of northwestern type among the Yana, Achomawi, and mountain Maidu can be ascribed to specific northwestern influences. Most of the cultural characteristics common to northwestern and northeastern California appear to have been found also in Oregon for some distance north. To ascribe to the Yurok or Karok any definite share in the formation of modern Achomawi civilization would therefore be a one-sided view. The whole of the tract embracing northernmost California and western, or at least southwestern, Oregon is in some respects a larger but ultimate cultural unit. Within this unit, groups of peripheral position like the Achomawi have acquired only the more rudimentary elements and generic institutions, which they have further mingled with elements derived in perhaps larger proportion from central California and in some measure even from plateau or plains sources, not to mention minor institutions of local origin. Centrally situated nations like the Yurok, on the other hand, have kept the original cultural supply in less adulterated form, and in building upon it have exerted an expansive influence on their neighbors and through them on peoples beyond.

Useful as the recognition of culture areas is as a scaffolding or preliminary plan for the student, the conditions in this region corroborate wholly the realization which has been gradually arrived at through investigations of civilization in many other parts of America, namely, that the exact delineation of such ethnographic provinces is almost invariably an artificial and unprofitable endeavor. It is the foci that can be tolerably determined, not the limits; the influences that are of significance, rather than the range of the influences.

Such a focus, in some measure for all northernmost California and southwestern Oregon, and absolutely for northwestern California, is constituted by the Yurok, the Hupa, and the Karok.

Even as between these three little peoples of such close interrelations, some precedence of civilizational intensity, a slight nucleolus within the nucleus, can be detected; and the priority must be accorded to the Yurok.

Geographical and populational considerations would lead to such an anticipation. The Yurok live on the united Klamath, the Hupa and Karok on its two arms, the Trinity and the unaugmented Klamath above the Trinity. The numbers of the Yurok were as great

as those of the two other groups combined. Of the tribes of the second order or degree of participation in the civilization, the Tolowa, Wiyot, and Chilula, all three were adjacent to the Yurok, one only to the Hupa, none to the Karok. The canoe can be made, in its perfected type, only of the redwood, a tree that grows, within the habitat of the three focal peoples, only in Yurok territory; and in fact the Hupa and Karok buy their boats from the Yurok. The same tree also furnishes the best material for the lumber of which the houses of the region are built.

Actual cultural evidences are slight but confirmatory. Throughout California it appears that adolescence ceremonies having direct reference to physiological functions are not only relatively but absolutely more elaborated among tribes of a ruder and more basic civilization. Groups that have developed other ceremonial institutions to a considerable pitch actually curtail or dwarf this rite. The Yurok make distinctly less of it than either Karok or Hupa. The great ceremonies so characteristic of the region are, however, most numerous among them. The Hupa perform these rituals in two or three towns, the Karok in four, and the Yurok in seven. The elimination of animals as characters in traditional tales is distinctive of the pure northwestern culture. The Yurok are more extreme in this respect than are the Karok. Both Karok and Hupa agree with the larger nation in placing the birth of their culture here at the Yurok village of Kenek.

Slender as are these indications, they all point the same way. They justify the conclusion that the innermost core of northwestern civilization is more nearly represented by the Yurok than by any other group. Even in a wider view, the center of dispersal—or concentration—of this civilization might be described as situated at the confluence of the Trinity and Klamath, from which the three tribes stretch out like the arms of a huge Y. This spot is Yurok territory. It is occupied by the village of Weitspus, now called Weitchpec, and its suburbs. Either here or at some point in the populous 20 miles of river below must the precise middle of the cultural focus be set, if we are to attempt to draw our perspective to its finest angle.

Of course it can not be contended that the whole of the northwestern civilization, or even all its topmost crests, flowed out from this sole spot. Even an Athenian or a Roman metropolis at its height never formulated, much less originated, all of the culture of which it was the representative; and the California Indians were far from knowing any metropolises. It might well be better, in a search such as has occupied us a moment ago, to think of the finally determined location as a point of civilizational gathering rather than radiation. But where most is accumulated, most must also be

given out. The difference in cultural potency between upper and lower Yurok, between Yurok and Karok, must have been slight. For every ten ideas or colorings of ideas that emanated from the exact center at least nine must have filtered into it; and even toward remoter regions, the disproportion can hardly have been excessive. As regards any given single item of culture, it would be nearly impossible to assert with confidence where its specific development had taken place. The thing of moment, after all, is not the awarding of precedence to this or that group of men or little tract of land, but the determination of the civilization in its most exquisite form, with an understanding, so far as may be, of its coming into being. It is this purpose that has been followed, it may seem deviously, through the balancings of the preceding pages; and the end having been attained so far as seems possible in the present state of knowledge, it remains to picture the civilization as accurately as it can be pictured through the medium of the institutions, the thoughts, and the practices of the Yurok.

It may be added, as a circumstance not without a touch of the climactic in the wider vista of native American history, and as an illustration of principles well recognized in ethnology, that three of the great families of the continent are represented at the point of assemblage of this civilization. The Yurok are Algonkins, the Karok Hokans, the Hupa Athabascans.

TOWNS.

The territory of the Yurok, small as is its extent, is very unrepresentative of their actual life, since all of their habitations stood either on the Klamath River or on the shore of the ocean. All land back in the hills away from the houses served only for hunting deer, picking up acorns, beating in seeds, and gathering firewood or sweat-house kindlings, according to its vegetation. The most productive tracts were owned privately. They were occasionally camped on, though never for long periods. All true settlements formed only a long winding lane; and along this waterway Yurok life was lived.

The towns—hamlets is an exacter term according to civilized standards—numbered about 54 and are shown in Figure 1. A few of these, such as Kenekpul, Tsetskwi, Himetl, Keikhkem, Nagetl, Tlemekwetl, and some on the coast, may have been inhabited only from time to time, during the lifetime of a single man or a group of relatives. The Klamath villages mostly lie on ancient river terraces, which gradually decrease in height toward the mouth of the widening stream. Wahsekw is 200 feet up, Kenek 100, Kepel 75, Ko'otep 35, Turip 25, Wohkel 20. The coast towns are almost invariably either on a lagoon or at the mouth of a stream. Tsurau alone overlooks a cove well sheltered behind Trinidad Head. Like the more wholly

ocean-situated Wiyot and Tolowa, the Yurok did not hesitate to paddle out into open salt water for miles, if there was occasion; but their habits were formed on the river or still water. The canoe

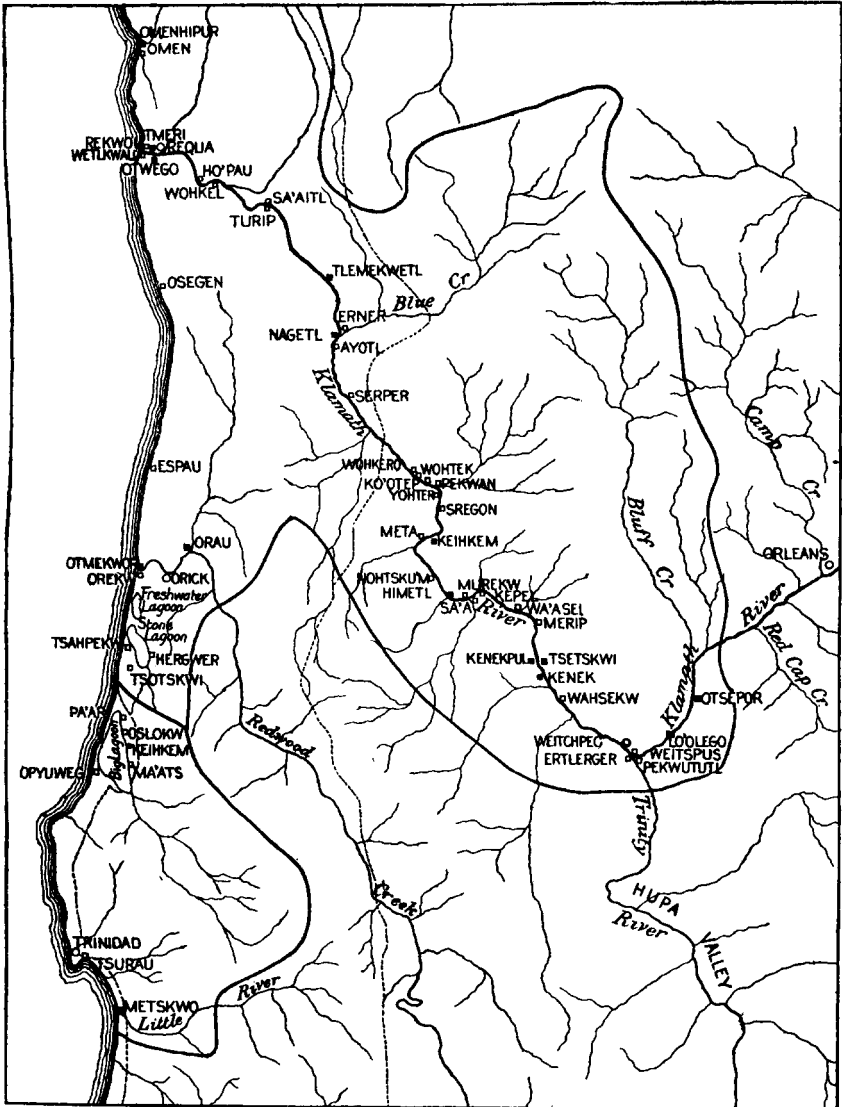


FIG. 1.—Yurok towns and territory. Solid squares indicate sites occupied only during certain periods. Dotted line, redwood timber belt.

was designed for stream use rather than launching through the surf; and the coast itself was designated as downstream and upstream according as it extended north or south. Fishing was done at mouths of running fresh water, or by men standing at the edge of the surf, much more than on the abounding ocean.

The important villages come in groups. The uppermost of these groups is at the mouth of the Trinity: Weitspus, Pekwututl, and Ertlerger. These must have had, a century ago, a combined population of nearly 200. Wahsekw, next below, was isolated and not very large, but wealthy. Those that followed next were of little moment. Kenek, which lies at the best fishing rapids in the Klamath, except possibly the fall near the mouth of the Salmon River in Karok territory, is the town most frequently mentioned in Yurok mythology, and is celebrated even in the traditions of their neighbors, but was always a small settlement in historical times. Kepel, Sa'a, Murekw, and Himetl formed another considerable group of about the populousness of that at Weitspus. Murekw seems to have been the largest of the group, Sa'a its religious center. Several smaller settlements followed at short intervals, among which Sregon enjoyed a reputation for belligerence and wealth. Pekwan Creek brought Pekwan, Ko'otep, Wohtek, and Wohkero. This was perhaps the most populous cluster of Yurok villages. For the next 20 miles the towns were strung apart and mostly quite small: Turip and Sa'aitl, also called Turip-opposite, formed the only larger group. Then, at the mouth, on opposite sides of the tidal lagoon, came Rekwoi and Wetkwau, with Tsekwetl, Pegwolau, and Keskitsa as quarters or suburbs, and Tmeri and Otwego somewhat doubtful as separate villages. Here also the population must have approximated 200.

On the coast, Tsurau at Trinidad, several miles from its neighbors, was estimated the largest town; Opyuweg on Big Lagoon—also called simply Oketo, "lake"—was next; and Tshapkw on Stone Lagoon third. Four smaller townlets stood with Opyuweg on Big Lagoon, and Tshapkw had Hergwer as a minor mate. Of the other coast towns, Orekw at the mouth of Redwood Creek was the leading one, with Espau probably next.

Otsepor was really two settlements: Otsepor, and Aikoo downstream. Ehkwiyer below Tsetskw, Tekta below Wohkero, Enipeu below Serper, Stowin below Tlemekwetl have been occupied recently, but do not seem to be old sites. Tlemekwetl is also known as Erlikenpets, Hergwer as Plepei, Metskwo as Srepor. Terwer was an important summer camp site on the north bank between Sa'aitl and Wohkel, but appears to have had no permanent houses. O'menhipur included houses on both sides of the mouth of Wilson Creek. Neryitmurm and Pinpa are sometimes spoken of as towns, but may be only parts of Opyuweg.

The great fixed ceremonies were all held at the populous clusters: Weitspus, Kepel-Sa'a, Pekwan, Rekwoi, Wetkwau, Orekw, Opyuweg. Each of these had a sacred sweat house; and at each of them, and at them only, a White Deerskin or Jumping dance was made or begun. Sa'a alone replaced the dance with a ritually built fish weir at adjacent Kepel. It will be seen that ceremony followed population, as myth did not. Besides Kenek, little Merip, Tlemekwetl, Turip, and Shumig—the uninhabited bluff behind Patricks Point—enter prominently into tradition.

TOWN NAMES.

It is clear from the appended list that in spite of abundant intercourse between the Yurok and Hupa, place names were not adopted into a foreign language, but were made over by these tribes. Some-

times they were translated. Thus the Yurok and Hupa names for Weitspus both refer to confluence, for Nohtskum to a nose of rock, for Serper to a prairie for Wohkel to pepperwoods. Other places seem to have been descriptively named by the Hupa, without reference to the significance of their Yurok names. Thus they call four villages after the pepperwood, *tunchwin*, the Yurok only one.

YUROK TOWNS.	HUPA NAMES.
Otsepor.....	Hotinunding.
Pekwututl.....	Hotuwaihot.
Ertlerger.....	Tunchwinta'ching.
Weitspus.....	Tlenalding (Karak: Ansafriki).
Wahsekwa.....	Hotenanding (Karak: Hohira).
Kenek.....	Choholchweding (Karak: Shwufum).
Merip.....	Hongha'ding.
Wa'asei.....	Tunchwingkis-hunding.
Kepel.....	Ta'tesading (Karak: A'avunai).
Murekw.....	Tunchwingkut.
Nohtsku'm.....	Senongading.
Meta.....	Ninamelding.
Sregon.....	Kyuwitleding.
Pekwan.....	Kaikisdeke (Karak: Firipama).
Ko'otep.....	Hohochitding.
Wohtek.....	Ninda'sanding.
Serper.....	Tlokuchitding.
Turip.....	Ninuwaikyanding.
Sa'a'itl.....	Kitlweding.
Terwer camp.....	Kauhkyokis-hunding.
Wohkel.....	Tunchwingkyoding.
Ho'pau.....	Chahalding.
Rekwoi.....	Mukanaduwlading (Karak: Su'fp).
Wetkwau.....	Tsetcheding.
Espau.....	Mingkeyyoding.
Orekw.....	Chewillinding.
Oketo.....	Chwaltaike.
Tsurau.....	Muwunnuhwonding.

ORGANIZATION OF TOWNS.

Yurok houses, or their sites, had names descriptive of their position, topography, size, frontage, or ceremonial function. Many of the designations reappear in village after village. The names of abandoned houses were remembered for at least a lifetime, perhaps nearly as long as the pit remained visible. If a family grew and a son or married-in son-in-law erected a new dwelling adjacent to the old, the original name applied to both houses. Sweat houses were usually but not always called by the same name as the house to whose master they belonged, and seem normally to have been built close by.

The habit of naming house sites appears to have been restricted to northwestern California. It is but one instance of many of the

intensive localization of life in this region, of its deep rooting in the soil. The origin of the custom is scarcely discernible, but the Yurok made frequent use of it to designate persons without naming them. A person referred to as "the old man of Trail Descends" would be absolutely defined to his village mates, and even in distant villages might be better known by that description than by his personal appellation.

The following are the houses of Weitspus, as shown in Figure 2.

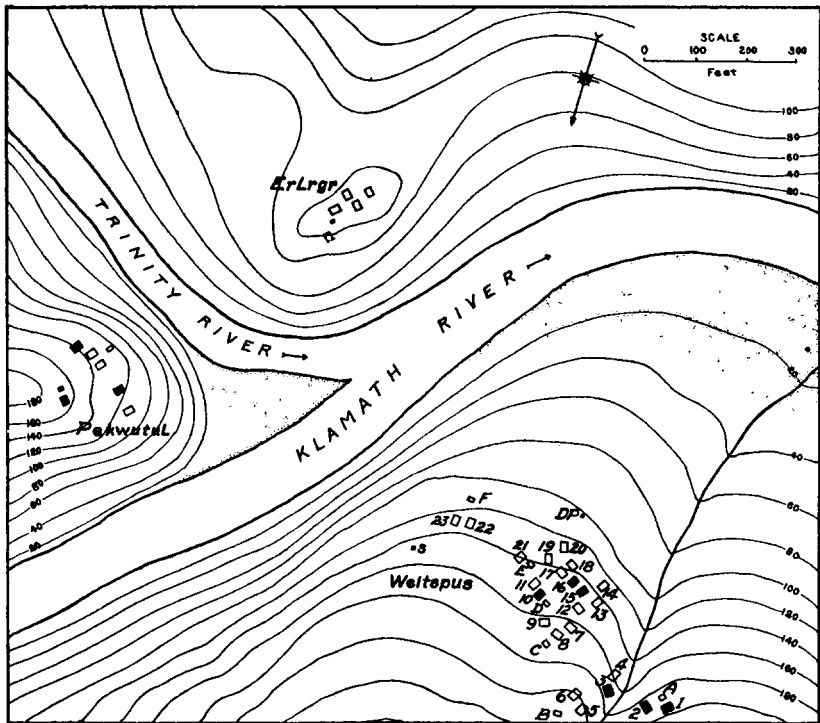


FIG. 2.—Yurok town of Weitspus and associated settlements. Squares, houses; solid squares, standing in 1909; small rectangles, sweat houses. (After Waterman.)

HOUSES.

- | | |
|--------------------------------|--------------------------------------|
| 1. (With 2). | 13. Otsepor ("steep"). |
| 2. Wonitl or Wonoyertl ("up"). | 14. Kome'r ("last"). |
| 3. (With 4). | 15. Ple'l ("large"). |
| 4. Ra'ak ("in the creek"). | 16. (With 17). |
| 5. Sohtsu ("on top"). | 17. Nikerwerk ("close to dance"). |
| 6. Ketsketl. | 18. Erkigeri ("tie hair" for dance). |
| 7. | 19. Wogwu ("in middle"). |
| 8. | 20. Opyuweg ("dance"). |
| 9. Oslokw ("trail descends"). | 21. Ta'amo ("elderberries"). |
| 10. (With 11). | 22. Higwop ("in the water"). |
| 11. Tsekwetl ("flat"). | 23. Petsku ("upstream"). |
| 12. | |

SWEAT HOUSES.

(Named after houses which they adjoin and to which they belong.)

A with 2.		D with 11.
B with 6.		E with 19.
C with 9.		F with 22.

These are the houses of Rekwoi: Oregok ("where rolls down," a game), Ketsketl, Oslok, Layekw ("trail") or Erkigeri (where they prepared for dancing), Plel ("large," in which the Jumping dance was begun), Hokome'r ("end"), Knau, Ma'a, Te'wira, Ma'a-wono ("up-hill from Ma'a"), Sepora ("open place, flat"), Perkweri ("behind the door"), Kekomeri ("end, last"), Kiwogi ("in middle"), Ernerkw ("narrow"), Kinekau ("on the brink"), Tewolek-repau ("facing the ocean"), Howeyiro'i, Olige'l Ma'a-hito ("this side of Ma'a"), Nekeral. Of these, Ketsketl, Oslok, Layekw, Knau, Ma'a, Te'wira, Sepora, Kiwogi and Howeyiro'i had sweat houses at one time or another; besides which there were sweat houses known as Tetl, Tsa'at'orka'i, and Ki'mo'le'n ("ugly, old"), the last being the sweat house used in the Jumping dance.

Pekwan contained Ereu, Tekor, Ketsketl, Opyuweg ("dance," in which the Jumping dance was made), an unnamed house adjacent to the last and probably belonging to the same family, Etlkero, Wogi, Erkigeri-tserwo (in which the dance was prepared for), Hiwon ("uphill"), Lekusa ("sweat house exit"), Tetl wo'lometl ("the tetl live in it," they being the men who during the Jumping dance frequent the sacred sweat house), Hetlkak, Tso'oleu ("down hill"), Olohkwetoip, Ta'amo ("elderberries"), Hitsao, Ska'awelotl ("buckeye hangs"). The sweat houses were Ereu, Ketsketl, Wogi, Lekusa, Hesier, and Opegoiole, the last used in the Jumping dance. The cemetery filled the center of the village, from Ketsketl to Lekusa, and between Wogi and Erkigeri on the upper side and Etlkero and Hitsao on the other.¹

POLITICAL AND NATIONAL SENSE.

The national horizon of the Yurok was as confined as that of most northern Californians. Adjacent tribes were visited at ceremonies and to some extent wives were purchased from them. Of those next beyond, there was only the dimmest knowledge; and farther, neither rumor nor legend nor interest. At that distance, there was only the end of the world, or a strange unsighted ocean, and perhaps things that no one wanted to see. The Yurok did not venture into the unknown and felt no desire to. Nor did they welcome strangers. If any came, it must be for a bad purpose; and they were put out of the way at the first opportunity. A man of substance, wealth, or character did not stray or nose about. He remained at home in dignity, or traveled where relatives of old or hereditary friends welcomed him. If ever he went farther, it was with their introduction. An old man of Pekwan, born there of a Tolowa mother from Kohpei, a man of property and many formulas, had traveled in his lifetime as far as Tolowa Eshpeu; Karok Kumawer, not quite as far as sacred

¹ Waterman, Yurok Geography, 1920 (see Bibliography), lists the houses of Rekwoi and Pekwan with slight variations from the above, adds town plats, and gives detailed maps of Yurok settlements and habitat generally.

Inam, below Happy Camp; and in Wiyot territory to Eureka. The county seat and its fairs drew him to the latter. Before the white man came he would probably not have passed beyond the mouth of Mad River.

It is essential to bear in mind that since there was no definite community sense within a village, there was no opportunity for a larger or political community to develop out of a group of adjacent villages. One settlement in such a group—a "suburb"—was sometimes involved in a feud while another directly across the river looked on. Of course, wherever kinship existed, it formed a definite bond between towns as within them; but however instrumental blood relationship may sometimes become as a means of political organization, it is not in itself productive of a political sense; and the replacement of the latter by a feeling of kinship or personal relation among people like the Yurok is precisely what makes it necessary to distinguish the two if this peculiar society is to be understood.

It is true that Wahsekw danced against Weitspus, and played against it at shinny, and that under threat of attack from a remote and consolidated alien foe, village might adhere to village in joint war, just as, in lesser feuds, town mates, impelled by bonds of association or imperiled by their common residence, would sometimes unite with the group of individuals with whom the feud originated. But these are occasions such as draw neighbors together the world over, be they individuals, districts, or nations. While they are capable of being utilized in the formation of civic units, they do not in themselves constitute the associated bodies into political societies.

There is one recorded instance of larger community rights. If a whale came ashore anywhere between Atlau, south of Osegen, and Tsotskwi-hipau, south of Dry Lagoon, it belonged to Espau, Orekw, and Tsahpekw jointly, each man taking a cut a half-fathom wide, the rich men a full fathom. This is analogous to a recognition, probably prospective rather than ever actual, that Little River (or perhaps a certain other stream in the vicinity) marked the point beyond which a stranded whale was wholly in Wiyot ownership; to the north thereof the property of the Yurok of Tsurau (including Metskwo); whereas if it drifted to shore across the mouth of the stream, it was shared by the two groups. The Big Lagoon villages probably held corresponding rights for the intervening stretch of coast, and Rekwoi-Wetkewau the privilege on another stretch of beach to the north. But a whale was an infrequent and uncontrollable event, a half winter's provisions, and yet not so wholly sporadic that definite custom was unable to crystallize about it. There is no instance of a similar law as regards fishing rights on the river, hunting territories, and acorn and seed tracts; all of which were individual or family property and not community rights. Fish dams, intercommunally erected for brief periods at Kepel, at Lo'olego above Weitspus, and on Redwood Creek at Orau at the mouth of Prairie Creek, are perhaps somewhat comparable to the whale claims of the coast.

Yurok speech was uniform along the river. On the coast a difference of dialect became perceptible, according to some accounts, at Espau, a more marked one at Orekw, and a third, most divergent variety, at Tsurau. Actually these differences must have been very slight, since recorded vocabularies and texts show an appreciable difference only for the region of Big Lagoon and Trinidad; and even this dialect was intelligible on the river.

The term "Coast Yurok," in the present account, is used not with reference to this rather slight speech cleavage, but geographically—for the people south of the mouth of the Klamath. These the other Yurok call Nererner. Thus, *ner-nererner*, I speak Coast Yurok; *ne-shagero*, I speak Yurok. Similarly, *ne-kerermerner*, I speak the language of the Karok, the Petsik-la; *ne-we'yohtene*, I speak Wiyot (We'yot); *ne-tolowo*, I speak Tolowa; *ne-mimohsigo*, I speak the Athabaskan dialect of the Hupa (Hupo-la) and Chilula (Tsolu-la).

DIRECTIONS.

The Yurok, and with them their neighbors, know no cardinal directions, but think in terms of the flow of water. Thus *pul* is the radical meaning downstream; *pets*, upstream; *hiko*, across the stream; *won*, up hill, that is, away from the stream on one's own side; *wohpe*, across the ocean, and so on. Such terms are also combined with one another. If a Yurok says "east" he regards this as an English word for upstream, or whatever may be the run of the water where he is. The name Yurok itself—which in its origin is anything but an ethnic designation—means "downstream" in the adjacent Karok language. The degree to which native speech is affected by this manner of thought is remarkable. A house has its door not at its "western" but its "downstream" corner. A man is told to pick up a thing that lies "upstream" from him, not on his "left." The basis of this reckoning is so intensely local, like everything Yurok, that it may become ambiguous or contradictory in the usage of our broader outlook. A Yurok coming from O'men to Rekwoi has two "upstreams" before him: south along the coast, and south-southeast, though with many turns, along the Klamath. When he arrives at Weitspus, the Trinity stretches ahead in the same direction in the same system of valley and ridges; but being a tributary, its direction is "up a side stream," and the direction "upstream" along the Klamath suddenly turns north, or a little east of north, for many miles. Beyond their Karok neighbors the Yurok seem to have a sense that the stream comes from the east. At least they point in that direction when they refer to the end of the world at the head of the Klamath.

This plan of orientation is characteristic of all the northwestern tribes, and is followed in some degree in central California. The

Yokuts terms of direction, in the far-away San Joaquin Valley, are at least shifted from the cardinal points in accord with the flow of water, if indeed they do not refer to it. The cognate Maidu words are said to have the same meaning as our own. But it is possible that the Maidu have given a sun-determined meaning to original drainage terms under the ritualizing influence of their Kuksu cult. This may also be what has happened among southern Wintun, Pomo, and Yuki, who constantly use words like "north," while the central Wintun think in terms of waterflow. It has been customary among inquirers to assume that Pomo *yo* means "south" because a group consistently uses it for that direction; which, of course, is no proof. In any event it is likely that exact south, when they knew a south, was determined for most California tribes by the prevailing direction of their streams as much as by the meridian of the sun. The rectangular and parallel disposition of the drainage in the greater part of the State must have contributed to this attitude. Only in southern California, where water runs far apart and intermittently, and the ceremonializing symbolism of the southwestern tribes is a near influence, is it certain that we encounter true terms of solar orientation.

POPULATION.

Yurok population can be more accurately determined than the strength of most other Californian groups, so that a detailed analysis seems worth while.

The most valuable source of information is a census made in 1852 by a trader who spent the most of his life at Klamath. It covers the towns from the mouth of the river to the salmon dam at Kepel. Only 17 are enumerated, but some of the smaller ones may have been counted as suburbs of the more important settlements. Thus Wetlkwau was perhaps reckoned as part of Rekwai, or perhaps overlooked. The figures are:

	Houses.	Inhab- itants.		Houses.	Inhab- itants.
Rekwai	22	116	Yohter	3	13
Ho'pau	6	72	Sregon	7	66
Wohkel	2	15	Meta	6	39
Sa'aitl	2	34	Nohtsku'm	4	15
Turip	14	94	Murekw	14	105
Serper	4	52	Sa'a	3	13
Wohkero	3	51	Kepel	3	10
Wohtek	4	55			
Ko'otep	24	165		141	1,052
Pekwan	20	137			

The total of 1,052 comprises 354 men, 381 women, 160 boys, 157 girls. The 7 per cent deficiency in adult males is about what might be expected as a consequence of feuds.

The house averages per village fluctuate from 3 to 17.* This seems excessive; but there is no reason to doubt the grand average of nearly $7\frac{1}{2}$ souls per dwelling. The five largest towns yield 617 persons in 94 houses, or somewhat over $6\frac{1}{2}$.

In the stretch of river covered by the 17 towns of the list, Figure 1 shows 20 standard settlements and 6 others that were inhabited discontinuously or are otherwise doubtful. According as the 141 houses and 1,052 souls are attributed respectively to 17, 20, or 26 settlements, the house average per village is $8\frac{1}{2}$, 7, and $5\frac{1}{2}$, the population 62, 53, or 40. The most likely averages for settlements of all sizes and kinds would seem to be:

Persons per house, $7\frac{1}{2}$.
 Houses per town, 6.
 Persons per town, 45.

Outside of the Kepel-Rekwoi stretch, Figure 1 designates 21 standard and 7 more doubtful towns. These allow of calculations of the whole Yurok population being undertaken:

$1,052 (=26 \times 40) + 1,133 (=28 \times 40) = 2,185.$
 $1,052 (=20 \times 53) + 1,105 (=21 \times 53) = 2,155.$
 $1,052 (=17 \times 62) + 1,300 (=21 \times 62) = 2,352.$

The conclusion is that the aggregate Yurok population can not have been much below and was certainly not above 2,500.

This figure is precisely the estimate arrived at from acquaintance with the settlements and sites of recent years, their house pits, and discussion with the older Indians of the number of inhabited houses they remember from their youth.

A count of the upper Yurok villages, also made about 1852 by an early resident on the river, is less itemized than the preceding, but yields 544 persons in 68 houses from Wahsekw to Otsepor, and an average house population of eight. The map has only six villages in this reach.

Five hundred and forty-four added to 1,052 makes 1,596. There is a gap of nearly 10 miles, which the first authority estimates to have had 310 inhabitants. This seems a high figure, since there were only five settlements, and two of these not admitted as old or permanent by the modern Yurok. Perhaps Kepel and Wahsekw have been counted twice. A reduction to 200 still leaves the total for the River Yurok at 1,800 in 37 settlements. Seventeen coast villages, exclusive of Rekwoi and Wetikwau, would have 800 inhabitants at the same ratio. But as the coast towns make the impression of having been somewhat smaller than those on the river, and not more than one or two were distinctly populous, this figure can be reduced to 600 or 700; which, added to the 1,800 on the river, brings us again to barely 2,500. This number seems almost certain to be true within not to exceed 100 or 200 at the time of first American contact.

These data, so far as they relate to house and village population, probably hold with little change for all the specifically northwestern groups; that is, the Karok, Hupa, Tolowa, Yurok, and with some re-

duction for the Chilula. The populousness per riparian mile fluctuated according to local conditions, as is set forth in connection with the Wiyot; while any computation based on area of land held would be worthless. Prohibitive caution would also have to be exercised in applying any of these figures to other parts of California. Not only the topography and natural resources but customs vary enormously.

The Government expedition sent through the Klamath region in 1851 to negotiate with the Indians did not follow the river below Wahsekw, but 32 Yurok villages were mentioned by the Indians as lying between Bluff Creek and the mouth. This tallies closely with the present map. At the ratio then estimated of 10 persons to the house and 9 houses per village, the population on the river would have been nearly 3,000; but this figure seeming excessive, it was cut in half by the recorder as still liberal. Recent counts of houses and house pits recollected as inhabited, total over 170 for the Rekwoi-Kepel stretch.

	Modern memo- ries.	1852 count.		Modern memo- ries.	1852 count.
Rekwoi-Wetkwau.....	23+	22	Sregon	6	7
Ho'peu	9	6	Meta	7	6
Wohkel.....	2	2	Nohtsku'm.....	4	4
Sa'aitl.....	5	2	Murekw-Himetl	21	14
Turip	8+	14	Sa'a-Kepel	14	6
Serper.....	3	4			
Wohkero-Wohtek.....	13	7		154+	141
Ko'otep.....	18	24	Other settlements	19	
Pekwan	17+	20			
Yohter	4	3		173+ ²	

The Yurok recognize that a village normally contained more named house sites than inhabited houses. Families died out, consolidated, or moved away. The pit of their dwelling remained and its name would also survive for a generation or two. If allowance is made for parts of villages washed out by floods and possibly by mining, or dwellings already abandoned when the American came and totally forgotten 60 years later, the number of house sites on these 30 miles of river may be set at 200 or more in place of 173. In other words, there were two houses to each three recognized house sites among the Yurok in native times.

² Waterman, *Yurok Geography*, 1920, p. 206, gives a somewhat different distribution of the number of houses in the towns between Rekwoi and Kepel, but an almost identical total of 171 plus a few in small settlements. For the Yurok as a whole he tabulates 324 houses in 47 recognized towns, besides which there were 16 minor settlements in which there remained only house pits during native memory or for which recollection failed. The total of 324 multiplied by $7\frac{1}{2}$ yields 2,430 as the Yurok population. Unoccupied houses in the larger towns would probably more than make up for inhabited but uncounted houses in the smaller settlements. On page 209 he lists 107 different names borne by 219 different houses. Of these, 23 names of 111 houses refer to position in the town, 17 names of 24 houses describe the structure, and 6 names of 12 houses have religious reference.

A count of the same 17 villages on the lower Klamath in 1895 revealed a total of 151 houses, or 10 more than in 1852. But instead of 1,052 Indians only 384 were living, and these partly of mixed blood. There were 141 men, 136 women, 55 boys, and 52 girls, or only about 2½ souls per house—a third of the ratio in native times.

The majority of these 151 dwellings were built in American fashion. It was customary, by this time, for a family to have two or three houses, or a native and an American house. The principal change in relative size of villages was between Ko'otep and Wohtek-Wohkero. The former was overwhelmed with mud in the great floods of 1861-62, and most of the inhabitants moved to the latter site. In 1852 Ko'otep had 24 of the 31 houses in the group, in 1895 only 6 out of 37. Turip also suffered from flood and declined from 14 houses to 5 in the interval, while Rekwoi, favored with a trading post like Wohtekw-Wohkero, rose from 22 to 30 in 1895.

On the basis of 382 people in these 17 settlements, the Yurok population in 1895 may be set at 900, or perhaps a little less on account of a more rapid decrease along the coast than on the river.

The Federal census of 1910 reported 668 Yurok. This figure probably includes substantially all full and half bloods, and part of the quarter breeds.

CHAPTER 2.

THE YUOK: LAW AND CUSTOM.

Principles of Yurok law, 20; money, 22; treasure, 26; valuations, 27; blood money 28; marriage laws, 28; debt slavery, 32; fishing privileges, 33; ownership of land, 34; law of ferriage, 35; legal status of the shaman, 35; mourners' rights, 37; inheritance, 39; rich and poor, 39; pursuit of wealth, 40; marriage and the town, 42; the crises of life, 44; names, 47; war, 49.

PRINCIPLES OF YUOK LAW.

These are the standards by which the Yurok regulate their conduct toward one another:

1. All rights, claims, possessions, and privileges are individual and personal, and all wrongs are against individuals. There is no offense against the community, no duty owing it, no right or power of any sort inhering in it.

2. There is no punishment, because a political state or social unit that might punish does not exist, and because punishment by an individual would constitute a new offense which might be morally justified but would expose to a new and unweakened liability. An act of revenge therefore causes two liabilities to lie where one lay before.

3. Every possession and privilege, and every injury and offense, can be exactly valued in terms of property.

4. There is no distinction between material and nonmaterial ownership, right, or damage, nor between property rights in persons and in things.

5. Every invasion of privilege or property must be exactly compensated.

6. Intent or ignorance, malice or negligence, are never a factor. The fact and amount of damage are alone considered. The psychological attitude is as if intent were always involved.

7. Directness or indirectness of cause of damage is not considered, except in so far as a direct cause has precedence over an indirect one. If the agent who is directly responsible can not satisfactorily be made amenable, liability automatically attaches to the next agent or instrument in the chain of causality, and so on indefinitely.

8. Settlement of compensation due is arrived at by negotiation of the parties interested or their representatives, and by them alone.

9. When compensation has been agreed upon and accepted for a claim, this claim is irrevocably and totally extinguished. Even the harboring of a sentiment of injury is thereafter improper, and if such sentiment can be indirectly connected with the commission of an injury, it establishes a valid counter-liability. The known cherishing of resentment will even be alleged as prima facie evidence of responsibility in case an injury of undeterminable personal agency is suffered.

10. Sex, age, nationality, or record of previous wrongs or damage inflicted or suffered do not in any measure modify or diminish liability.

11. Property either possesses a value fixed by custom, or can be valued by consideration of payments made for it in previous changes of ownership. Persons possess valuations that differ, and the valuation of the same nonmaterial property or privilege varies, according to the rating of the person owning it. The rating of persons depends partly upon the amount of property which they possess, partly upon the values which have previously passed in transfers or compensations concerning themselves or their ancestors.

One doubtful qualification must be admitted to the principle that the Yurok world of humanity recognizes only individuals: the claims of kinship. These are undoubtedly strong, not only as sentiments but in their influence on legal operations. Yet a group of kinsmen is not a circumscribed group, as a clan or village community or tribe would be. It shades out in all directions, and integrates into innumerable others. It is true that when descent is reckoned unilaterally, a body of kinsmen in the lineage of the proper sex tends to maintain identity for long periods and can easily become treated as a group. It is also conceivable that such patrilinear kin units exist in the consciousness of Yurok society, and have merely passed unnoticed because they bear no formal designations. Yet this seems unlikely. A rich man is always spoken of as the prominent person of a town, not of a body of people. In the case of a full and dignified marriage, the bond between brothers-in-law seems to be active as well as close. Women certainly identify themselves with their husbands' interests as heartily as with those of their parents and brothers on most occasions. These facts indicate that relationship through females is also regarded by the Yurok; and such being the case, it is impossible for a kin group not to have been sufficiently connected with other kin groups to prevent either being marked off as an integral unit. Then, a "half-married" man must have acted in common with the father-in-law in whose house he lived; and his children in turn would be linked, socially and probably legally, to the grandfather with whom they grew up as well as with their paternal grandfather and his descendant. So, too, it is clear that a married woman's kin as well as her husband retained an interest in her. If the latter beat her, her father had a claim against him. Were she killed, the father as well as the husband would therefore be injured; and there can be little doubt that something of this community of interest and claim would descend to her children. Kinship, accordingly, operated in at least some measure bilaterally and consequently diffusively; so that a definite unit of kinsmen acting as a group capable of constituted social action did not exist.

This attitude can also be justified juridically, if we construe every Yurok as having a reciprocal legal and property interest in every one of his kin, proportionate, of course, to the proximity of the relationship. A has an interest in his kinsmen X, Y, and Z similar to

his interest in his own person, and they in him. If A is injured, the claim is his. If he is killed, his interest in himself passes to X, Y, Z—first, or most largely, to his sons, next to his brothers; in their default to his brothers' sons—much as his property interests pass, on his natural death, to the same individuals. The only difference is that the claim of blood is reciprocal, possession of goods or privilege absolute or nearly so.

It may be added that this interpretation of Yurok law fits very nicely the practices prevailing in regard to wife purchase. Here the interest in a person is at least largely ceded by her kinsmen for compensation received.

It is men that hold and press claims and receive damages for women and minors, but only as their natural guardians. The rights of a woman are in no sense curtailed by her sex, nor those of a child by its years; but both are in the hands of adult male trustees. Old women whose nearer male kin have died often have considerable property in their possession. The weakness of their status is merely that they are unable to press their just claims by the threat of force, not that their claim is less than that of a man.

It may be asked how the Yurok executed their law without political authority being in existence. The question is legitimate; but a profounder one is why we insist on thinking of law only as a function of the state when the example of the Yurok, and of many other nations, proves that there is no inherent connection between legal and political institutions. The Yurok procedure is simplicity itself. Each side to an issue presses and resists vigorously, exacts all it can, yields when it has to, continues the controversy when continuance promises to be profitable or settlement is clearly suicidal, and usually ends in compromising more or less. Power, resolution, and wealth give great advantages; justice is not always done; but what people can say otherwise of its practices? The Yurok, like all of us, accept the conditions of their world, physical and social; the individual lives along as best he may; and the institutions go on.

MONEY.

The money of the Yurok was dentalium shells. *Dentalia* occur in California, the species *D. hexagonum* inhabiting the southern coast, and *D. indianorum* perhaps the northern. Both species, however, live in the sand in comparatively deep water, and seem not to have been taken alive by any of the California Indians. The Yurok certainly were not aware of the presence of the mollusk along their ocean shore, and received their supply of the "tusk" shells from the north. They knew of them as coming both along the coast and down the Klamath River. Since the direction of the first of these

sources is "downstream" to them, they speak in their traditions of the shells living at the downstream and upstream ends of the world, where strange but enviable peoples live who suck the flesh of the univalves.

Dentalia are known to have been fished by the Indians of Vancouver Island, and were perhaps taken by some tribes farther south; but it is certain that every piece in Yurok possession had traveled many miles, probably hundreds, and passed through a series of mutually unknown nations.

The Yurok grade their shells very exactly according to length, on which alone the value depends. They are kept in strings that reach from the end of an average man's thumb to the point of his shoulder. Successive shells have the butt end in opposite direction so as not to slip into one another. The pieces on one string are as nearly as possible of one size. So far as they vary, they are arranged in order of their length. But shells of sufficiently different size to be designated by distinct names are never strung together, since this would make value reckoning as difficult as if we broke coins into pieces. The length of "strings" was not far from $27\frac{1}{2}$ inches, but of course never exactly the same, since a string contained only an integral number of shells and these, like all organisms, varied. The cord itself measured a yard or more. This allowed the shells to be slid along it and separated for individual measurement without the necessity of unstringing. The sizes and names of the shells are as follows:

Length of shell in inches.	Yurok name of shell.	Hupa name of shell.	Yurok name of string.	Hupa name of string.	Shells to string of $27\frac{1}{2}$ inches.
$2\frac{1}{2}$	Kergerpiti.....	Dingket.....	Kohtepis.....	Moanatia.....	11
$2\frac{5}{8}$	Tego'o.....	Kiketukut-hoi	Na'apis.....	Moananah.....	12
$2\frac{1}{4}$	Wega.....	Chwolahit.....	Nahksepitl....	Moanatak.....	13
2—.....	Hewiyem.....	Hostanhit.....	Ta'anepitl....	Moanadingk...	14
$1\frac{1}{2}$ —.....	Merostan.....	Tsepupitl....	15

The Yurok further distinguish *tsewosteu*, which is a little shorter than *merostan*, though still money. Possibly *tsewosteu* was the name of the 15-to-the-string shells, and *merostan*—sometimes called "young man's money"—denoted a size of which $14\frac{1}{2}$ measured a string. The Yurok further specify the length, both of pieces and of strings, by adding a number of qualifying terms, especially *oveyemek* and *wohpekemek*, which denote various degrees of shortness from standard.

Dentalia which go more than 15 or $15\frac{1}{2}$ shells to the string are necklace beads. These come in three sizes, *terkutem*, *skayuperwern*, and *wetskaku*, the latter being the shortest. The value of all these was infinitely less than that of money, and they were strung in fathoms or half-fathoms, the grade being esti-

mated by eye, not measured. Ten half-fathom strings of *terkutem* were equal to about one 13-string of money; making a rate of an American dollar or less per yard.

The Karok call dentalia *ishpuk*, the broken bead lengths *apmananich*. The largest size of money shells is *psiwawa*, the next *psiwawa afishni*, the third *shisharetiropaop*.

All sizes of dentalia have depreciated since first contact with the whites, so that valuations given to-day in terms of American money fluctuate; but the following appear to have been the approximate early ratings, which in recent years have become reduced about one-half:

To string.	Value of shell.	Value of string.
11	\$5.00	\$50.00
12	2.00	20.00
13	1.00	10.00
14	.50	5.00
15	.25	2.50

From this it is clear that an increase in length of shell sufficient to reduce by one the number of pieces required to fill a standard string about doubled its value.

Dentalia of the largest size were exceedingly scarce. A string of them might now and then be paid for a wife by a man of great prominence; but never two strings. Possession of a pair of such strings was sufficient to make a man well known.

Shells are often but not always incised with fine lines or angles, and frequently slipped into the skin of a minute black and red snake, or wound spirally with strips of this skin. The ends of the cord are usually knotted into a minute tuft of scarlet woodpecker down. All these little devices evince the loving attention with which this money was handled but do not in the least enhance its value.

As might be expected, the value of dentalia was greater in California than among the northern tribes at the source of supply. In Washington or northern Oregon, as among the Yurok, a slave was rated at a string; but the northern string was a fathom long. Among the Nutka, money was still cheaper: it took 5 fathoms of it to buy a slave.

The size of the shells used in the north has, however, not been accurately determined. For the Oregon-Washington region, 40 shells were reckoned to the fathom, which gives an individual length averaging at the lowest limit of what the Yurok accepted as money, or even a little less. In British Columbia it is stated that 25 pieces must stretch a fathom. This would yield an average of considerably over $2\frac{1}{2}$ inches, or more than the very longest shells known to the Yurok. It may be added that the fathom measure was in constant use among the Yurok for almost everything but money.

The actual valuing of dentalia was individual or in groups of fives, the length of men's arms being too variable and the size of shells too irregular to permit of exact appraisals by treating a string as a unit. The shells on a cord were therefore turned over and matched against each other, and then laid against the fingers from crease to crease of the joints. The largest size was gauged from the farther crease of the little finger to the fold in the palm below; according to some accounts, the measure was also taken on the index. Other sizes were matched against the middle finger. A shell from a full 13-piece string was supposed to extend precisely from the base of this finger to the last crease and was called *wetlemek wega*. A 12-to-the-string shell, of course, passed beyond.

Measurement was also by fives, from the end of the thumbnail to a series of lines tattooed across the forearm. These indelible marks were made from fives of known value, and served as a standard not dependent on bodily peculiarities.

The generic Yurok name for dentalium is *tsik*. Since the coming of the whites it has also been known as *otl we-tsik*, "human beings their dentalium," that is, "Indian money," in distinction from American coins. The early settlers corrupted this to "allicocheek," used the term to the Indians, and then came to believe that it was a native designation common to all the diverse languages of the region.

Dentalium is frequently personified by the Yurok. *Pelín-tsiek*, "Great Dentalium," enters frequently into their myths as if he were a man, and in some versions is almost a creator. *Tego'o* is also a character in legend.

All other shells were insignificant beside dentalia in Yurok consideration. Olivellas were strung and used for ornament, but did not rate as currency. Haliotis, which seems to have been imported from the coast to the south of Cape Mendocino, was liberally used on the fringe of Yurok women's dresses, on ear pendants, in the inlay of pipes, and the like. But it also never became money and did not nearly attain the value of good dentalia. Now and then a short length of disk beads from central California penetrated to the Yurok, but as a prized variety rather than an article of recognized value.

A myth, told, it may be noted, by a Coast Yurok of Eshpeu married at Orekw, narrates how the dentalia journeyed by the shore from the north. At the mouth of the Klamath the small shells went south along the coast, but Pelintsiek and Tego'o continued up the river. At Ho'opeu and Serper Tego'o wished to enter, at Turip his larger companion; but in each case the other refused. At Ko'otep and Shreggon they went in. Pekwan they did not enter, but said that it would contain money. Nohtsku'm and Meta they passed by. At Murekw they entered, as at Sa'a and Wa'asei, and left money. At Kenek, Pelintsiek wished to leave money, but apparently did not do so. At Wahsekw and again at Weitspus they went in and left three shells. At Pekwututl also they entered, and there the story ends with Pelintsiek's saying that some money must continue upstream (to the Karok) and up the Trinity to the Hupa. The tale records the Yurok idea as to the situation of wealth; it illustrates their interest in money; and although a somewhat extreme example, is a characteristic representation of their peculiar mythology, with its minimum of plot interest, intense localization, and rationalizing accounting of particular human institutions.

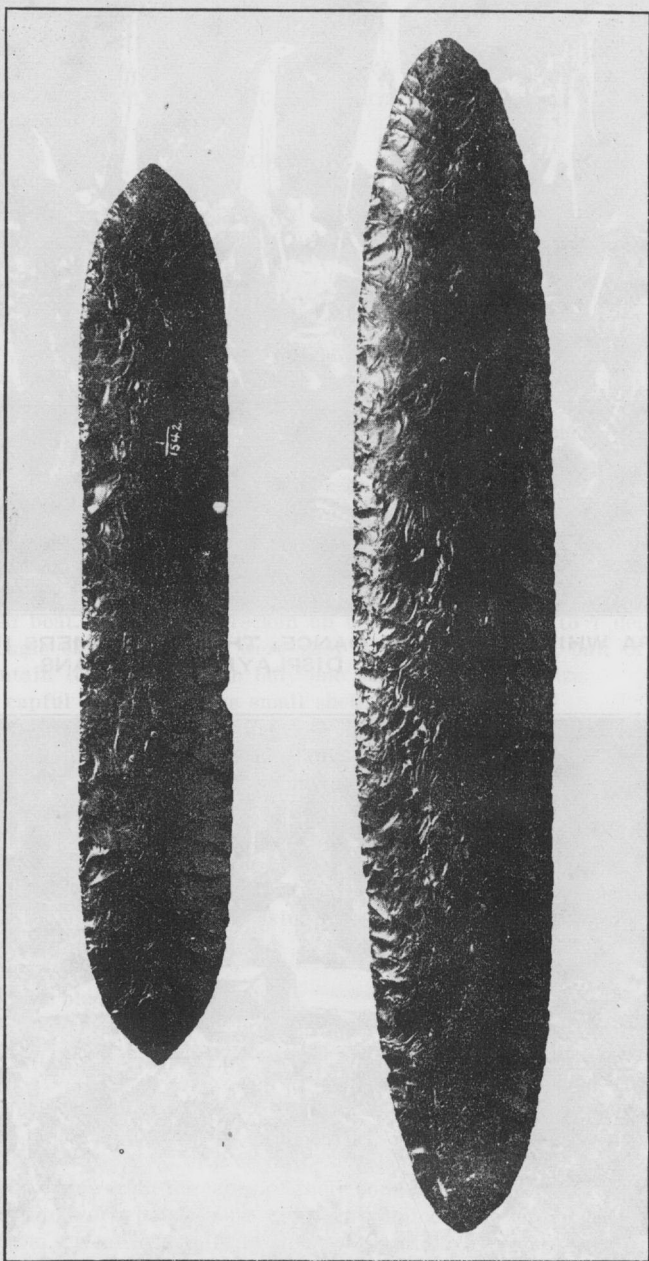
TREASURE.

Of articles other than shells, those that approach nearest to the character of money are woodpecker scalps. These are of two sizes, both of them scarlet and beautifully soft: those from the larger bird are slightly more brilliant. The two kinds of scalp are known as *kokoneu* (Karok: *furah*) and *terker'it*. The former are rated at \$1 to \$1.50 each, the latter variously at 10, 15, and 25 cents. The native ratio seems to have been 6 to 1. Woodpecker scalps differ from dentalia in that they have value as material, being worked into magnificent dance headdresses, and used as trimming on other regalia. They represent the Yurok idea of the acme of splendor. Dentalium currency is never worn or exhibited in display, and being entirely without intrinsic utility or ornamental possibility, is wholly and purely money.

Deerskins of rare colors and large blades of obsidian and flint possessed high values; in fact, all objects carried in dances represented wealth. But these articles varied so greatly according to color, size, fineness, or workmanship, that their civilized equivalents are jewels rather than money. At the same time, there was a strong tendency, as can be seen from the examples below, to make part of every payment of consequence in a variety of articles. When large sums changed ownership, as in the purchase of a high-class wife or settlement for the death of a rich man, not more than about half the total seems to have been in dentalia. In the same way strings paid over were of graduated sizes, not all of one value. These facts indicate that a proper variety and balance of wealth as well as quantity were considered desirable.

Even a common deerskin represented value when prepared for dance use. Besides the hide, there was the labor of stuffing the head, and woodpecker scalps were needed for eyes, ears, throat, and tongue. An unusually light or dark skin was worth more, and those that the Yurok call "gray" and "black" and "red" are estimated at \$50 to \$100. A pure albino skin, with transparent hoofs, is rated at \$250 to \$500. But this is a theoretic valuation given for the sake of comparison. The Yurok state that fine white skins did not change ownership. Their possession was known far and wide and to part with one on any consideration would have been equivalent to a king selling his crown. (Pls. 2, 3.)

Similarly with obsidians. The usual statement that these are worth \$1 an inch of length is true for blades of half a foot to a foot. A 20-inch piece, however, would be held at about \$50, and the few renowned giants that reach 30 and even 33 inches are, from the native point of view, inestimable. The above applies to black



YUOK TREASURES, EXHIBITED IN DANCES:
OBSIDIAN BLADES, THE SMALLER RED, THE
LARGER BLACK AND $13\frac{1}{2}$ INCHES LONG



HUPA WHITE DEERSKIN DANCE; THE PERFORMERS IN FRONT OF THE LINE DISPLAYING OBSIDIANS



YUROK MAKING A BOAT

obsidian. The red, which is rarer and does not come in as large pieces, is worth considerably more. Most valuable of all are the blades of white flint, which can not be chipped quite as evenly as the obsidian, but can be worked broader and somewhat thinner. The largest of these run to about a foot and a half long.

VALUATIONS.

The following are some Yurok valuations, apparently on the modern basis of a 12-dentalium string being worth 10 American dollars:

A large boat, that is, a capacious one—the length is uniform—was worth two 12-strings, one full and one short; or 10 large or 60 small woodpecker scalps.

A small boat: One 13-string or 3 large woodpecker heads.

A very small boat carrying two men: Five shells from a 13-string.

The Karok put a boat at two strings of small shells.

A blanket of two deerskins sewn together and painted is said to have been worth a small boat. This seems a high valuation; but the Karok say, 4 to 10 medium or short dentalia or a whole string of small ones, if the skins are ample.

A quiver of otter or fisher fur, with bow and 40 arrows, was the equivalent of a good-sized boat. The Karok reckon an otter skin worth 4 to 7 dentalia.

An entire eagle skin—the birds were shot with the bow at a bait of deer meat on mountain tops—was worth only one shell of smallest size.

A woman's capful of tobacco, one small shell.

A house, 3 strings.

A well-conditioned house of redwood planks, 5 strings.

A fishing place, 1 to 3 strings. Two instances are known of Karok fishing rights having been sold for \$5. The value must have been very variable.

A tract bearing acorns, 1 to 5 strings.

The meat from a "small" section—perhaps a half fathom—of a whale, 1 string, presumably of short shells.

A "black," "red," or mottled deer skin, dressed for dance use, 5 strings.

A light gray skin, 6 strings.

A white skin, 10 strings.

Obsidian or flint blades, 2 to 10 strings.

A headband, *sraisplegok*, of 50 large woodpecker scalps, 10 strings. This seems too high a rating in comparison with the others. Small shells must be meant.

Doctors' fees were high: \$10 to \$20—that is, 1 to 2 strings of good money—are specified as the cost of a treatment.

A slave was rated at only 1 or 2 strings. Evidently the Yurok did not know how to exact full value from the labor of their bondsmen, not because the latter could not be held to work, but because industry was too little organized.

For a wife from a wealthy family 10 strings seem to have been expected, made up, perhaps, of one of 11 shells, one of 12, two of 12 short, and so on, with perhaps a headband of 50 woodpecker scalps, an obsidian, a boat, etc. One Yurok boasted of having paid 14 strings for his wife, plus as much more in other prop-

erty, including two headbands, the whole representing \$300 American at the lower valuation here followed.

For a poorer girl 8 strings and a boat might be given.

The Karok say that a wife was worth 5 to 10 strings. Among both tribes, therefore, a man's life came somewhat higher than what he would pay for a bride of his own rank; which rating, seeing that her relatives did not have to mourn her, is rather favorable to the woman.

For "half-marriage" the price actually paid seems to have been rather less than half.

For the killing of a man of standing the cost was 15 strings, plus, perhaps, a red obsidian, a woodpecker scalp headband, and other property, besides a daughter. The Karok also quote a man's price at 15 strings.

A common man was worth 10 strings, probably of somewhat shorter dentalia, plus, perhaps, 20 large scalps and a good boat.

For a bastard 5 to 6 strings, presumably of small shells, and a few loose woodpecker scalps, are mentioned as usual blood money.

Seduction and pregnancy were rated as calling for 5 strings, or perhaps 20 woodpecker scalps. For a second child the compensation would be less, about 3 strings. The Karok say 2 to 3 strings for seduction, but 4 to 7 if the father took his illegitimate child.

Adultery came at about the same figure.

Uttering the name of a dead man called for the payment of about 2 strings of 13 shells. For a rich man 3 strings of somewhat better money might be demanded.

For breaking a mourning necklace, whether by accident or in play, three or four pieces of money were given.

BLOOD MONEY

The principles of weregild are sufficiently clear from what has been said; an instance or two may be worth adding.

An American at Rekwoi engaged a number of Indians to transport stores from Crescent City. In the surf and rocks at the dangerous entrance to the Klamath a canoe was lost and four natives drowned. Compensation was of course demanded; when it was not forthcoming, the American was ambushed and killed by the brother of one of the dead men. According to one version, the goods were Government property, and the trader responsible only for their transport. The Indians' claims are said to have been forwarded to the Government, but while officials pondered or refused, the Indians, losing hope of a settlement, fell back on the revenge which alone remained to them.

In a Karok myth dealing with the establishment of institutions, it is said in so many words that "if they kill and do not pay, fighting will be perpetual. If a woman is not paid for, there will be bad repute; but if she is bought, everyone will know that so much was given for her, and she will have a good name."

A Yurok myth, which tells of five brothers who made the sky, instituted money and property, and provided for purification from corpse contamination, has them say: "If human beings own money and valuables they will be pleased and think of them. They will not be vindictive; and they will not kill readily, because they will not wish to pay away what they have and prize."

MARRIAGE LAWS.

In marriage the rank of husband and wife and children depended on the amount paid for the woman. People's social status was

determined not only by what they possessed, but by what had been given by their fathers for their mothers. Men of wealth made a point of paying large sums for their brides. They thereby enhanced their own standing and insured that of their children. A young man of repute preserved the tradition of his lineage and honored the person and family of his wife in proportion as he paid liberally for her. A poor man was despised not only for his lack of substance, but for the little that he gave for the mother of his children, and for the mean circumstances surrounding his own origin. A bastard was one whose birth had never been properly paid for, and he stood at the bottom of the social scale.

How far the wishes of girls were consulted it is difficult to say, but marriages in which they were unwilling partners are spoken of. We are likely to think in such cases of mercenary fathers intent on profit, when perhaps the main motive in the parents' minds was an honorable alliance and a secure and distinguished career for the daughter.

"Half-marriage" was not rare. The bridegroom paid what he could and worked out a reasonable balance in services to his father-in-law. Of course he lived in the old man's house and was dependent on him for some years, whereas the full-married man took his wife home at once—in fact had her brought to him. It is not certain how often half-marriage was the result of deliberate negotiations, and how frequently a device for decently patching up a love affair.

In a full marriage the groom was represented by two intermediaries, kinsmen, and the price was very exactly specified and carefully considered. A young man rarely possessed sufficient property in his own right, and received the purchase money from his father, or from the latter and his brothers. This was not a formal loan, the blood feeling being very strong among the Yurok. When the bride arrived, at least among the well bred, a considerable amount of property accompanied her. Ten baskets of dentalia, otter skins, and other compact valuables, a canoe or two, and several deerskin blankets, seem to have passed in this way among the wealthy, without any previous bargaining or specification. In this way a rich father voluntarily returned part of the payment made him, the Yurok say. However, on a divorce taking place, these gifts must be returned as fully as the stipulated purchase price.

Sometimes two men traded their sisters to each other for wives; but in such case each nevertheless paid to the other the full amount of money, as if a single purchase were being transacted. In short, the formality of payment was indispensable to a marriage.

On the death of the father of a household, his sons would be entitled to the price received when their sisters were married. In

default of sons, the dead man's brothers arranged the marriage of their nieces and received the pay for them. A man sometimes gave to his son part of the money he received at his daughter's wedding, or used the whole of it to buy his son a wife.

Pressing debt sometimes led to betrothal. An infant daughter might be sold to another man for his little boy, the children perhaps remaining in ignorance of their relation. As soon as the girl had passed her adolescence the marriage was consummated.

Sometimes an arrangement was entered into by which a youth received the sister of a sick or crippled man in return for labor or services rendered him.

Divorce was by wish of either party, and entailed only complete repayment. A woman could leave her husband at will, provided her kin were ready to refund; though this was not their usual disposition unless she had been abused. A man, it seems, was not expected to divorce his wife without cause; such as laziness. Probably if a reasonable allegation could not be produced, the woman's relatives would refuse to repay him, in which case the divorce, while still thoroughly open to him, would be an absurd loss.

An implied condition of purchase of a wife was that she bear children. Sterility therefore meant nonfulfillment of contract, and was perhaps the most frequent cause of divorce. If a couple with children separated, the woman could take them with her only on full repayment of her original price. On the other hand, each child left with the husband reduced the repayment, and several canceled it altogether. Theoretically, therefore, the average middle-aged or elderly woman with adult children was free to return to her parents' house, and remained with her husband from choice alone. This privilege is clear, but the Yurok do not seem to formulate it, perhaps because its exercise was not a normal occurrence.

Similarly, it might be inferred that a wife was bought for a natural span of life. If she died young a sister or kinswoman was due the husband. If he passed away first his equity did not lapse but remained in the family, and she was married by his brother. In either event, however, a payment, smaller than the original one, was made to her family. In case of the wife's death this might be interpreted as due to a desire to distribute the loss between the two families involved, since the furnishing of a marriageable and therefore valuable substitute, perhaps repeatedly, wholly gratis, would work hardship on the woman's kin. The payment by the dead man's brother, however, can not well be understood except on the basis that the woman's family retained an interest in her after her marriage. A more likely interpretation of both cases is that the Yurok

did not operate on principles so legalistically defined, but held to a generic notion that no union could take place without a payment. The amount given appears to have been nearly half of the original price, although the Indians customarily speak of it as "a little."

It is said that even when a married woman of some age died her kinsmen were required to provide a substitute or repay her original purchase price unless she had borne three or four children. If she had had only one or two children, partial repayment was due.

It may be added that a full year elapsed before the widow's remarriage to her brother-in-law. During this time she kept her hair very short, did not go about much, cried considerably, lived on in her dead husband's house, and kept his property together.

The levirate, as it is called, and the corresponding custom of marrying the sister of the dead or living wife were universal in California, although among many tribes payment for the wife was slight or nominal and among some lacking. The particular legal ideas which the Yurok have connected with these customs can therefore not be regarded as causative of the customs. Historically it is extremely probable that priority must be granted to the levirate, the Yurok merely investing this with the economic considerations that shaped all their life. The foregoing interpretations of Yurok marriage laws must accordingly be construed only as an attempt to make precise a point of view, not as a genetic explanation. Ethnologically, the significance of the group of tribes represented by the Yurok lies largely in the fact that whereas their practices, when compared with those of the bulk of the Indians of California, are obviously closely similar at most points, or at least parallel, they nevertheless possess a distinctive aspect and value throughout.

If a man was jealous and beat his wife without due cause she was likely to return to her parents. Sometimes her father would then dissolve the marriage by returning the purchase price. Her maltreatment did not of itself nullify the marriage transaction. But it did cause a claim for liability, and her relatives seem to have been entitled to keep the woman until her husband had paid them damages for his abuse of her, whereupon he resumed full jurisdiction over her. This provision appeals to us perhaps primarily as one of humanity. Juridically it is of interest as indicating that a woman's kin retained a legal interest in her. Unfortunately we do not know how blood money for a married woman was distributed. It may be suspected that its amount was somewhat greater than her marriage price, the excess going to her relatives.

A curious practice was followed in the Wohtek Deerskin dance following the Kepel fish dam. Before this was finished on the hill at Plohkseu, they

danced downstream from Wohkero at Helega'au. Here the old men made men tell what their fathers had paid for their mothers. Those of moderate ancestry were permitted to dance; the rich-born and the illegitimate were both excluded.

A Karok woman born at Ashipak about the time the Americans came had relatives among the Yurok of Rekwoi, the Hupa, and the Shasta. Her grandfather had had wives in or from five different places. For some of these he had paid only partially, the agreement being that the children should remain in the mother's house. It is likely that this is a case of a wealthy man's love affairs legalized after pregnancy set in, rather than of formally proposed marriage; and that the payments made, and the status of the father, were sufficient to remove serious stigma.

Adultery was of course paid for to the husband. From 1 to 5 strings are mentioned as the fine.

Constructive adultery also constituted an injury. Speech or communication between a woman and a former lover made the latter liable. If he met her on the trail he might have to pay a medium-sized string. If he came into a house in which she sat the husband was likely to charge that the visit was intentional, and on pressing his claim might succeed in obtaining double compensation.

Two reasons are given for the payment for seduction. A woman's first bearing is hard and she might die; also, her price to her future husband is spoiled; that is, reduced.

DEBT SLAVERY.

Slavery was a recognized institution but scarcely an important one. The proportion of slave population was small, probably not over one-twentieth, certainly not over a tenth. One Yurok man had three slaves, but he was exceptionally rich, and may not have owned them simultaneously. Slaves entered their condition solely through debt, never through violence. Men were not taken prisoners in war, and women and children were invariably restored when settlement was made; solitary strangers that elsewhere might have been oppressed were suspected and killed by the Yurok. Debt arose from legal rather than economic vicissitudes, Yurok industry and finance being insufficiently developed for a man to fall gradually into arrears from lack of subsistence or excessive borrowing. The usual cause was an act of physical violence or destruction of property; striking a rich man's son, for instance, or speaking the name of a dead person of wealth. Slaves made string and nets, fished, and performed similar work. They were not killed in display of wealth, as farther north on the coast, the Yurok seeing no sense in the destruction of property except when carried away by spite. Slaves, however, were full property. An owner might buy his slave a wife to keep him contented; the children then belonged to the

master. The institution seems to have been unknown in California except for the advanced northwestern tribes.

It appears that female relatives paid in blood settlement by poor people became slaves or of kindred status. It is said that if the man to whom such a woman was handed over wished to marry her, or to give her in marriage to a kinsman, he paid a small amount to her family. This indicates that the law accorded him a right to her services, not to her person, and the former was the only right in her which he could transfer on sale.

A bastard, in burning over a hillside, once set fire to certain valuables which a rich man of Sregon had concealed in the vicinity. He was unable to compensate and became the other's slave. Subsequently the Sregonite killed a Tolowa, and transferred the slave as part of the blood money. This was long after the American was in the land; but the slave knew that if he attempted to avail himself of the protection of the white man's law, he would be liable under the native code and probably ambushed and killed by his master. He therefore arranged with him to purchase his liberty, apparently with money earned by services to Americans.

The Yurok state that their slaves did not attempt to run off. A slave might evade a new master; in which case his old proprietor would be appealed to and would threaten him with instant death if he did not return to the service of his new owner. It must be remembered that enslavement of foreigners was not practiced. Among his own or known people, public sentiment would support the master and not the slave. If the latter fled to aliens, his status would at best remain the same, his condition would certainly be worse, and he was likely to be killed at once as an unprotected and unwelcome stranger.

Payment for a murdered slave was, of course, due his master, not his kinsmen. A rich owner would receive a high settlement. It is the old story of values being determined not only intrinsically but according to the value borne by the owner or claimant.

FISHING PRIVILEGES.

If several men jointly owned a fishing place, which seems to have been the case with nearly all the most prolific eddies, they used it in rotation for one or more days according to their share, relieving each other about the middle of the afternoon for 24-hour periods. Thus a famous Karok spot called Ishkeishahachip, formerly on the north side of the river at the foot of the Ashanamkarak fall, but subsequently obliterated or spoiled by the river, belonged for one day to an Ashanamkarak man; for one to a man from Ishipishi, a mile above; for one to the head man of the village opposite Orleans, a dozen miles downstream; and for two days to the rich man of the village

at Red Cap Creek, still farther below. A successful fisherman usually gave liberally of his catch to all comers, so that it is no wonder that the Yurok have a fondness for stopping to chat with a fisherman whom they are passing. If a man allowed another to fish at his place, he received the bulk of the catch. If only one salmon was taken, the "tenant" kept merely the tail end.

A fishing place near Wahskw was originally owned by two Weitspus men who were not kinsmen, or at any rate not closely related. One of them dying, his share passed to his son, who sold it to a Wahsekw man for \$5 in American money. The new part owner also possessed a place at which he was entitled to put up a platform a short distance below.

It was forbidden to establish a new fishing place or to fish below a recognized one. This provision guaranteed the maintenance of the value of those in existence, and must have very closely restricted the total number to those established by tradition and inheritance.

If one man used another's fishing place, even without explicit permission of the owner, and fell and slipped there and cut his leg or was bruised, he would at once lay claim to the fishing place as damages. People would say to the owner: "It was your place and he was hurt; you should pay him." Perhaps a compromise would be effected on the basis of the plaintiff receiving a half interest in the privilege of the spot.

OWNERSHIP OF LAND.

Up to a mile or more from the river, all land of any value for hunting was privately owned; back of this, there were no claims, nor was there much hunting. It may be that deer were scarce away from the river; but more likely, the private tracts in the aggregate represented accessibility and convenience to the game rather than exhaustive control of its total supply. It may be added that the Yurok country, being well timbered, was poor in small game, deer and elk being the principal objects of the chase. Rich men often held three or four inherited tracts, poor people perhaps a single one, others none. Poachers were shot. A small creek near Weitspus is named Otl-amo, "person caught," because, according to tradition, a poacher was there taken in a deer snare. A wounded animal could be pursued anywhere. It belonged to the hunter, and the owner of the tract in which it fell had no claim upon it.

Certain prairies on the Bald Hills, valuable for seed gathering, belonged to Weitspus and Wahsekw families, who had bought them from the Chilula.

A Weitspus man who had killed a fellow resident of that village fled to the Coast Yurok, bought himself a small stream that flowed into the ocean not far from Osagon Creek, and made his home there. This case is doubly illuminat-

ing. It shows the personal heterogeneity of the larger villages, and demonstrates that land was bought and sold for abode and asylum—a rather unusual feature in American Indian society.

The ownership of house sites is discussed elsewhere.

LAW OF FERRIAGE.

Free ferriage must at all times be rendered. At least in theory it is extended also to those who can not reciprocate because of being boatless or in chronic poverty. The underlying assumption of this custom seems to be that ferriage is a primal necessity to which everyone is at times subject and which everyone is also at times in position to relieve. The traveler accordingly has much the status which a guest enjoys as regards food, but his claims are crystallized into a definite privilege. The Yurok and their neighbors extend the right also to Americans resident among them, charging ferriage only to transient voyagers. In the old days even an enemy with whom one did not speak had to be taken as passenger. Such a man on arriving opposite a village shouted. If no one was about but the one who bore him a grudge, the latter nevertheless paddled over. The traveler sat in the boat with his back to the steersman, keeping silence. For a refusal to accord ferriage from three to six short dentalia could be claimed. If a traveler finds a settlement deserted, he takes any boat at the river's edge and puts himself across, without the least care or obligation as to its return.

The carrier being his passenger's agent, the latter becomes liable for any injury to him. A Yurok of Kenek had his house catch fire while ferrying an acquaintance. The latter was due to repay his entire loss: except for the service rendered the owner would have been at hand and might have extinguished the blaze, the Yurok said.

LEGAL STATUS OF THE SHAMAN.

Shaman's fees for the treatment of disease were very high, as the examples previously given indicate. Shamans are said to have frequently urged their female relatives to try to acquire "pains"—shamanistic powers—because wealth was easily got thereby. The rule was for payment to be tendered with the invitation to cure. Usually some negotiation followed. The doctor held out for more; but being legally obliged to go was apt to plead indisposition or illness of her own. The offer was then increased, the pay being actually shown, it appears, and, reaching a satisfactory figure, was accepted, and the shaman went on her visit. Acceptance, however, implied cure, and if this was not attained the entire amount must be returned to the patient or his relatives. This was the old law; but the Karok state that American physicians' example has in recent years caused the

practice to spring up of the shaman retaining a small part of her fee as compensation for her time and trouble.

Usually the patient felt improved and the doctor returned claiming a cure. If a relapse followed, she was summoned and came again, receiving a small fee. In strict logic, she should have served for nothing, the patient not having received the complete cure that was tacitly contracted for; but a new effort being involved, there seems to have been some concession to this. The principle is analogous to that which compels a widower to pay a small sum for his second wife, who replaces the first. It is as if the law recognized the equity of partially distributing the loss in cases that are in their nature beyond human agency. This is a mitigating influence that contrasts rather strangely and somewhat pleasingly with the remorseless rigor of the main tenor of Yurok law.

It is a common belief of the Yurok that some shamans would extract one of the pains from a sick person, thus effecting a temporary improvement in his condition, but deliberately leave another within him, in order to be paid for a second treatment. Other shamans sometimes accused them of such malpractice, declaring they could see the remaining pain. It is very characteristic that the Yurok and their northwestern neighbors think in such cases of the shaman's motives as greed, the other California Indians almost invariably as malice.

It is in accord with this diversity of point of view that one scarcely hears among the Yurok of shamans being killed for losing patients, one of the commonest of events elsewhere in California.

On the other hand, the law-spinning inclination of the Yurok is manifest in their absolute rule that a shaman who had declined to visit a patient was liable, in the event of his death, even after treatment by another shaman, for the full fee tendered her, or even a little more. Only a conflicting case, or genuine sickness of the shaman herself, was ground for an attempt on the shaman's part to evade this liability. The argument was that if the fee had been accepted and treatment extended, the sick person might not have died. Hence the liability was complete up to the amount which the patient's family were ready to offer in his behalf. A Karok shaman who had attained some reputation by once appearing to die and then returning to tell of her experiences in the other world, subsequently laid herself open to a claim for not attending a sick person and refused to settle it. The kinsmen of her prospective but deceased patient thereupon waylaid her in the brush and choked her to death. Many a central and south California doctor has met this fate: but his supposed misconduct was intent to kill, as evidenced by failure to cure. The northwesterners took satisfaction because a claim for damages was not met.

It is said that people were bewitched not only by shamans hungering for fees and by avowed foes, but sometimes by mere enviers, who hoped to see a rich man's wealth gradually pass from him to his physicians.

A Karok of Katimin began to suffer with headache, and accused a woman of having bewitched him. Doubtless there was ill feeling between them. He formally voiced his complaint to her brother. The family conferred and offered him three strings as damages. He refused the amount as insufficient, and they, feeling that a sincere effort at reparation had been slighted, announced that they would henceforth be *inivashan*, enemies. Since that time the families have not spoken.

MOURNERS' RIGHTS.

As long as a corpse remained unburied, no one was allowed to pass the village in a boat. If a traveler attempted to go on, the kin of the dead person would lay hold of his canoe. If he succeeded nevertheless, he incurred liability to them. The motive of the prohibition seems to have been that it was a slight to mourners if others transacted ordinary business in their sight or vicinity.

It is, however, specifically stated that this statute did not apply if the dead person had been killed by violence. Similarly those slain were not included among the dead of the year whose kin must be paid before a village could undertake a dance. The reason is clear: if there is a killing, the mourners have been or will be paid, and no further compensation is necessary; while those who grieve for a relative dead from natural causes are enduring an irremediable loss, and their feelings must be assuaged.

If a man died away from home his body might be taken back or buried on the spot. In the latter case the right to interment was purchased. Once payment had been accepted for this privilege, subsequent protest at the inclusion of a stranger's body in a family graveyard subjected the critic to liability for a claim for damages.

Before a major dance could be held, the dead of the year had to be paid for. This was done by contributions of the residents of the village, or by the rich man of the locality. If a village did not hold a dance, the law nevertheless applied, no residents being entitled to visit a ceremony elsewhere until the home mourners were satisfied. This is an extremely characteristic Yurok provision. The dances were held by them to be absolutely necessary to the prosperity and preservation of the world: still, because they afforded entertainment and pleasure to those who assembled, the mourners resented the occasion, and prevented it, until tendered pay for the violation of their grief. In short, a private right is not in the least impaired by coming into conflict with a communal or universal necessity. Since the ceremony is desirable, let those interested in

it extinguish the personal claim, rather than have the holder of the latter suffer, would be the Yurok point of view. To us, the legal sanctioning of the obtrusion of a private interest in the face of a general need seems monstrous. The native probably feels that the mourners are extremely reasonable in allowing the dance to be held at all, and that in proportion to the necessity thereof the community ought to be ready to make sacrifices. This is anarchy; but the Yurok are an anarchic people.

Before the Weitspus dance of 1901, four families were paid \$2 each. The compensation thus amounts to only a very small percentage of the value of a man's life. The rich man of Pekwututl, across the river, demanded and received \$3 because he was rich. Having the money in his possession, he demanded a second payment of like amount for a relative he had lost at Hupa. The Weitspus people demurred on the ground that he would be paid for this death by the Hupa when they held their dance at Takimitlding; but he stood firm and received what he asked.

If a village did not make or visit a dance for a year the mourners' claim lapsed totally. There was the same limit to the prohibition against uttering a dead person's name.

According to a Karok informant the dead of the year were paid for by the rich men so far as the dead were relatives of those who contributed dance regalia, whereas even fellow townsmen who were too poor to help, or had been unwilling, were passed over.

The Yurok declare that the minor "brush dance" was not preceded by payments formerly, but that of late years small compensations have been exacted. The Hupa, they state, pay more heavily for the privilege of making this dance. The difference in custom may be due to an earlier abandonment of the great dances by the reservation Hupa, whereby the brush dance was exalted to a more significant position. But it seems more in accord with the spirit of Yurok institutions that the brush dance should also have been permitted only after compensation; mourners particularly resent hearing singing. The pay is, however, likely to have been small at all times, since the brush dance was instituted by an individual, who was at considerable expense apart from purchasing the privilege.

Compensation for utterances of the name of the dead went, of course, to the immediate kin—father, brother, or son. A brother might give part to the widow; but she acted only as custodian of her dead husband's wealth, and was herself still the property of his family, unless she had borne a number of surviving children. If it was she that was dead, payment is said to have gone to her husband, not to her kin. The Yurok state that the amount of compensation depended solely on the rank of the deceased; age or sex were not factors. After the name was bestowed on a child of the family, a year having elapsed, the taboo was of course thereby lifted. This makes it clear that the conscious motive of the custom is respect for the mourners' grief for a due season. If two men had the same name, the poorer,

on the death of the richer, would "throw his away," so as to avoid occasion of giving offense. If the wealthy man was the survivor, he would pay his namesake's family, perhaps as much as five strings, satisfy them, and retain his name.

INHERITANCE.

Only a small amount of property was buried with the dead, and none of this of great value. The bulk of the estate went to a man's sons, but the daughters received a share and something was given to all the nearer relatives—at least on the male side—or they would be angry. The kinsman who actually interred the corpse—or rather, the one who assumed defilement on behalf of the others—made a particular claim; no doubt for the restrictions to which his contamination subjected him. Moreover, if there was no one in the family who knew a formula for purification from a corpse, it was necessary for this voluntary scapegoat to hire some one to recite on his behalf; and the fee for this service was high. It is said that poor men were sometimes compelled to give one of their children into slavery in payment for this indispensable release from the excommunicating taboo.

For the building of a house, kinsmen were called upon. They were fed but not paid while they labored; and of course could expect reciprocation. If one of them possessed planks already cut, he furnished them, to be replaced at subsequent convenience. The house was inherited by the son. The brother is said to have received it only if there were neither adult sons nor daughters.

An old and sick Karok woman allowed her half-breed daughter to take possession of her property. Thereupon the sister with whom she lived at Kenek, no doubt in disappointed spite, said to her: "You have nothing. I do not want you," and the decrepit woman went to a more charitable relative at Rekwoi to end her few days.

RICH AND POOR.

The Yurok are well aware of the difference in manners and character between rich and poor in their society. A well-brought-up man asked to step into a house sits with folded arms, they say, and talks little, chiefly in answers. If he is given food, he becomes conversational, to show that he is not famished, and eats very slowly. Should he gobble his meal and arise to go, his host would laugh and say to his children: "That is how I constantly tell you not to behave." If an obscure person commits a breach of etiquette, a well-to-do man passes the error with the remark that he comes from poor people and can not know how to conduct himself. Such a wealthy man exhorts his sons to accost visitors in a quiet and friendly manner and invite them to their house; thus they will have friends. A poor

man, on the other hand, instructs his son not in policy but in means to acquire strength. He tells him where to bathe at night; then a being will draw him under the water and speak to him, and he will come away with powerful physique and courage.

Life was evidently so regulated that there was little opportunity for any one to improve his wealth and station in society materially.

The poor, therefore, accepted more or less gracefully the patronage of a man of means, or attempted to win for themselves a position of some kind not dependent on property. A savage temper, and physical prowess to support it, were perhaps the only avenue open in this direction; shamans were women, and priests those who had inherited knowledge of formulas.

The rich man is called *si'atleu*, or simply *pegerk*, "man." Similarly, a wealthy or "real" woman is a *wentsauks* or "woman." A poor person is *wa'asoï*. A slave is called *uka'atl*. A bastard is called either *kamuks*, or *negenits*, "mouse," because of his parasitic habits. *Uwohpewek* means "he is married"; *winohpewek*, "he is half-married."

Even a small village group was known as *pegarhkes*, "manly," if its members were determined, resentful, and wealthy enough to afford to take revenge.

The following Yurok statement is characteristic: "The beautiful skins or headdresses or obsidians displayed at a dance by one rich man excite the interest and envy of visitors of wealth, whereas poor men take notice but are not stirred. Such wealthy spectators return home determined to exhibit an even greater value of property the next year. Their effort, in turn, incites the first man to outdo all his competitors."

The Karok speak of a branching of the trail traversed by the dead. One path is followed by "poor men, who have no providence, and do not help (with regalia, payments, and entertainment) to make the dances." The other is the trail of people of worth.

When an honored guest was taken into the sweat house he was assigned the *tepolatl*, the place of distinction, and the host offered him his own pipe. A common man was told to lie at *legai*, by the door, or *nergernertl*, opposite it. A bastard who entered was ordered out, the Yurok say. It is likely, however, that such unfortunates were more tolerantly treated by their maternal grandfather and uncles.

Food was sometimes sold by the Yurok: but no well-to-do man was guilty of the practice. "May he do it, he is half poor—*tmenemï wa'asoï*" would be the slighting remark passed; much as we might use the term *nouveau riche* or "climber."

PURSUIT OF WEALTH.

The persistence with which the Yurok desire wealth is extraordinary. They are firmly convinced that persistent thinking of money will bring it. Particularly is this believed to be true while one is engaged in any sweat-house occupation. As a man climbs

the hill to gather sweat-house wood—always a meritorious practice, in the sense that it tends to bring about fulfillment of wishes—he puts his mind on dentalia. He makes himself see them along the trail, or hanging from fir trees eating the leaves. When he sees a tree that is particularly full of these visioned dentalia, he climbs it to cut its branches just below the top. In the sweat house he looks until he sees more money shells, perhaps peering in at him through the door. When he goes down to the river he stares into it, and at last may discern a shell as large as a salmon, with gills working like those of a fish. Young men were recommended to undergo these practices for 10 days at a time, meanwhile fasting and exerting themselves with the utmost vigor, and not allowing their minds to be diverted by communication with other people, particularly women. They would then become rich in old age.

Direct willing, demanding, or asking of this sort are a large element in all the magic of the Yurok, whatever its purpose. Saying a thing with sufficient intensity and frequency was a means toward bringing it about. They state that at night, or when he was alone, a man often kept calling, "I want to be rich," or "I wish dentalia," perhaps weeping at the same time. The appeal seems to have been general, not to particular or named spirits. Magic is therefore at least as accurate a designation of the practice as prayer. How far the desires were spoken aloud is somewhat uncertain, the usual native words for "saying" and "thinking" something being the same; but it is very probable that the seeker uttered his words at least to himself. The practical efficacy of the custom is unquestionable. The man who constantly forced his mind and will into a state of concentration on money would be likely to allow no opportunity for acquisition to slip past him, no matter how indirect or subtle the opening.

According to a Karok myth, the sweat house, its restriction to men, and the practice of gathering firewood for it, were instituted in order that human beings might acquire and own dentalia.

The Yurok hold a strong conviction that dentalium money and the congress of the sexes stand in a relation of inherent antithesis. This is the reason given for the summer mating season: the shells would leave the house in which conjugal desires were satisfied, and it is too cold and rainy to sleep outdoors in winter. To preserve his money, in other words to prevent his becoming a spendthrift, a man bathes after contact with his wife, and is careful not to depart from the natural positions. Strangely enough, the Yurok have a saying that a man who can exercise his virility 10 times in one night will become extraordinarily wealthy; but there are not wanting those who consider this ideal unattainable by modern human beings.

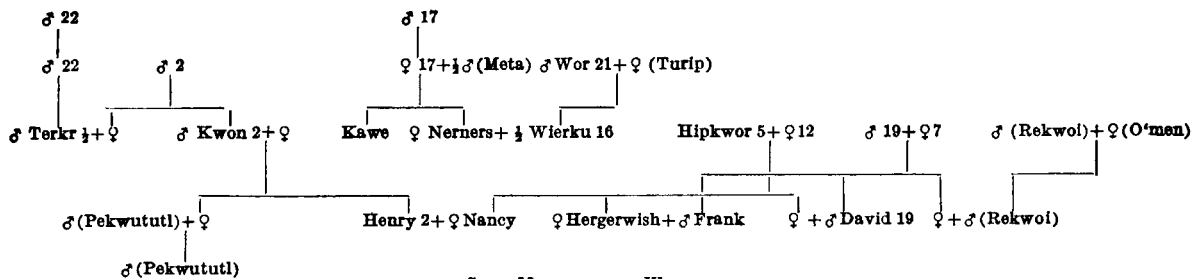
This is a case of typical blending of avarice and magic, as related by the Hupa. The grandchild of the rich man of Medilding had its mouth constantly open. A shaman finally saw and proclaimed the cause. An ancestor of the rich man had asked to kiss a dead friend or relative good-by. He descended into the grave and, bending over the corpse's face, used his lips to draw out from the nose the two dentalia that are inserted through the septum, concealing his booty in his mouth until the grave had been filled. According to report, the rich man admitted that an ancestor of his had actually risked this deed; and the shaman declared that it was the same dentalia that now kept the child's jaws apart.

A man who had borrowed a canoe and wished to buy it might report to the owner that he had broken it; but the possessor was likely to see through the ruse. This is a native instancing of the cupidity which seems to them natural and justifiable.

Gifts were sometimes made by the Yurok, but on a small scale; and while reciprocation of some sort was anticipated, it was generally smaller and could not be enforced. Presents were clearly a rich man's luxury. The host might say to a visitor whose friendship he considered worth strengthening: "You had better return by boat," thereby giving him a canoe. The guest in time would extend his invitation; and the visit would end with his presentation of a string or two of small money, or a quiver full of arrows. As the Yurok say, the first donor had to be satisfied with what he got, because he had given a gift.

MARRIAGE AND THE TOWN.

The Yurok married where and whom they pleased, in the home village or outside, within their nation or abroad. The only bar was to kindred; but the kin of persons connected by marriage were not considered kin. The wife's daughter as well as her sister were regarded suitable partners. The smaller villages were so often composed wholly of the branches of one family that they practiced exogamy of necessity. That such exogamy had not risen to native consciousness as something desirable in itself is shown by numerous endogamous marriages in the larger towns. This point deserves particular consideration because the organization of the Athabascans of the Oregon coast, which seems to have been identical with that of the Yurok, has been misrepresented, simple villages—as ungentile as our country towns—being represented as patrilinear clans, and the mere rule against the marriage of kindred construed as clan exogamy. The subjoined table illustrates the degree of endogamy at one of the larger Yurok towns, Weitspus, and the following examples the distance to which its inhabitants were ready to go for wives when they pleased.



SOME MARRIAGES AT WEITSPUS.

+, married; 1/2+, half married; 22, etc.: number of house in fig. 2; (Pekwututl), persons from other villages.

House 15 (fig. 2) belonged to the daughter of the former owner. Her half-married husband is of a Karok father from Katimin and a Yurok woman of Ho'opeu. Kewik of Nohtsku'm half-married into Ertlerger, but quarreled with his wife's family, and, moving across the river with her, built himself house 3 in Weitspus, whose site his grandson still owned. The father of the owner of 9 had two wives: The first a Karok from Ashanamkarak, the second a Tolowa. An old man in 10 traded sisters with a Wahsekw man.

THE CRISES OF LIFE.

Births occurred among the Yurok and their neighbors chiefly in spring. This was, of course, not because of any animal-like impulse to rut at a certain season, as has sometimes been imagined, but because of highly specialized ideas of property and magic. The Yurok had made the just psychological observation that men who think much of other matters, especially women, do not often become or remain wealthy. From this they inferred an inherent antipathy between money and things sexual. Since dentalia and valuables were kept in the house, a man never slept there with his wife, as already stated, for fear of becoming poor. The institution of the sweat house rendered this easily possible. In summer, however, when the cold rains were over, the couple made their bed outdoors; with the result that it seems natural to the Yurok that children should be born in spring. A similar condition has been reported from the far-away Miwok region; but the responsible social circumstances, which were certainly different from those of the Yurok, are unknown.

As a girl's property value was greatly impaired if she bore a child before marriage, and she was subject to abuse from her family and disgrace before the community, abortion was frequently attempted. Hot stones were put on the abdomen, and the foetus thrown into the river. There is little doubt that parents guarded their girls carefully, but the latter give the impression of having been more inclined to prudence than to virtue for its own sake. Probably habits differed largely according to the rank of the family. Poor girls had much less to lose by an indiscretion.

The prospective mother's wish was to bear a small child. Therefore she worked hard and ate sparingly. Difficulty in labor was thought to be caused by undue size of the child brought on by the mother's eating and sleeping too much.

In most of California women sit in childbirth. For the Hupa the same is reported, but the Yurok woman is said to have lain bracing her feet against an assistant. Her wrists were tied with pack straps to parts of the house frame. When the assistant commanded, she raised herself by these thongs. She must shut her mouth, else the child would not leave her body. Many formulas to assist childbirth were known. The most powerful of these, as their

own content relates, were thought to become effective as soon as the reciter entered the house with her herb.

If the child during the first five or six days of its life were to take nourishment from its mother, the Yurok believe that its jaws would become affected and it would soon starve. During this period it is fed only a little water in which hazel or pine nuts have been rubbed, and which looks milky. For about the same number of days, or until the child's navel is healed, the father eats apart, touches no meat or fresh salmon, and drinks thin acorn soup instead of pure water. The mother is under the same restrictions for a longer period: 50 days, or 60 for a stillbirth. She spends this time in a separate hut.

The umbilical cord is severed with a piece of quartz clamped inside a split stick, and is carefully preserved in the house for about a year. When the child is about to be weaned the father takes the shred on a ridge, splits a living fir, inserts the little piece of preciousness, and binds the sapling together again. On his return the baby has its first meal other than milk.

If twins of opposite sexes were born, the Yurok smothered one of the pair, usually the girl. They had a dread of such births, which they explain on the ground that if the twins lived they might be incestuous. Boy twins were believed to quarrel all their lives, but were spared. Once triplets were born at Murekw. There was much excitement and much talk of killing them; but a Deerskin dance was made and warded off the sickness which the portent foreboded.

When a girl becomes mature she is called *ukerhtsperek*, and sits silent in her home for 10 days with her back turned to the central fire pit. She moves as little as possible, and scratches her head only with a bone whittled and incised for the occasion. Once each day she goes to bring in firewood; on her way she looks neither to left nor right, and looks up at no one. The longer she fasts, the more food will she have in her life, it is believed. After four days she may eat, but only at a spot where the roar of the river confounds every other sound. Should she hear even a bird sing, she ceases at once. Each evening she bathes, once the first night, twice the second, and so increasingly until on the eighth she pours the water over herself eight times. The ninth night she bathes ten times; and on the tenth day, with declining day, once, squatting by the river, while the small children of the village, one after the other, wash her back. Her mother or another woman then lays 10 sticks on the sand and tells her she will bear so many sons, and places 10 sticks in a row to represent her daughters. The girl's dress during the 10 days is a skirt of shredded maple bark, such as shamans wear during their novitiate.

One in every several hundred Yurok men, on the average, preferred the life and dress of a woman, and was called *wergern*. This frame of mind, which appears to have a congenital or psychological basis well recognized by the psychiatrist, was not combated, but socially recognized by the Indians of California—in fact, probably by all the tribes of the continent north of Mexico. Only among the advanced peoples of that region did the law frown upon transvestites. The Yurok explanation of the phenomenon is that such males were impelled by the desire to become shamans. This is certainly not true, since men shamans were not unknown. It is a fact, however, that all the *wergern* seem to have been shamans and esteemed as such—a fact that illuminates the Yurok institution of shamanism. The *wergern* usually manifested the first symptoms of his proclivities by beginning to weave baskets. Soon he donned women's clothing and pounded acorns.

At death, the corpse is addressed: "*Awok, tsutl* (alas, good-by), look well and take with you the one who killed you with *upunamitl*" (a closure or pressing of internal organs produced magically). The body is then painted with soot, and the septum of the nose pierced for insertion of a dentalium shell. Elderberry sticks measure the length for the grave. This is lined with planks. Boards are removed from one side of the house and the body handed by two mourners inside to two outside. No living soul passes through the opening and the corpse does not leave by the door. The earth on which the person has lain in death is thrown away. At the grave the dead body is washed with water containing herbs or roots and then interred with its head downstream. No one in the town eats during the funeral, small children are taken aside, and all who have looked upon the dead bathe. Those of the mourners who have touched the corpse rub themselves with the grapevine with which the body has been lowered into the grave and hand it from one to the other, thereby passing on the contamination to the last one. This man for five days shuns all intercourse with human kind, does no work, sits in a corner of the house with his back turned, drinks no water, eats only thin acorn gruel, nightly makes a fire on the grave to keep his dead kinsman warm, and finally returns to communion with people by undergoing a washing purification of which the cardinal feature is a long formula.

Cemeteries adjoined towns; often lay in their very heart. Large settlements sometimes had two or three graveyards. Each family plot was small, so that in time numbers of bodies came to be buried in one grave. Old bones were always reinterred. At present each plot is neatly fenced with pickets and posts; but the Yurok say that even in the old days their graves were inclosed with boards. The clothing and some of the personal belongings of the dead were set

or hung over the grave; but there was no extensive destruction of property, much less any subsequent offerings to fire, as among most California tribes. People dying away from home were, if possible, transported back for interment; or, a grave was purchased for them where they died.

The dead, called *so'o* or *kesamai*—the words are used alike for “ghost” and “skeleton”—were thought to go below. The entrance was pointed out at a small tree not far above the river just upstream from Sa'aitl, opposite Turip. The Coast Yurok knew a spot in their own territory, and the Karok made the path of the dead go up the ridge southeastward from the mouth of the Salmon. Underground, the dead Yurok came to a river, across which he was ferried by a Charon in a canoe. Occasionally the boat tipped over. Then the corpse revived on earth. Once the crossing had been accomplished, return was impossible. People killed with weapons went to a separate place in the willows; here they forever shouted and danced the war dance. Contentious and thievish men also remained apart: their place was inferior. A rich, peaceable man, on the other hand, who had constantly planned entertainment for dances, came to the sky. Long ago, a young man once followed his beloved, overtook her at the bank of the river, and in his anger broke the ferryman's boat, it is said. He brought back his bride, and for 10 years while the canoe of the lower world was being repaired or rebuilt, no one died on earth.

If a person revived “after having died,” a special dance, called *wasurawits*, was considered necessary to bring him back to human intelligence. This seems to have been a modified form of the brush dance, with similar step and positions, held indoors. Only a few feathers were used. All available dresses heavily fringed with haliotis were shaken to drown the voices of the ghosts which the patient had heard and which were rendering him insane. If he was violent, he was lifted on the drying frame within the house and held by two men; when his strength began to return, he was supported and made to dance to speed his recovery.

Should a person already buried make his way out of the grave, the Yurok believed him a monster, from whose insatiable desire for destruction they could only save themselves by killing him once more; but this was only to be accomplished by striking him with a bowstring!

NAMES.

The Yurok avoid addressing each other by name, except sometimes in closest intimacy. It is the height of bad manners to call a person by name, and a Yurok who is so addressed by an American looks

shocked. Of course, English names and nicknames do not count. It is not even proper to speak of an absent person by his name before his relatives. All sorts of circumlocution come into use, many of them known to all the Yurok: *Ehkwiyer omewimar*, "Ehkwiyer its old man"; *Meta keryern*, "the proud one of Meta"; *Ra-hiwoi*, "(he has his house) on the side of Ra (a streamlet in Murekw)"; and the like. An old man at Wahsekw was designated by the fact that his house faced upstream. Most of the following names of the women reputed about 15 years ago the ablest shamans among the Yurok, are of this descriptive type.

At Wahsekw (farthest upstream of the towns mentioned): *Petsi-mell* (pets, "upstream").

At Sa'a: *Sa-wayo-mell*.

At Murekw: *Tsmeyowega* and *Mureku-tsewa*.

At Sregon: *Was-mell* and *Pekwisau*.

At Wohtek: *Kewei*.

At Wokhero: *Merit-mela* (Merip, a town, presumably her birthplace).

At Sta'awin: *Kosi-tsewa*.

At Espau: *Kairepu* and *O'men-mela* (O'men, a town).

At Tsurau: *Tsurau-tsewa*.

Most of the true personal names of the Yurok are untranslatable in the present knowledge of the language, but may have meanings: Tsinsu, Melotso, Ninowo, Penis, Woilo, Tskerker, O'pe'n, Wilets, Kwegetip ("yearling deer"), Petsuslo ("thrown upstream"). Nicknames like Segep, "coyote," are of course transparent.

As in all California, an absolute taboo is laid on the names of the dead. The violation of this constitutes a mortal offense, voidable only by a considerable payment. We are wont to think of the hardship entailed by such a law on the unwitting and careless; but the Indian, reared since earliest recollection in the shadow of this regulation, makes no mistakes, and when he utters a dead man's name may justly be presumed to do so deliberately. *De mortuis nil*, the Yurok would paraphrase our saying, and live up to it with even greater emotional vehemence. A namesake drops his name at once. Even words that resemble a name are not used. When *Tegis* died, the common word *tsis*, "woodpecker scalps," was not uttered in the hearing of his relatives or by them. Other people, if no tell-tale ill-wishers were about, would be free from such scruple. Whatever may have been the original basis of the custom, it is clear that its force among the Yurok is now more social than religious. They no doubt hold that calling a ghost might bring it, but they hardly entertain such dread about the conversational mention of a dead person.

The name taboo has sometimes been invoked as a contributory explanation of the dialectic diversity of native California. It can not have had much influence. The custom prevails in the Great Basin, throughout whose broad extent no language is spoken but

Shoshonean, and that in only three closely similar forms. Moreover, the Yurok, and with them apparently many other tribes of California, formally end the taboo at the end of a year, by bestowing the dead person's name on a younger relative or child of the same sex. A youth abandons his name to assume that of a dead brother, father's brother, or even mother's brother. This may happen to him several times; but after middle life he changes no more. Children remain unnamed until after they can walk; sometimes they are 6 or 7 years old before a kinsman's name becomes vacant. Some sort of designation for them, of course, comes into use, but this appellation is "picked up" for them and not considered their name. The Yurok state that after a year the family that has lost a relative wishes his name to be out of taboo again.

WAR.

No distinction of principle existed in the native mind between murder and war. It is rather clear that all so-called wars were only feuds that happened to involve large groups of kinsmen, several such groups, or unrelated fellow townsmen of the original participants. Whoever was not drawn into a war was as careful to remain neutral as in a private quarrel. When settlement came it was made on the sole basis known: all damage was compensated. Every man slain or hurt was paid for according to his value, all captive women and children restored, burned houses were paid for, seized property handed back. It seems that actual payments for the aggregate amounts due were made by each side instead of the lesser value being deducted from the greater and the net difference alone paid. This practice was perhaps necessitated by the fact that Yurok money with all its refinement of measurement was not really standardized in the same sense as our own, no two strings, generally speaking, being of exactly the same value. In any event the greater financial drain bore on the winner. There is no group of tribes in California better developed to enjoy tribute than the Yurok and their neighbors, and none to whom the idea was so utterly foreign. The *vae victis* of civilization might well have been replaced among the Yurok, in a monetary sense at least, by the dictum: "Woe to the victors."

When blood money was offered, the exact length of each string was shown by a rod of the precise dimension. This stick was kept by the payee, and subsequently measured against the row of dentalia. To the ends of the rod were lashed little tabs of buckskin, to make possible its being held between the fingers that clasped the string of shells. This device enabled the precise value of each string to be determined during the period when contact between the principals

in conflict, or even handling of the property of one by the other, would have been precarious.

The Yurok took no scalps. They did not trouble to decapitate a fallen foe unless it was to make sure of his death. They held no scalp dance or formal victory celebration. They did have a war dance known as the *wertlkerermer*, the songs to which are of a lively if not stirring character. This was essentially a dance of settlement. The participants stood in a row, fully armed, with their faces painted black. A bowshot or less away their opponents performed. Before the actual dance took place, the money or property to be paid over by each side was "cooked." It was laid in baskets, held over the fire, blown upon, and sung over, while the party danced about. No doubt a formula was also recited over the money. The purpose of this practice was to insure that if the recipient of the pay continued to harbor thoughts of revenge against the payers, his wishes would recoil upon himself. After this came the war dance proper, performed by each side standing abreast, very much as in the great dances; and finally the payments by each side were actually handed over, provided the reconciliation had not broken up in a battle meanwhile. It seems that the same or a similar dance was also made as a preparation before war parties started out, but this is not certain.

The chief weapon was the bow. In close fighting, a short stone club, spatula shaped and blunt edged, was used for cracking heads. This was called *okawayaya*. Spears were known, it appears, but very little employed. There were no shields, but two types of body armor. One was of thick elk hide, the other a strait-jacket of rods wound together with string. Some men preferred not to be encumbered with so stiff a protection. Women are said sometimes to have rushed into a fight and seized men as if to allay the quarrel, but in reality to hold them for their brothers or husbands to smite.

The greatest war of which the Yurok know took place some years before the Americans came into the country, probably about 1830 or 1840. Some Weitspus men who had married Hupa wives were attacked while visiting there. The cause of the grievance has not been recorded. In the course of the resulting feud the Hupa attacked Weitspus. During the fight a woman was killed who was born of a Weitspus father and Rekvoi mother, and who was herself half married, that is, living at her father's home. Her death angered her relatives at Rekvoi, it is said. At any rate they gathered their forces, to which were added a number of Tolowa. There were 84 altogether, including 6 women to cook for the party. This number shows conclusively that even this war was an affair of families or at most villages. If the Yurok as a whole had mustered against the Hupa they would have been able to assemble nearly ten times as strong. The party traveled toward Hupa by way of Redwood Creek or the hills above it. They journeyed three nights, resting during the day. Early in the morning they waited at Takimitiding. The first Hupa who emerged was

killed. Then the fight was on. Many of the Hupa fell, the others fled, and the entire village was burned by the victors, who thereupon seized all the canoes and started homeward down the Trinity River. Two of the men had taken young women whom they intended to marry. But at Weitspus, where the party stopped, probably to eat after the morning's work and no doubt to recount its adventures, some people who pitied the girls enabled them to escape. These connivers may have been individuals with Hupa blood affiliations, perhaps even direct relatives of the two women.

About half a year later the Hupa retaliated. They were helped by their kinsmen up toward the south fork of the Trinity and by the Chilula. Nearly 100 of them are said to have gone. They descended by boat, traveling at night and drawing their canoes up into the brush during the day. Rekwoi was attacked and burned much as Takimitiding had been. Those who were not slain had difficulty living through the winter because their stores of food had been destroyed. The Hupa returned as they had come. This fact again indicates the private nature of the quarrel. Canoes must be laboriously poled and in some spots dragged upstream. Had the Yurok been possessed of any national sentiment in the matter, they could have easily mustered several hundred warriors to overwhelm the Hupa while these were occupied with their difficult navigation. As a matter of fact, the Yurok relate, the villages along the Klamath made no attempt to stop the war party. They concluded that scores being now substantially even, a settlement would soon follow. The Hupa indeed sent to ask for a settlement, and this took place, large amounts being paid on each side.

A feud of some note took place between Sregon and Ko'otep. When the leading man of Sregon lost his brother by sickness, he accused an inhabitant of Wohtek or Wohkero of having poisoned him. The suspect was soon killed from ambush. After this a Sregon man was attacked and killed at Ko'otep, which is only a short distance from Wohtek. This act involved the people of Ko'otep, which was at this time a large village. After a time, settlement was proposed, and the two parties met in an open place below Sregon to conclude the negotiations. Each side was ready to make the customary dance, when some one fired a shot. In the fight that resulted, a Meta ally of the Sregon people was killed. The headman of Sregon now went down river with his friends and lay in wait at an overhanging and bushy bank at Serper, where the current takes boats close in shore. When a canoe of his foes came up, he attacked it and killed four of the inmates. The feud went on for some time. Sregon, never a large village, fought, with only some aid from Meta, against Ko'otep, Wohtek, and Pekwan, but lost only 3 men to 10 of their opponents'. The headman at Sregon was sufficiently wealthy, when settlement came, to pay for all the satisfaction he had earned. He once said with reference to his experience in this and other feuds, that open battles often took place without anyone being killed. Somehow men are hard to hit, he philosophized: arrows have a way of flying past a human being when a hunter is sure to strike a deer at the same distance; as modern military handbooks also tell.

A small feud occurred between Meta and Pekwan. A number of families were camped along the river for fishing, when a man from Wohtek or Wohkero was killed by enemies from Meta. The grievance is not reported. Those who had slain him fled to Osegon, presumably because they had relatives there. The Wohkero kinsmen of the dead man followed them and a fight took place. An Osegon and a Meta man fell in this little battle. Subsequently another Meta man was killed. Afterwards settlement was made.

Many years ago, probably before the arrival of the Americans, Opyuweg, the largest village on Big Lagoon, became involved in a quarrel with the Wiyot,

who attacked the town and killed a number of people. Opyuweg subsequently retaliated, but was unable to even the score, the Wiyot being too numerous. Consequently when settlement was made Opyuweg received a large balance. The village fought this feud alone.

Soon after 1860 the Chilula attacked Herwer on Stone Lagoon and killed 10 people. This was at the time the Chilula were in feud with the Americans and Herwer was very likely made to suffer for aid or information given the whites, or thought by the Chilula to have been given. The main grievance of the Chilula, as well as their danger, must have been from the Americans, but satisfaction was more easily taken against the Yurok.

Once there was sickness at Ko'otep. Three Orekw women married at Ko'otep were blamed. An attempt was made to kill them, but one of the Ko'otep men protected them against the others. This angered his fellow townsmen, who, with the aid of friends from Weitspus, succeeded in killing him when he was at Ayotl. One of his kinsmen, probably feeling himself impotent against the actual slayers, revenged himself by killing one of the three women from Orekw, whom he held responsible because it was on their account that his relative had become involved in the quarrel which resulted in his death. This act, of course, meant war between Orekw and Ko'otep. The two parties met several times to negotiate the difficulty before they succeeded. On each occasion some one became excited and fighting commenced over again. Several men were wounded in these skirmishes, but no one was killed. In the final settlement one of the two surviving Orekw women returned to her home, and the other was married by a housemate of the man who had lost his life through championing her cause.

Other wars were waged between Wetlkwau and Ho'opeu; between Rekwoi, aided by Oketo and Tsurau, against the Tolowa of Smith River; and by Weitspus, as an ally of the Karok of Orleans, against the Hupa and Chilula.

CHAPTER 3.

THE YUOK: RELIGION.

Great dances; 53; costume and steps, 55; the dances at Weitspus, 57; the Kepel Dam dance, 58; the Jumping dance at Pekwan, 60; dances at the mouth of the river, 60; dances on the coast, 61; the brush dance, 61; the modern Ghost dance, 62; shamanism, 63; disease and witchcraft, 66; special classes of shamans, 67; taboos, 68; formulas, 69; mythology, 73; calendar, 74.

GREAT DANCES.

The major ceremonies of the Yuok reveal the following qualities:

1. The motive is to renew or maintain the established world. This purpose includes bountiful wild crops, abundance of salmon, and the prevention of famine, earthquakes, and flood. To a greater or less extent, the expression of these objects takes on the character of a new year's rite. This is particularly plain in the first salmon ceremony at Wetlkwau and the fish dam building at Kepel. Other ceremonies reveal the motive less outspokenly, but all those of the Karok and most of those of the Hupa are distinct world renovation or first fruits rituals; and the equation by all three tribes of the ceremonies of direct with those of indirect new year's type confirms the interpretation. Most of the rites are made in September or October, the remainder about April.

2. The esoteric portion of the ceremony is the recitation of a long formula, narrating, mostly in dialogue, the establishment of the ceremony by spirits of prehuman race and its immediate beneficial effect. This formula is spoken in sections before various rocks or spots that mark the abode of these spirits. The reciter is an old man, usually accompanied by an assistant; any prescribed symbolic acts are performed by them alone. They fast and otherwise refrain from ordinary occupation; inhabit a house sanctified by tradition for this purpose; and spend a number of nights in the associated sweat house, sometimes in the company of several men who also observe restrictions, though they do not directly participate in the acts of magic or recitation. The only offering made is of small quantities of angelica root thrown into the fire, or of tobacco.

3. After the recitation of the formula, or the major portion, a dance begins, and goes on every afternoon, or morning and after-

noon, for 5, 10, or more days. The regalia are of forms strictly standardized by custom, but are wholly unsymbolical and in no sense regarded as sacred. They comprise the most valuable things in the world known to the Yurok—all their great treasures, in fact, except dentalium shells; and the largest obsidian and flint blades, and whitest deerskins, far outvalue any of their money, while the bands of woodpecker scalps are each worth more than a string of the largest shells. The dances are therefore the one occasion on which the wealthy can make public display of the property on which their position in the world depends; while the entertainment of visitors from far and near is a burden they are reluctant and yet proud to bear. Any man can dance: the lesser regalia are often intrusted to boys. The singers are those noted for their ability, and constantly compose new songs, although the character of the melodies for each type of dance is so uniform that the novel improvisations prove to be little but minor variations of one theme, or of a set of similar themes cast in one rigid style. Women watch but never dance. The valuables are not only those of the home town, but of the whole river, or of long stretches of it. Men carry their treasures far, and when they are responsible for a dance, receive reciprocation from those whose dances they have aided.

4. The dances are of two kinds, known to the Americans as White Deerskin and Jumping dance. In some spots only the latter is made; wherever the Deerskin dance is made, it can be followed also by a Jumping dance. In both, the dancers stand in a line abreast facing the audience of men, women, and children, and some glowing embers by which sits the formula reciter with angelica incense in his hand. The chief singer is in the middle of the line, with an assistant on each side; the remainder of the rank form a sort of chorus that adds little but occasional monotone grunts or shouts. They sway or swing the objects they hold in time to the step or leap which constitutes the dance.

5. The localization of these ceremonies is extreme. The formulas abound in place names. They are spoken at a series of places in and about the village which are exactly prescribed. The sacred house and sweat house of each ceremony are believed to have stood since the time when there were no men in the world: the planks, it is true, are replaced, but the structures occupy the identical spot. The dance ground itself is always the same; and when a dance moves from village to village or hillside, it is in invariable sequence. The selection of the places that enter into the ceremonies is traditionally arbitrary. It is true that the largest villages are the ones in which dances are held, and that some of the spots of ritual are landmarks; but there is no appearance of anything symbolic or inherently re-

ligious in their choices. The places are usually not prominent in myth, and it is evidently the fact that the dance is made at a particular site that has caused the nameless and colorless spirit referred to in the formula to be associated with it, not the reverse. It is the locality that has ceremonial preeminent sanctity to the Yurok. Elsewhere in California the Indian thinks first of his spirit or god and his characteristics or history; if a certain spot counts at all, it is because of its connection with the deity. There is something strangely old world and un-American in the Yurok attitude, a reminiscence of high places and fanes and hallowed groves.

6. The dances are conducted with a distinct attempt at climactic effect. On the first days they are brief and the property carried is inconsiderable. Gradually they grow in duration, intensity, and splendor. The famous treasures begin to appear only toward the last day: the most priceless of all are reserved for the final appearance of that day. The number of dancers, the vehemence of their motions, the loudness of the songs, the crowd of spectators, increase similarly; even on each day of the series, an accumulation is noticeable. The performances are always conducted by competing parties. Each of these represents a village—the home town and from one to five of those in the vicinity. These match and outdo one another, as the rich man of each village gradually hands over more and more of his own and his followers' and friends' valuables to the dancers to display.

The gradual unfolding of the ceremonies is illustrated by the progress of the Weitspus Jumping dance on its way uphill. At the first stop, on one occasion, 7 dancers, mostly boys, stood in line, and the songs continued for about 14 leaps. Only two dancers wore woodpecker scalp headbands. Gradually the dancers became more numerous, the boys disappeared, the songs lengthened, the headbands became 5, then 6, then 9; until, at the summit, 16 men, each with a standard band, danced to songs of nearly 40 leaps.

Such is the character of the great ceremonies.

All ceremonies are likely to have been annual in the old days, but for many years the custom has been to hold them only in alternate years at each locality. Those on the coast have not been performed in a long time, and of late even the river dances have become very irregular.

Opyuweg is the name the Yurok apply to any form of major dance, and to that only: the "brush" dance is *umeleyek* or *worero*, the war dance *wertliker-ermer*, the shaman's dance *remohpo*. The Jumping dance is sometimes called *wonikulego*' but this is a descriptive term: "they leap up." The Karok new year's rites at Katimin and Orleans are named *welaitek* by the Yurok, the one at Amaikiara *upuntek*, that of the Hupa at Takimitlding *uplopu*.

COSTUME AND STEPS.

The Deerskin dancers wear aprons of civet cat or a deer-hide blanket about the waist, masses of dentalium necklaces, and forehead bands of wolf fur that shade the eyes. From the head rises a stick on which are fastened

two or four black and white eagle or condor feathers, so put together as to look like a single feather of enormous length, its quill covered with woodpecker scalp; or, three slender rods of sinew, scarlet with attached bits of scalp, rise from the stick. The dancers also hold poles on which are white, light gray, black, or mottled deerskins, the heads stuffed, the ears, mouths, throats, and false tongues decorated with woodpecker scalps, the hide of the body and legs hanging loose. A slightly swaying row of these skins looks really splendid. The singer in the center of the line, and his two assistants, add to the costume of the others a light net, reaching from the forehead to the middle of the shoulders and terminating in a fringe of feathers. Their apron is always of civet-cat skins. The step of the entire row is merely a short stamp with one foot. At each end of the line and in front of it is a dancer who carries an obsidian blade instead of a deerskin. Over his wolf-fur forehead band is a strap from which project like hooks half a dozen or more curve-cut canine teeth of sea lions. From the head hangs down a long, close-woven or crocheted net, painted in diamonds or triangles, and feather fringed. A double deerskin blanket passes over one shoulder and covers part of the body; or is replaced by an apron of civet or raccoon skins. Under the left arm is a fur quiver. These two dancers advance and pass each other in front of the row of deerskins several times during each song, crouching, blowing a whistle, and holding their obsidians out conspicuously. In the final drama of the ceremony they may number four instead of two. All the dancers are painted with a few thin lines of soot across the cheeks or down the shoulders and arms; or the jaw is blackened, or the chin striped. The painting is quite variable according to individual, and decorative, not symbolic.

The Jumping dance varies between two steps, which are never changed while a song is in progress. In the first the hand holding a dancing basket is raised, then swung down and the knees bent until the fingers touch the ground, whereupon the dancer hops about half a foot into the air. In the second form of dance one foot is stamped violently as the basket descends. The drop or stamp coincides with the beat of the music; the leap itself is therefore begun at the end of a bar of song.

The principal ornament worn in this dance is a buckskin band, tied over the forehead with the ends flapping. Its central portion is carefully covered with 50 large woodpecker scalps, and bordered with lines of other feathers and a strip of white fur from a deer belly. Before the dance reaches its height, this band is often replaced by a stuffed head ring of skin, to which about five large woodpecker scalps are glued and sewed with sinew. Either headdress is topped by a long white plume on a stick. From the neck hang masses of dentalium beads; about the hips is folded a double deerskin blanket, the fur side inward. In one hand is a cylindrical basket, slit along one side. This has no utilitarian prototype, nor do the Yurok put anything but grass stuffing into it or attach any symbolic association to it. This basket, *ego'or*, suggests in its shape an enlarged native money box; but the Yurok do not see the resemblance. Face and body paint is slight, as in the Deerskin dance.

Not one of the ornaments worn or carried in either of the two ceremonies appears to have the least mythological or ritualistic significance. All the dress is standard, but by meaningless custom alone. Also, not a single one of the numerous ornaments is in use among any of the California tribes except the few adjacent to the Yurok who practice the identical ceremonies. The woodpecker scalp bands alone have some analogues in the lower Sacramento Valley, where belts and headpieces of the type appear in the Kuksu ceremonies. These seem, however, to have been often made on a close network, instead of buck-

skin, and when intended for headwear to have been broad in the middle and tapering toward the ends. One such specimen of this shape has been found among the Hupa, only a few miles from Weitspus; but its history is unknown, and it may either represent an ancient type or be a traded article. Outside of the partial similarity of these bands, there is no specific resemblance between the northwestern regalia and those of central and southern California. Whether the same uniqueness applies also toward Oregon is not known.

THE DANCES AT WEITSPUS.

The Deerskin dance at Weitspus comes in autumn, and is held on a little terrace facing the village (fig. 2). It lasts 12 to 16 days, according to the number of visitors present, their requests, and the quantity of treasures they bring. There is a short dance late each morning, another before sunset. By the last day the evening dance has grown to occupy most of the afternoon. Wahsekw, Loolego, Pekwututl, and Weitspus equipped the competing parties of dancers in the old days. The concluding dance was formerly made in two large canoes that crossed the river from Pekwututl to Weitspus.

The Jumping dance at Weitspus lasts two days. The formula reciter, followed by a girl assistant or wood gatherer, prays and makes offering, beginning early in the morning at three rocks or bushes in the village, then at five on the way up the mountain Kewet, at a ninth spot near the summit, at a tenth on top, which subsequently serves as a dressing place, and at an eleventh, under a venerated cedar, where a fire is kindled and the dances of the remainder of the afternoon and next day are held. The people follow him up at respectful distance, breakfastless. There is no dancing in the village. At the fourth to eighth halts, small groups of men and boys dance in line to three songs. At the ninth and tenth stops, a larger number of men dance in a circle; under the sacred tree they dance to three songs in a circle and then to three in line. All the way up, the older people occasionally weep as they think of their dead of long ago who used to come with them to these cherished spots; and each man's and woman's wish is to be similarly remembered after he or she is gone. When the tree is finally reached and the dance reaches its height, there is an outburst of wailing: the song and lamentations, the brilliance of the ornaments, and the streaming tears, make an impressive scene. Then everyone, hungry and tired, goes to eat and relax amid merriment.

In the afternoon the village parties begin to dance against each other, and visitors from a distance arrive. Wahsekw has made its own way up the mountain and now endeavors to surpass Weitspus. As it grows dark the dancing ends, and the people camp for the night.

The next day dancing is resumed. The line grows in length, more and more of the gleaming headbands are produced, until in the afternoon the ceremony comes to a magnificent climax of half an hour with hundreds of spectators weeping aloud. Then all pack up and journey well satisfied back to Weitspus.

Here is a case of Indian allegation versus action.

The Deerskin dance at Weitspus is usually stated to continue from 12 to 16 days. In 1901 it commenced on September 3 and ended 18 days later, on September 20, in a great quarrel. Too many old men had saved out their most precious obsidians for the final appearance at the end of the afternoon, no one would withdraw, the altercation soon developed recriminations, old jealousies were awakened, all the men present took sides and participated in the argument, and the end was that everyone wrapped up his regalia and went away. Thus the climax of the dance never came off. The Jumping dance was announced for two days later, and most of the visitors went home to stow away their deerskin ornaments and bring those for the Jumping dance—ostensibly. Actually most of them were much embittered, and there was a general feeling that the Jumping dance would not be held. On September 21 it rained, and the old man who knew the sacred formula for both dances announced that the weather would prevent the dance. The Indian opinion was that he was still angry. He was a poor man, but had become involved in the quarrel.

On September 26 an American visitor attempted to get the dance under way, but the old man refused to take part "because a moon had now gone by since the Deerskin dance begun." Really only 24 days had elapsed. On September 30 he alleged the same reason with more accuracy; if it rained the following day the dance would have to be definitely omitted for the year, because of the interval of a moon. The American persisted, however, and the old formula speaker remaining obdurate, another man who had several times assisted him volunteered to act. He did not know the entire formula, he admitted, but enough of the essential parts to answer. He fixed the payment due him at \$4 in American money. This was regarded by the Indians as a reasonable amount, but no one wished to contribute now. Some tentative pledges of small amount were made, however, and by dint of persistent dunning and soliciting, with an addition by himself, the interested outsider after several days succeeded in bringing together the whole of the stipulated sum. As soon as this was handed to the assistant, the native attitude changed to one of interest. The new formula reciter began his preparation. At once his chief decided to officiate in person, and claimed the fee. Part of this having been already spent by the substitute at the trader's store for flour and a shirt, the old man accepted the balance and next morning was at his task. The dancers followed him, and about noon, when the assemblage reached the summit, all differences seemed to have been forgotten and the ceremony developed undisturbed to the end of the next day.

THE KEPEL DAM DANCE.

Perhaps the most famous of all ceremonies among the Yurok is the Deerskin dance associated with the building of a salmon dam at Kepel in early autumn. The dam is made at the upstream edge of that village; the sacred house and sweat house of the ceremony stand in adjoining Sa'a; most of the dancing is in villages downstream.

The ceremony is in charge of the usual formulist, who, with an assistant, restricts himself to a diet of thin acorn gruel and visits many hallowed spots for 10 days. For gathering firewood he has a woman assistant. During the 10 days a band of at least 60 men—a smaller number would be unable to complete the work in time—assemble the posts, stakes, and withes and erect the weir. These materials are obtained in specified ways at designated spots, and, with all the sanctity of the occasion, custom provides many occasions for merrymaking. The weir is built in 10 named sections by as many companies of men. Each group leaves an entrance, behind which is an inclosure: when salmon have run into this, the gate is shut and the fish easily taken out with nets. Comic interludes increase toward the end. On the last day the formulist's assistant, wearing a beard and personating a Karok who has eloped with another man's wife, pretends to be fleeing vengeance and allows his canoe to be capsized in midstream. He swims to Kepel, crouches, and the mass of men, armed with long poles, clash them together over his head and lay them on his back until he is almost covered from sight. This episode is repeated with but little improvised change from year to year, but is received by the multitude with appreciation that grows with familiarity. The end of the dam building is a period of freedom. Jokes, ridicule, and abuse run riot; sentiment forbids offense; and as night comes, lovers' passions are inflamed.

The formula for this ceremony is imperfectly known; but many of the actions, as well as the purpose of the dam, accentuate its tenor as a new year's and world establishing rite.

Before the great weir is finished, a sort of imitation Deerskin dance is held, with long flat cobbles to represent obsidian blades, by the river at Murekw, just downstream. The night of the completion, and the next day, the proper Deerskin dance is danced at Kepel. A few days pass; and then the people gather again about Wohtek-Wohkero, camping in groups, and dancing, for 10, 12, 14, or 16 days, at a spot just downstream from the village, with Wohtek, Ko'otep, Pekwan, Sregon, Murekw, and Kepel-Sa'a competing. After another "ten days," the Jumping dance is made, for a night and a day, at Murekw, or in alternate years on the hill above Merip. Other accounts place the main Deerskin dance at Wohtek, and alternate a brief supplementary Deerskin dance at Halega'u, downstream from Wohkero, with the Murekw and Merip Jumping dances.

Kepel-Sa'a has not been a large community in historic times. Its selection for the dam is no doubt due to a favorable condition of the river bed. The associated dancing is mostly held at larger villages. That at Wohtek-Wohkero may be suspected to have taken place at Ko'otep before the ruination of this town by the floods of 1861-62. Myths tell how the *woge* spirits were about to institute the dam at Turip, and how, when it was moved to Kepel, the Turip people, coming over the hills to take back their rights by force, were turned into redwood trees still visible from Kepel—the farthest of the species upstream. The lie of river and hills at the two places is very similar, and this resemblance to the eye, with the outposts at Kepel of the trees that dominate the view at

Turip, may be the sole foundation of the tale; or a dam at Turip may have been a former actuality.

The dam and dance have not been made for many years, primarily because enough men can no longer be assembled for the construction, but in native opinion because no one can recite the entire formula. A woman married in Meta is reputed to be the only person who knows certain passages, and she will not teach them. She has lost her parents, all her brothers and sisters, and 10 children, it is said. The ceremony would be for the health of the world; and in her own grief, she wishes no one else to be happy among the undiminished array of all his kin. So tell the Yurok; and while they regret her sentiment, they seem to find it natural and scarcely disapprove.

THE JUMPING DANCE AT PEKWAN.

The Pekwan ceremony is a Jumping dance, partly held in a large house. For 10 days the formulist—with a number of elderly companions, women as well as men, the *tell*—fasts, restrains himself, and spends his time in the sacred house and sweat house. It appears that this group of persons sings much of the time.¹ The last night they remain awake in the sweat house. The next day the people dance by the river, and in the afternoon or evening go up into the sacred house, whose roof and walls have been removed to give a view inside. They dance first before it, then in the interior, which, however, accommodates only about 10 dancers. After this they dance at four spots in or by the village, proceeding in upstream order from one to the other. The competing parties represent Wohtek, Sregon, Murekw, and Pekwan. This continues for two days, after which the old people again sing in the sweat house one night, beating the walls with sticks. This is an early autumn ceremony.

DANCES AT THE MOUTH OF THE RIVER.

Rekwoi had a similar Jumping dance, held partly in a sacred house. The climax was a dance made in two large canoes, which approached across the broad lagoon abreast. The season for the ceremony seems to have been autumn.

Wetlkwau, on the opposite side of the mouth, formerly had a more venerated rite. There was a sacred house and sweat house, and the formulist kept a pipe that was regarded with the greatest fear. Each year, it may be presumed about April, he and his assistant proceeded to the very debouch of the river and speared the first salmon. This was cooked on the beach and the assistant attempted to eat it entire. Should he ever succeed it was thought that he would become extremely wealthy. Some fragments of the formula that are known tell of the coming of the great salmon leader from the miraculous country across the ocean.

¹ More on the *tell* is to be found in Lucy Thompson (see Bibliography).

Wetlkwau also made a Deerskin dance, which, with the shriveling of the village, has long been abandoned. It was evidently an aftermath to the salmon rite. In this the competing towns were Turip, Rekwoi, and Wetlkwau. On the last day they danced across the lagoon in boats and finished on the hill above Rekwoi. No one was allowed to witness the boat dance whose father's payment for his mother had not included either a canoe or one of the large Hudson Bay Co. knives, which before 1850 were extremely valuable. Sometimes at Wetlkwau the final dance above Rekwoi was omitted and a separate Jumping dance substituted. This is said to have been held 20 miles upstream on the hill back of Pekwan.

DANCES ON THE COAST.

Orekw, at the mouth of Redwood Creek, held a Jumping dance associated with a traditional house.

Another Jumping dance was made at Oketo, or more exactly at the main village of Opyuweg, "they dance," on Big Lagoon, Oketo. This included dancing indoors and in boats on the lagoon. It must have been an important ceremony, since it lasted 10 to 12 days. The formula is reported similar to that spoken at Rekwoi, and different from those of Orekw and Pekwan.

It is rather remarkable that Tsurau at Trinidad, sometimes reckoned the largest Coast Yurok village, possessed no dance. The Coast Yurok frequented a Jumping dance made by the Wiyot on Mad River, and sometimes went to a ceremony of another type made by the Wiyot of Olog on Humboldt Bay. They declare that these farther Wiyot rarely visited them at the Oketo dance, except one famous rich man named Munters, "white," to whom story accredits 10 wives who all drowned at once on Humboldt Bay.

THE BRUSH DANCE.

A minor dance is called the "brush dance" by the Americans. It is ostensibly held to cure an ailing child. As a matter of fact it is often made when the younger men are desirous of a holiday. Whether, however, the initiative comes from an alarmed mother or from those who wish to enjoy themselves, the sick child must be provided. It is kept at the dance all night, and the woman who recites the formula speaks it for the child's benefit. The dance is held in the living house, but the roof and most of the walls of this are taken down for the occasion. On the first night young men dance about the fire for a few hours. They wear no ornaments but hold boughs of foliage up before them. The following night is an intermission, and on the third or fourth night the dance proper takes place from dark

until dawn. The regalia are somewhat variable, especially as regards headdresses, but represent no great value. Arrow-filled quivers and sometimes small obsidian blades mounted on sticks are carried. All ornaments of considerable intrinsic value are reserved for the two great dances. The participants enter the house in competitive parties, each dancing to three songs on every appearance. Two formulas are in use for the dance, or, it would be better to say, two types of ceremonial action in connection with the formula, since the latter is always somewhat different according to the individual reciting it. The *umeleyek* formula is spoken on the first and third nights; the alternative *worero*, which is considered stronger, on the first and fourth, and is followed by the waving of pitch-pine brands over the child.

THE MODERN GHOST DANCE.

The first Ghost dance movement that originated among the northern Paiute reached the Yurok about 1872 via the Shasta, Karok, and Tolowa, but endured only a short time, and vanished with scarcely any effect. It seems that groups like the southern Wintun and Pomo, whose institutions had long been suffering under Spanish and American contact, embodied considerable elements of Ghost dance doctrine into what remained of their religion.

From the Shasta of Scott River the Ghost dance spread to the Happy Camp Karok. Report traveled, and both Tolowa and lower Karok came to see and learned to believe. A woman of Amaikiara seems to have been the first to dream among the latter. Many Yurok were attracted and came to Amaikiara with their dance ornaments. Perhaps they were shocked at the announcement that when the great change came these precious things would vanish. At any rate, most of them grew tired and went home. The Hupa either never came in numbers or failed to be seriously influenced.

The dance actually reached the Yurok from the Tolowa. An old man from Burnt Ranch instituted it at Sta'awin, above Turip, where he came to visit a Yurok nephew. After his return, the nephew began to dream. The dance was then taken down the coast to Big Lagoon, and up the river to Ko'otep, then not yet resettled after the flood of 1862. This was in the summer after the Karok had become converted. The Yurok prophet and his Tolowa uncle announced that the dance must be held also at Weitspus if the dead of that vicinity were to return; but the movement waned before they could effect their purpose. There seem always to have been a number of Yurok who remained unconvinced, and none, except the immediate family of the dreamer, on whose minds the doctrine had more than a passing hold.

The beliefs and practices sound as if taken from a description of the Dakota 20 years later. The world was to end; the dead would return, true converts among the living survive, disbelievers turn to stone. The new world was to be sexless; and in preparation men and women were instructed to bathe together without shame, and husband and wife to ignore each other. All planking was removed from graves to facilitate the resurrection. The prophets visited the dead in dreams and carried messages from them—once even that they would appear the next day. The dancers, men, women, and children, formed concentric circles, revolving in opposite directions.

Local custom, however, colored the doctrine at several points. Dogs were killed. All valuables would turn to rubbish, it was proclaimed, unless exposed in the dance. When there was dancing in the morning, breakfast must be deferred until after it, as in old native ceremonies. Sometimes the dance took place indoors. The officiating prophet remained aloof from the crowd in a house of his own, like the formula reciter of a typical Yurok rite.

SHAMANISM.

A Yurok woman goes through the following stages to become a shaman:

First she dreams of a dead person, usually if not always a shaman, who puts into her body a "pain." The possession of this animate object in her person is what essentially constitutes her a shaman.

Then the *remohpo*, or "doctor dance," is made for her in the sweat house for 10 days, during which she fasts and dances severely under the direction of older shamans. The pain is thereby induced to leave her body, is exhibited, and is then reswallowed by her. The purpose of this dance is to give the novice control of her "pain."

After this, in summer, she goes to a "seat" or little monument on a mountain top, where she spends one night in speaking or dancing. The function of this act is obscure.

After her return she usually goes through the *remohpo* once more.

Then follows the *ukwerhkwer teilogitl*, a dance around a large hot fire, to "cook the pains." The idea perhaps is that the pains are rendered more pliable or amenable to her will. This rite includes a formula. The shaman is now ready to practice her profession.

The Yurok accept as a self-evident fact, which they do not attempt to explain, their conviction that possession of one or more pains enables the carrier to see and extract similar pains from people who have been made sick by their internal presence. The emphasis, in their ideas, is wholly on the "pain." The spirit enters into belief only to bestow the first pain, and seems not to be considered active thereafter. Moreover, the spirit is the spirit of a human being, sometimes of an ancestor, in human form; not of an

animal or mountain or lake, rarely of a disembodied divinity. The customary North American concept of the "guardian spirit" is therefore reduced to a minimum among the Yurok. The pain, on the other hand, as a material though animate object operating homeopathically, as it were, and therefore sympathetically, brings Yurok shamanism a step nearer magic than is usual.

This is a native summary of a shaman's inception:

A woman on her way for firewood perhaps begins to think of the dead who formerly lived in her town, notes how grass-grown and dim the path is, clears it of brush, and weeps in recollection. Not long after she dreams. A person says to her: "I pity you as you always cry when you gather wood. You should become a shaman. Eat this!" The woman, not knowing what it is, eats what is offered. She wakes and realizes that what she thought reality was a dream. The base of her sternum hurts; it is a pain growing in her. But perhaps when she is on the path again, she may decide: "Well, I dreamed it so. I will try." Then she tells them in the house of her experience, and her relatives take her into the sweat house and make the *remohpo* for her for 10 days, so she will acquire (her power) readily. The purpose of the dance is to make the pain which she dreamed to have been put into her come out of her body. Perhaps it is displayed on a flat basket. Then she drinks it again. Later, in summer, in the seventh month, a male relative accompanies her to a stone chair (*tsektseyä*) on a mountain. There are such on Kewet, the mountain behind Weitspus, and on other ridges. These seats are good for other things also. They can be used to acquire luck in gambling or power of bewitching people; but they can not be used ignorantly. One must know how long to fast, how to offer tobacco, what formula to speak. The seats have been there since the time of the *woge*. The shaman dances by a fire near the chair, and speaks things that are not known to other people. Her kinsman watches that she does herself no harm. In the morning he leads her back. They are already dancing in the sweat house. At last she enters; and then for 10 days the *remohpo* goes on again. Men sing for her; when she is exhausted, one of her relatives dances for her until she recovers. This is the only time a woman enters the sweat house (*sic*; but see below).

According to further accounts, a shaman becomes a shaman by dreaming of a dead shaman, who gives her the initial power. Often a woman seeks to be a shaman. At every opportunity she cries and cries, until finally the desired dream comes to her.

A man who knew the formula and ritual for the "pain cooking" after the second *remohpo* described it as follows:

Two kinsmen of the new shaman bring four limbs of pitch-pine wood and four large slabs of bark from a mountain. A fire is made with these eight pieces of fuel in the house after the roof has been taken off. The novice has been painted, in the sweat house, with black vertical stripes. She now joins the people in the house, who dance in a circle alternately to the right and left about the fire, wearing fir branches in their belts to shield them from the heat. When the ordeal becomes unendurable, they pour over themselves a little water which the ritualist has prepared with herb in it. There is a separate vessel for the novice. Spectators look on from outside. The dancing continues without pause until the fire is wholly consumed. Then some one pretends illness, and the novice seizes and begins to suck him as if to extract his pain. Sometimes, too, a woman falls down during the dance, seized with a pain

which will ultimately make her a shaman. Some older practitioner then at once diagnoses her condition. This pain-cooking rite is not indispensable, but novices like to undergo it because it increases their power and enables them to earn more in their profession. The ritualist is in charge because he knows the necessary formula and herbs. He is generally not a shaman himself.

The following is an account given by a shaman of repute of her acquisition of her powers:

I began with a dream. At that time I was already married at Sregon. In the dream I was on Bald Hills. There I met a Chilula man who fed me deer meat which was black with blood. I did not know the man, but he was a short-nosed person. I had this dream in autumn, after we had gathered acorns.

In the morning I was ill. A doctor was called in to treat me and diagnosed my case. Then I went to the sweat house to dance for 10 nights. This whole time I did not eat. Once I danced until I became unconscious. They carried me into the living house. When I revived I climbed up the framework of poles for drying fish, escaped through the smoke hole, ran to another sweat house, and began to dance there.

On the tenth day, while I was dancing, I obtained control of my first "pain." It came out of my mouth looking like a salmon liver, and as I held it in my hands blood dripped from it to the ground. This is what I had seen in my dream on Bald Hills. I then thought that it was merely venison. It was when I ate the venison that the pain entered my body.

On the eleventh day I began to eat again, but only a little.

All that winter I went daily high up on the ridge to gather sweat-house wood and each night I spent in the sweat house. All this time I drank no water. Sometimes I walked along the river, put pebbles into my mouth and spat them out. Then I said to myself: "When I am a doctor I shall suck and the pains will come into my mouth as cool as these stones. I shall be paid for that." When day broke I would face the door of the sweat house and say: "A long dentalium is looking in at me." When I went up to gather wood, I kept saying: "The dentalium has gone before me; I see its tracks." When I had filled my basket with the wood, I said: "That large dentalium, the one I am carrying, is very heavy." When I swept the platform before the sweat house clean with a branch, I said: "I see dentalia. I see dentalia. I am sweeping them to both sides of me." So whatever I did I spoke of money constantly.

My sleeping place in the sweat house was *atserger*. This is the proper place for a doctor. I was not alone in the sweat house. Men were present to watch, for fear I might lose my mind and do myself some harm.

Thus, once while the others slept, I dreamed I saw an *uma'a* coming. One of his legs was straight, the other bent at the knee, and he walked on this knee as if it were his foot, and had only one eye. Then I shouted, dashed out, and ran down along the river. My male relatives pursued me and brought me back unconscious. Then I danced for three nights more. At this time I received my four largest pains. One of these is blue, one yellowish, another red, and the fourth white. Because I received these in dreaming about the *uma'a* they are the ones with which I cure sickness caused by an *uma'a*.

My smaller pains are whitish and less powerful. It is they that came to me in my first period of training. The pains come and go from my body. I do not always carry them in me. To-day they are inside of me.

Again, not long after, I went to the creek which flows in above Nohtsku'n. I said to myself: "When people are sick, I shall cure them if they pay me

enough." Then I heard singing in the gully. That same song I now sing in doctoring, but only if I am paid sufficiently. After this I danced again for 10 days.

In my dancing I could see various pains flying above the heads of the people. Then I became beyond control trying to catch them. Some of the pains were very hard to drive away. They kept coming back, hovering over certain men. Such men were likely to be sick soon. Gradually I obtained more control of my pains, until finally I could take them out of myself, lay them in a basket, set this at the opposite end of the sweat house, and then swallow them from where I stood. All this time I drank no water, gathered firewood for the sweat house, slept in this, and constantly spoke to myself of dentallum money. Thus I did for nearly two years. Then I began to be ready to cure. I worked hard and long at my training because I wished to be the best doctor of all. During all this time, if I slept in the house at all, I put angelica root at the four corners of the fireplace and also threw it into the blaze. I would say: "This angelica comes from the middle of the sky. There the dentalia and woodpecker scalps eat its leaves. That is why it is so withered." Then I inhaled the smoke of the burning root. Thus the dentalia would come to the house in which I was. My sweating and refraining from water were not for the entire two years, but only for 10 days at a time again and again. At such periods I would also gash myself and rub in young fern fronds.

In the seventh moon, after nearly two years, I stopped my training. Then the *ukwerhkwer teilogitl* formula was made for me and we danced about the fire. This cooked me, cooked my pains in me, and after this I was done and did not train any more.

When I am summoned to a patient I smoke and say to myself: "I wish you to become well because I like what they are paying me." If the patient dies, I must return the payment. Then I begin to doctor. After I have danced a long time I can see all the pains in the sick person's body. Sometimes there are things like bulbs growing in a man, and they sprout and flower. These I can see but can not extract. Sometimes there are other pains which I can not remove. Then I refer the sick person to another doctor. But the other doctor may say: "Why does she not suck them out herself? Perhaps she wishes you to die." Sometimes a doctor really wishes to kill people. Then she blows her pains out through her pipe, sending them into the person that she hates.

A shaman is called *kegeior*; the pains, *teinom* or *teilogitl*; *teilek* or *teile'm* is "sick."

DISEASE AND WITCHCRAFT.

The function of shamans is to diagnose in a condition of clairvoyance into which dancing and smoking the pipe has brought them; to manipulate the patient; and to cure by sucking out his pain. They do not ordinarily employ herbs or medicaments, these being reserved as the physical basis of the rituals of which formulas are the central feature. The pipe is the shaman's chief apparatus; she also wears strings of feathers from the two masses of her hair, and a maple-bark skirt. Her song may be learned in her original dream; the words she is said to improvise.

Disease is caused in various ways. The breaking of a taboo or ceremonial regulation often makes illness, but such is perhaps most often treated by another ceremony or a formula.

Shamans themselves make people sick in order to earn fees. They perhaps smoke during the night, then address their pipe, saying: "So and so, I wish you to become ill." When called to treat such a man, they are likely to leave at least one pain in him, that after this has grown they may be summoned with another fee.

Then there are people who have learned or bought a mysterious thing called *uma'a*, with which they destroy those whom they envy or hate. The possessors of such charms seem also to be called *uma'a*. Sometimes this thing is put on the end of a little arrow which is shot, at night from a distance, from a miniature bow at the house of the victim, one of whose inmates soon sickens. At times an *uma'a* can be seen at night, traveling on his nefarious errand. He may be carrying his charm concealed under his arm, but the thing is strong, breaks out, and is visible as sparks or a bluish light that shoots or rises and falls. If this enter a man, he is likely to sleep into his death. Some shamans, however, can suck it out.

Another cause of disease is a sort of poison called *ohpok*, compounded of crushed dog flesh, salamander larva, frog, or rattlesnake. This is put into the victim's food, care being taken that it reaches only him, and that any residue is destroyed. For a whole year he continues in apparent health; but when the same season comes around, he sickens, as the poison grows in him. Strong shamans can see and extract the *ohpok* by the customary means.

Upunamitl is a greatly dreaded swelling or choking of organs, due to an internal growth, but is perhaps to be interpreted as being to the Yurok a physiological process, since it appears itself to be caused by witchcraft, breach of taboo, and perhaps other influences.

The Yurok also fear what they call *sa'atl* or *sa'aitl*, dwarf-like spirits who haunt overgrown spots in creeks, and the like. Sometimes a bark is heard from such a place when no dog is about. Then one stops his ears with his fingers and runs off. Nor is water drunk from such streams. The word *sa'aitl* is probably connected with *so'o*, "ghost" or "skeleton," and *o-sa'ai-wor*, "his shadow."

SPECIAL CLASSES OF SHAMANS.

Three kinds of specialists among shamans, of whom there is frequent mention with most of the other Indians of California, are unrepresented among the Yurok—grizzly-bear shamans, rattlesnake shamans, and weather shamans. The first class, perhaps, have some remote similarity to the *uma'a* wizards. The functions of the second and third are replaced among the northwestern tribes by the recita-

tion of formulas. This is explicitly stated for rattlesnake bites, and was probably true of weather influencing, if the Yurok concerned themselves with this at all. There were shamans who in their initial dream ate a snake, carried it in their bodies, visible to other shamans, and sucked snakes from their patients; but the disease of which they cured was lunacy, not a bite. There was a shaman at Murekw famous for his ability to handle hot stones and eat living rattlesnakes, and after his death one of his kinsmen continued the practice. Such arduous feats, however, are not characteristic of Yurok shamanism, in which juggling is unimportant; and it is significant that both these individuals were men.

A Yurok man who wishes to be brave and fierce—"mean," the Yurok translate their word *tlmci*—goes at night to a lonely mountain pond, swims, and is then swallowed or taken below the surface by a monster. Traditions relate how such men were sometimes "pitied" and helped by the Thunders, and then became wealthy as well as strong. Most men's ambition did not lie in this direction. This belief is rather closer to the notions of the source of shamanistic power obtaining among most North American Indians, but stands well apart from the typical aspects of Yurok shamanism.

TABOOS.

The Yurok are firmly convinced of the definite immortality of the spirits of the game that they kill. Long ago, they say, the salmon declared, "I shall not be taken. I shall travel as far as the river extends. I shall leave my scales on nets and they will turn into salmon, but I myself shall go by and not be killed."

The old deer tell the young to try the house of such a one. Then one of the young deer lies down in that man's snare and dies. He eats its flesh with parched seed meal as flavoring and acorn gruel. The women sit still during the meal. They do not eat the head. None of the flesh is dropped on the floor, so that it may not be stepped on and carried outdoors by the soles; any scraps are scrupulously gathered and put away. After the meal the hands are carefully washed in a basket or wooden basin, then rubbed with fragrant chewed pepperwood leaves. The meat is served on wooden platters, which are washed only with water in baskets, never in a stream. The deer sees everything. After two days it returns. "How do you like that house?" the elders ask. "I do not like it," it says. "He does not wash his hands, and his women shift their feet while they sit at the meal." Or it answers: "He is good. He acts rightly. Smell my hand." They sniff it, like the pepperwood, and frequently go into that man's snares. So the deer never grow less, however much they are killed, the Yurok insist; and the hunter's success is brought not by his own cunning, but by the favor he can win from his game by respectful treatment.

If the hands are washed in flowing water after a meal of venison, it is thought that the deer is drowned. It is believed that

deer can not abide the whale; the flesh of the two is not eaten together, and whale meat is called "rotten wood" before a hunter in order not to spoil his luck. It is said that the deer dislike houses that seem dead and empty: "I constantly see smoke there, I will go to that house," they are thought to declare.

Salmon, or fish of any kind, are not eaten at the same time with bear meat, grouse eggs, or acorns blackened by prolonged soaking.

The Yurok avoid strange water, and will not drink from the most familiar stream in certain reaches. River water is never taken. A dog, the deadliest of poisons, might have been drowned, or a girl have thrown in an abortion.

Sometimes, after a killing, the slayer would set up a plank on the ridge above his house, cut the end into the rude semblance of a nose, attach a stick as arm, and fasten to this a bow. Then he addressed the figure: "You killed him. Take the evil that his kinsmen are thinking."

Any things connected with the physiology of sex on the one hand and with deer on the other are thought utterly incompatible by the Yurok. The prospective hunter therefore carefully keeps away from his wife, or counteracts the effect by reciting a formula of special potency. Nor does he approach her after a meal of venison or sea-lion flesh, for fear of bringing illness on their child. Such disease can be averted only by public confession after birth.

A number of taboos were enjoined on boatmen while on the ocean. Under no circumstances would they carry a corpse, a dog, or a bearskin, consume food, or speak of a woman as *wentsauks*: instead they called her *megawitl*. Even on the river, travelers could not eat a meal; but if in haste they might carry fire on a layer of earth, heat stones, and then, disembarking, quickly cook. Near Kenek, Merip, and Kepel, there are large stones at the water's edge, in front of which no corpse may pass, according to the injunction of the ancient *woge* spirits who took up their abodes in these rocks. The one near Merip extended his prohibition to women also, who therefore land above or below the huge block and walk inshore of it.

FORMULAS.

A trait of Yurok formulas is that while those devoted to the same end run along closely patterned lines, no two are alike. One man may even know several formulas serving the same purpose. Thus an old man at Orekw has three formulas for releasing from corpse contamination. One, that of *wertspit*, the insect responsible for death, calls on the spirits of only 3 spots; another names 12 localities; the third, 22, beginning far upstream, proceeding to the mouth of the river, then south along the coast, and ending beyond Orekw.

A Weitspus formula serving the same purpose calls on the spirits in 18 rocks. They are:

1. Ayomok, far up the river.
2. At the Karok village Inam.
3. At the Karok village Ashanamkarak. (Pl. 6.)
4. At the Karok village Amaikiara. (Pl. 7.)
5. At Atskergun-hipurayo, a short distance below.
6. At Wetsets, 2 miles above the Karok village Panamenits.
7. At the Karok village at Camp Creek, Yurok Olege'l.
8. At Otsepor, Bluff Creek, in Yurok territory.
9. Houksorekw, in the river, half a mile above Weitspus.
10. Oreuw, opposite Weitspus at Ertlerger. (Fig. 2.)

Here the mourner is washed. The recitation resumes:

11. Otsep, above Kenek.
12. Okegor, at Kenek. (Pl. 4.)
13. Tsekwa, at Merip.
14. Awiger, below Sa'a.
15. The hill at the mouth of Blue Creek.
16. Sa'aitl, at the entrance to the world of the dead.
17. Below Ho'opeu, perhaps at Omenoku.
18. Oregos, a bold column at Rekwoi, at the very mouth of the river. (Pl. 5.)

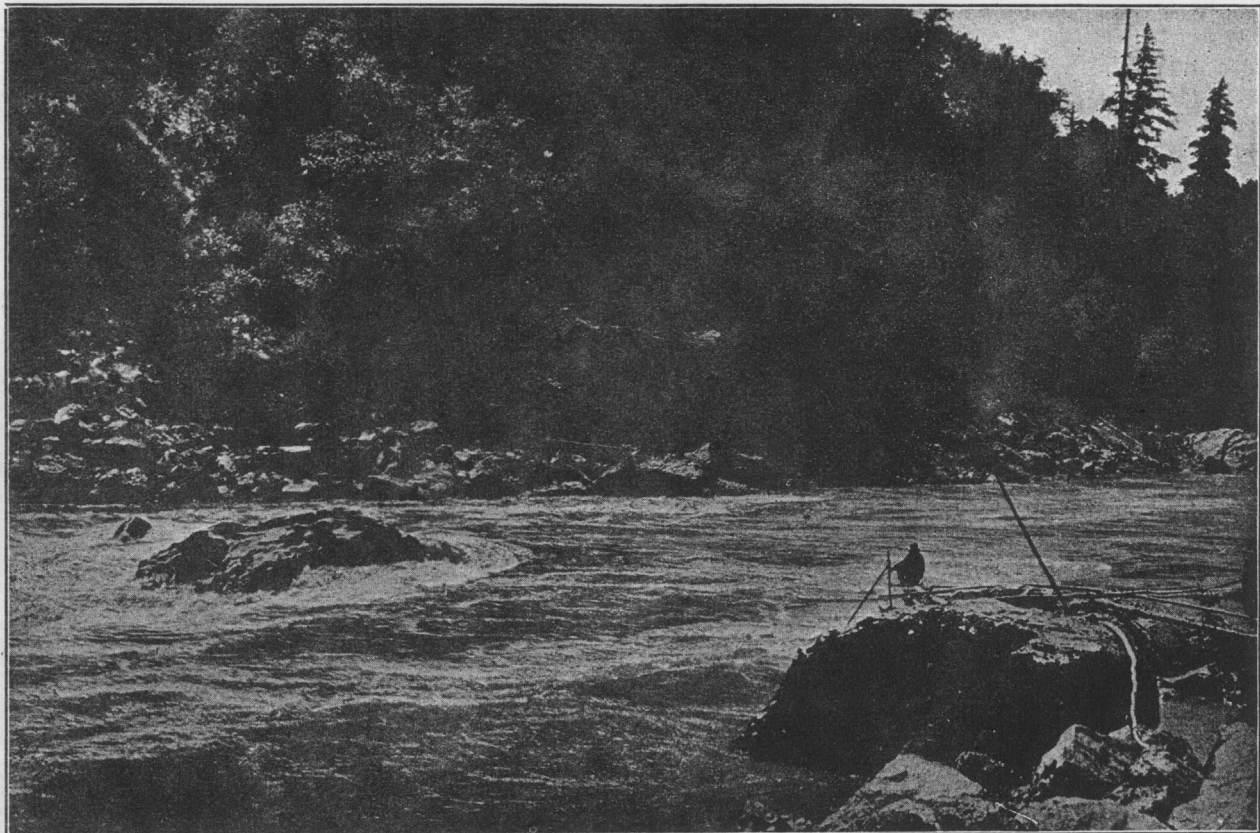
A similar formula belonging to a Rekwoi man names 10 spirits:

1. At the Karok village Kasheguwaiu.
2. At the Karok village Ashanamkarak.
3. At the Karok village Ka'arler at Orleans.
4. At or opposite Weitspus.
5. Okegor at Kenek.
6. Tsekwa at Merip.
7. Merhkwi at Kepel.
8. Awiger below Sa'a.
9. Kemenai at Omenoku.
10. Oregos at Rekwoi.

The spirits in these rocks did not wish human beings to die when "those through whom we die" had their way. The fifth, sixth, and eighth—corresponding to numbers 12, 13, 14 in the preceding list—objected so strongly that they became the ones who refuse to allow a corpse to pass them on the river. The tenth found a plant which makes the mourners' spoiled body good once more.

With these formulas may be compared one of the same character recorded in both the Hupa and Yurok languages from a Hupa woman of Yurok ancestry. It is clear from this instance of translation that the exact sound of the words seems of little moment to the Indians, the sense being the effective means of the formula. This recitation addresses rocks at the following spots on the river bank.

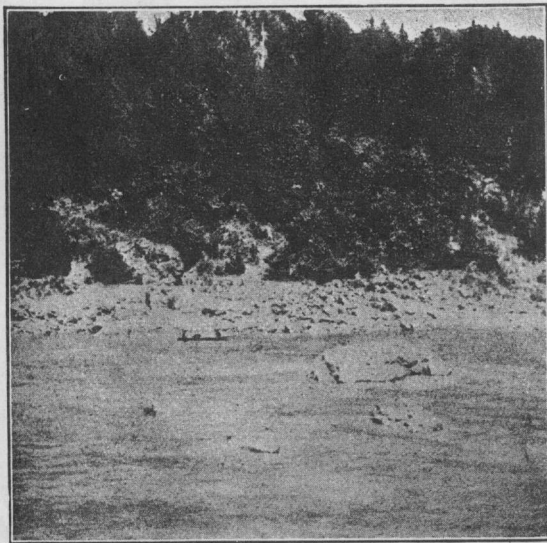
1. Kohtoi, Hupa Haslinding, on the Trinity above Hupa Valley.
2. Below.
3. Petsohiko, Hupa Djishtangading.
4. Ergerits, Hupa Tseyekkehohuhw.
5. Oknutl, Hupa Honsading.



YUROK FISHING FOR SALMON IN KLAMATH RIVER AT KENEK



MOUTH OF KLAMATH WITH PART OF YUROK VILLAGE OF REKWOI AND ROCK OREGOS, ABODE OF SPIRIT THAT PURIFIES FROM CORPSE CONTAMINATION



YUROK CANOE SHOOTING THE RAPIDS AT KENEC

BUREAU OF AMERICAN ETHNOLOGY

YUROK FISHING FOR SALMON IN KLAMATH RIVER AT KENEC

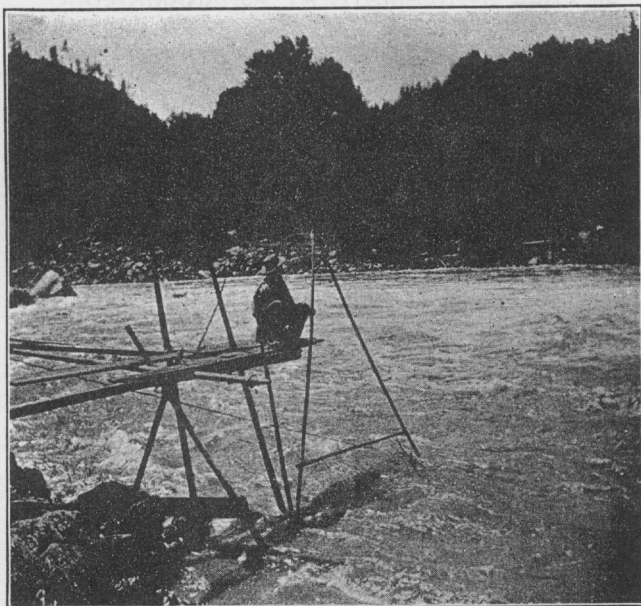
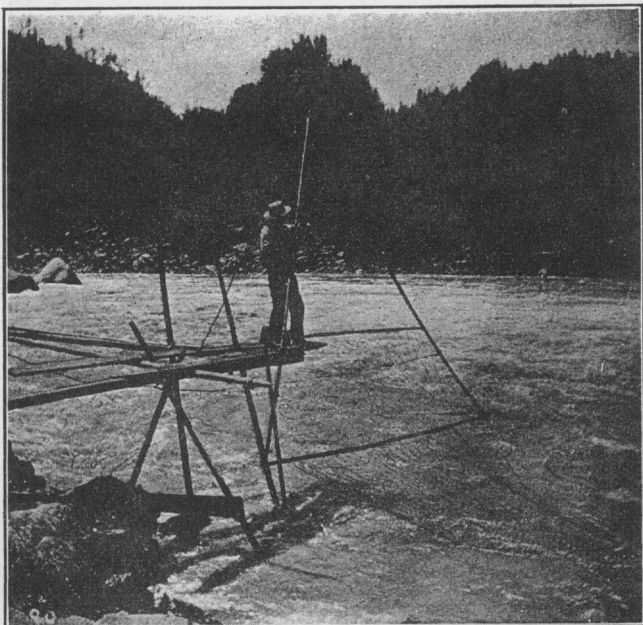
BULLETIN 78 PLATE 5



KAROK FISHING WITH PLUNGE NET AT FOOT OF FALL IN KLAMATH AT ASHANAMKARAK'



ALTAR, AT SAME SETTLEMENT, WHERE FIRE IS KINDLED ANNUALLY IN AMAIKIARA FIRST-SALMON RITE



KAROK FISHING FROM SCAFFOLD OPPOSITE AMAIKIARA

The eddy carries the bag of the net upstream. This is the most common method of taking salmon among the northwestern tribes.

6. Below and opposite.
7. Pekwututl.
8. Merip (compare 6 in the last list).
9. Nohtsku'm.
10. Wetlkwau, at the mouth opposite Rekwoi.
11. Rekwoi-kas, probably the same as Oregos at Rekwoi.

Six of these places are on the Trinity in Hupa territory, 5 among the Yurok on the Klamath. This is the Yurok version. The recorded Hupa original or translation speaks of 10 places, but actually names 12, only 5 of them on the Trinity, the second in the above list being omitted. The 7 in Yurok territory are :

6. Hotuwaihot, Pekwututl.
7. Chwichnaningading.
8. Senongading-tanedjit, Nohtsku'm.
9. Kyuwitleding, Sregon.
10. Kitlweding, Sa'aitl.
11. Tsetcheding, Wetlkwau.
12. Mukanaduwlading, Rekwoi.

It thus appears that the formulas are not absolutely memorized as to content, even the framework of names and places fluctuating somewhat in the mind of the reciter. The change which a formula can undergo in a few generations of transmission is therefore considerable. It seems that the innumerable formulas known among the Yurok and their neighbors fall into a rather limited number of types, in each of which the idea is identical, but the skeleton as well as the precise wording individually different and unstable. Beyond this, there is a marked fundamental similarity of concepts, and even of stock expressions, extending to practically all formulas irrespective of their purpose. For instance, spirits or plants so powerful that dentalia come to them and remain voluntarily under the most adverse circumstances, such as the presence of human bones, are likely to be mentioned in any kind of a formula.

The Yurok-Hupa recitative just mentioned is an example. It begins thus:

"Hahahahaha—I come to you who sit at Kohtoi. You are said to be the wise one. I am thus as it was left for us of the human world. My body frightens human beings. They make a fireplace while I have none. I make my fire alone. I do not eat what they eat. I do not look about the world. My body frightens them. Therefore, I tell you, let your mind be sorry for me."

"Yes," is the spirit's answer, "I saw him running downstream across the river with string about his head. No, I am not the one. I shall tell you who is the wise one, but in return you must leave for me that which makes human beings happy (tobacco). Hurry on to him who sat down opposite Dyishtangading."

The mourner makes the same appeal and receives a similar answer from each of the other spirits, until he repeats his request to the one at the mouth of the river, adding that he has been in vain at nine (*sic*) other places, and at each has been told that another is the really wise one. Then the Rekwoi spirit replies:

"I hear you. Do not be afraid. You shall travel again in the human world. You shall eat what people eat. Where they make a fire, you shall have yours.

You shall look about in the world. Your body will be new. I shall lend you this my herb and with it my medicine. You shall hunt and the deer will lie still for you; and it will be the same with dentalia. Now look, here it (my herb) stands outside my house. When it commences to be dark, it is grown high. And to-morrow in the morning it will be eaten down. Deer will have come to feed on it. Look at this, too, which stands erect behind the fire. Dentalla cut it down. At dawn it has grown up again. It has come to my head that it will be so with you (*i. e.*, you have the medicine, food and riches will seek you as if you had never been contaminated). Take my herb with you. I thought that I would lend it. But there will not be many who will know that (formula) by means of which my mind will be made sorry for human beings of the world. Well, take this my herb with you. But leave for me much of that (tobacco) which makes people happy with its body."

There is certainly sufficiency of direct appeal in this to suggest prayer. But it is notable that the spirits' answers are also given; and it is in these recited replies, and in the herb or root with which the formulist has previously provided himself, that the efficacy of the procedure is believed to reside. In fact, the whole, including the minute offerings of tobacco, is a dramatic enactment of a journey believed to have been actually performed by an afflicted ancient in search of relief.

Such, at any rate, is the obvious character of most northwestern formulas, and these differ among one another chiefly in the degree to which they are preponderatingly in the narrative form of a myth or pure dramatic dialogue. A Hupa "brush dance" formula illustrates the tale-like type.

"In the world's middle she and her granddaughter lived. And after a time a person grew in her (granddaughter's) body. 'Hei! Human beings are about to come into being, it seems; their smoke is everywhere,' she said. And the (unborn) child became sick from her. And it came from her. And she thought, 'With what is it that we shall steam this child?'"

Thereupon the old woman sent her granddaughter out to find the necessary medicine. The girl saw wild ginger, dug it, and when the baby was steamed it evinced greater animation. The old woman then found pitch-pine sticks, lit and waved them over the child (as is done in the dance). Then she thought:

"Human beings will soon come into existence. Perhaps their children will become sickly from them. They will think of our bodies. With what is it that we can make them think of us? Yes. One night will pass before (the final night of the dance). There will not be only one herb (in all the ceremony)."

So again she told her granddaughter to look. The girl went east, and at the foot of Mount Shasta saw a basket floating, but it was empty. She followed, lost it, and found it again at Kitokut, then at Kilaigyading, then, still going down the Klamath, successively at Otsepor, above Weitspus, at Weitspus, Kenek, Kepel, Pekwan, north of Rekwoi on the ocean, south of Orekw, and finally, near by, at Freshwater Lagoon, where it came to shore. The basket was still empty, but now she saw a house in which she found an old woman who said she had been thinking of her and her troubles.

"'There in the corner is your basket,' the old woman said, put her hand on it, held it up toward the sky, and (the girl) saw something (yellow pine

bark, the desired second medicine) fall into it. She held that (bark) up pointing crosswise and gave it to her and said: 'Take it and put it in your child's mouth.'"

With that attainment ends the formula, which is now used with the vegetables and brands mentioned in curing sickly children.

It is significant of the interrelations of the northwestern tribes that the 12 localities mentioned by name in this Hupa formula are in Shasta, Karok, Yurok, and Coast Yurok territory. On the other hand, the first of eight places designated in an analogous Yurok formula for the brush dance is in Chilula land. The spots are:

Plokseu, on the Bald Hills.

Oreuw, at Ertlerger.

Okegor, at Kenek.

Awiger, near Sa'a.

Oso, a hill opposite the mouth of Blue Creek.

Oka, a mountain downstream from Blue Creek.

Sa'aitl, opposite Turip.

Terwer, at the mouth of the creek of that name.

Several of these spots are prominent in the corpse purification formula and definitely associated with death taboos. It is therefore clear that any religious landmark was likely to be seized upon and worked into a formula, irrespective of what it primarily suggested to the native mind.

MYTHOLOGY.

The Yurok sometimes loosely mention Wohpekumeu, "widower across the ocean," as the one that made things as they are. But their tales ascribe to him only the institution of a certain limited number of practices. He was born at Kenek, lived there when not traveling in curiosity or under impulse of amatory desires, and was finally carried to the land across the salt water by the Skate woman, to rejoin the other *woge* who had departed from this world before. At Amai-kiara in Karok territory he deceived the woman who kept all salmon confined, and liberated the fish for the use of future mankind. From the sky he stole acorns—a benefit attributed also to Megwomets. Until he instituted birth, every woman's life was sacrificed in the production of her first and only child. Everywhere he pursued women, often unsuccessfully; and according as his wooings resulted, he made or marred good fishing places. Eager for feminine conquest, he attempted to deny or evade his son Kapuloyo, and finally, in order to marry the young man's wife, abandoned him on a high tree and blinded his grandson Kewomer. Kapuloyo escaped, gathered to himself all the dentalia in the world, and departed downstream; but near the mouth of the river, Wohpekumeu overtook him and recovered enough money to restock the supply for men.

Almost as great a favorite in tales as this tricky and unreliable benefactor of mankind, is Pulekukwerek, "downstream sharp," so named from the horns on which he sat—a grave, unconquerable character, who smoked tobacco but never ate, passed women by for the sweat house, and by strength and supernatural gifts destroyed monster after monster. His birth, as his name indicates, was far north on the coast at the end of the world. With their own devices he put an end to those who crushed people in pretending to split logs, speared them in playing games, and killed them with overstrong tobacco. He burned blind cannibal women, killed *sa'aitl* monsters with hot stones, and deprived of his power a dangerously jealous man of Merip. He drove women from the sweat house that they still frequented. He stole the boy Night, found the man who could weave the sky, and placed the stars upon it. When the time came, he retired uncompelled to the far-away land of dentalia and everlasting dances. All that the Yurok have of respectful admiration in their mythology they lavish on Pulekukwerek.

At times Pelintsiek, "great dentalium," or some other form of the money shell, appears half divinized in the traditions, and assumes certain of the functions usually ascribed to Wohpekumeu and Pulekukwerek, especially those of a broadly institutory nature. Sometimes the three appear in conjunction with Ki-wesona-megetotl, "Sky holder."

Megwomets, a bearded dwarf, carries acorns on his back and is the distributor of vegetal abundance. He enters into a few myths.

A number of episodes are told of Segep, coyote, but he is less frequently a favorite of invention, even in despicable situations, than among most California tribes, and the only achievement to his credit is the killing of the sun who had caused his children's death. The raccoon alone was able to lift the luminary back to his place: Tlkelikera, the mole, Wohpekumeu's sister, is more rarely mentioned. Wertspit, the locust larva, wished death into the world. Kego'or, the porpoises, lived with most of the foregoing at Kenek until the impending arrival of the human race, when they retired to Sumig, Patrick Point. Thunder and Earthquake were also inhabitants of Kenek, until the latter was beaten at his favorite game of shinny ball by a young man from the mountain Kewet. The house sites of many of these great ones of old are still shown at the little town.

The world is believed to float on water. At the head of the river, in the sky, where the Deerskin dance is danced nightly, are a gigantic white coyote and his yellow mate, the parents of all coyotes on earth.

CALENDAR.

The Yurok monthly calendar commences "at Christmas," that is, with the winter solstice. The first 8 or usually the first 10 moons are

numbered, not named. The remainder, up to 12 or 13, are designated by terms that appear to be descriptive.

- | | |
|------------------|--------------------------|
| 1. Kohtsewets. | 8. Knewoleteu. |
| 2. Na'aiwets. | 9. Kerermerk or Pia'ago. |
| 3. Nahksewets. | 10. Wetlowa or Le'lo'o. |
| 4. Tsona'aiwets. | 11. Nohso. |
| 5. Meroyo. | 12. Hohkemo. |
| 6. Kohtsawets. | 13. Ka'amo. |
| 7. Tserwerserk. | |

Informants who reckon 12 moons in the year omit one toward the end, or give *Hohkemo* as a synonym of *Nohso*. The most consistent accounts regularly enumerate 13. *Pia'ago* is said to refer to a red berry gathered then. The meaning of *Le'lo'o* is undetermined, but it is the month of the world renewing ceremonies of the Karok. In *Nohso* the people camp out to gather acorns. *Ka'amo* seems to refer to cold. The older Yurok are aware that some of them allow 13 moons to the year and others only 12. When individual reckonings differ, long arguments result. But when the acorns are ripe for picking, disputes end, for it is then unquestionably *Nohso*. This method of correction by seasonal phenomena is quaint in view of the unquestionable astronomical starting point, and suggests that this was such in theory rather than by close observation. At the same time, the knowledge of the fact that 12 moons do not suffice for a return of the sun indicates a closer reckoning of time than prevailed among central Californian tribes. Of similar order is the Yurok statement that the Pleiades—*teinem*, "the many"—are invisible for one month only. They disappear at the end of the fifth moon, are gone to lie in the water in the sixth, and in the seventh reappear just before daybreak.

CHAPTER 4.

THE YUOK: ARTS.

Dress, 76; houses, 78; sweat houses, 80; boats, 82; food, 84; fish and game, 84; acorns, 87; tobacco, 88; bows, 89; basketry, 90; wooden implements, 92; utensils of elk horn, 93; receptacles, 93; tools, 94; music, 95; musical instruments, 96; conclusion, 97.

DRESS.

The dress of northwestern California was essentially that of all the tribes of the State. Young men usually folded a deerskin about the hips. Their elders did not scruple to go naked. A breechclout was not worn. Women put on a buckskin apron, about a foot wide, its length slit into fringes, which were wrapped with a braid of lustrous *Xerophyllum* or strung with pine nuts. From the rear of the waist a much broader apron or skirt was brought around to meet the front piece. This rear apron was again fringed, but contained a considerable area of unslit skin. Women also habitually wore neat, round, snugly fitting caps of basketry (Pl. 73. *f*). These were modeled with a nearly flat top, but degenerated after some months into a peak. In cold weather both sexes threw over the shoulders a blanket or cape, normally of two deer hides sewn together (Fig. 3). A single skin or a garment pieced of small furs might be used instead. This cape was neither fitted to the form nor squared. The Yurok appear to have fancied the somewhat ragged effect of dangling legs and neck. A rectangular blanket woven of strips of rabbit fur, much used through the remainder of California and over large areas eastward, was rare or unknown among the northwestern tribes, perhaps because rabbits are scarce in their country. Capes and men's loin cloths always had the fur left on. Women's aprons were always dressed.

Rich women ornamented their dress heavily. Haliotis and clamshells jangled musically from the ends of the fringes; and occasionally a row of obsidian prisms tinkled with every step. Poor women contented themselves with less. They may sometimes have had recourse to a simple skirt of fringed inner bark of the maple, which was standard wear for adolescent girls and novitiate shamans.

The only footgear of moment was a one-piece front-seamed moccasin without decoration, donned chiefly for travel, by women gathering firewood, or sometimes as part of full dress. It was not worn

regularly by either sex. Modern specimens add a heavy sole, but this seems not to have been used in purely native days. Men put on a knee-length buckskin legging and a rude snowshoe—a hoop with a few cross ties of grapevine—when they went up into the hills in winter to hunt.

Men wore their hair at least half long. A confining net of string, customary in many other parts of California, was not known here. In boating, a thong might keep the hair out of the eyes. Before a fight, it was usually piled on top of the head. When the hunter donned a deer hide and stuffed deer's head (pl. 8), a disguise as likely to deceive a puma lurking in a tree as the game, he cushioned his hair over the nape and ran several sharp boneskewersthrough it. Women gathered their hair in two masses that fell in front of the shoulders and were held together by a thong, or on gala occasions by a strip of mink fur set with small woodpecker scalps.

In mourning, the hair was shortened. A widow cropped hers closely. A necklace of braided *Xerophyllum* was put on by all near mourners.

The Yurok say that this was never removed, being worn until it fell to pieces. It is likely that if it lasted a year, it was taken off when the name taboo of the dead was lifted. Perhaps it usually distintegrated before.

The Yurok did not usually mutilate any part of the body for the attachment of ornaments. Pendants of haliotis were hung around the ears. The nose, contrary to the custom of some adjacent tribes, was bored only after death. A reference to this condition was therefore construed as something like a curse.

Women had the entire chin, from the corners of the mouth downward, tattooed solidly except for two narrow blank lines. A beginning was made with three vertical stripes, which were broadened until they nearly met. Occasionally a row of points diversified the edges of the area. This style is universal in northwestern California.



FIG. 3.—Blanket of two deerskins, painted. Hupa.

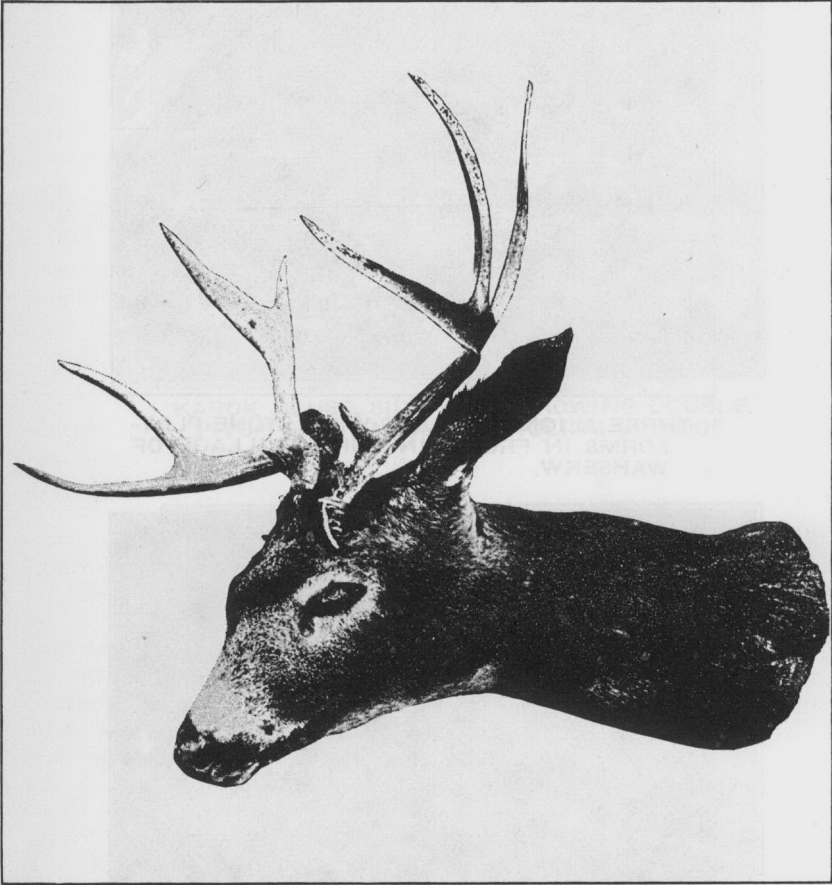
A little familiarity makes it rather pleasing. Lines and angles and circles always look like something added to the face. The solid mass, conforming to the contours of the chin, favored by the Yurok, soon seems an integral part of the features and serves to emphasize a well-modeled jaw. Certainly it is not long before a younger woman or half-breed who has escaped the tattoo strikes one with a sense of shock, as of something necessary missing. When pressed to explain the custom, the natives, as in all such cases, of course give a reason which is not the cause of the practice, but is interesting as their psychic reaction to the custom. They say that an untattooed woman looks like a man when she grows old. (Fig. 45 *a*.)

HOUSES.

The Yurok house is built wholly of planks split from logs with wedges and more or less adzed. It contains no posts and no beams. The roof planking is supported by three or four plates that rest on heavy planks in the front and rear walls. Two of these plates run near the side walls; the others form ridgepoles. The usual house has two ridges and three roof slopes, the middle one not quite level. A single-ridged house is to the Yurok a sign of the owner's poverty: he builds only 3 fathoms wide; a well-to-do man 4. Actual front-ages by measurement are 17½, 19, 20, 21½ feet. The depth is about a yard more. No houses surpassing or falling short of these figures by more than a foot or two were built. (Pls. 9, 10, 11.)

The walls are of planks set endwise in the ground, usually two rows thick. Little care is given the side walls, which are only a few feet high and protected by the overhanging eaves. For the front and rear, splendid solid planks from 1 to 4 feet in width are sometimes used. In the middle of the wall they may rise 10 or more feet. The boards in each wall are held together by two squared poles, one inside and the other out, lashed together with grapevine or hazel withes passing through holes in several of the boards. The plates, which often project several feet, rest in rectangular notches cut into planks of particular strength. The roof boards are as thin and wide as they can be made and from 8 to 10 feet long. They are merely laid on in two overlapping thicknesses. The lower ends are often not squared, and weather and split off irregularly, giving the Yurok house a very untidy look in our eyes. The smoke hole is made by laying aside a board in the middle. In rainy weather this leans over the opening, propped by a stick set at an angle. A refinement is introduced by gouging a gutter along the edges of the two boards bordering the smoke hole, to prevent side flow into the opening. The smoke hole is never used as a door, but it serves as the only window. Measuring about 2 by 7 feet, it admits a little shifting sunshine and a fair illumination to the middle of the house, but this remains cool in midsummer. It darkens early, and the corners are dim and musty at noon. A short log ladder with cut-in notches usually gives ready access from the ground to the roof when the smoke-hole plank is to be shifted or a leak repaired by an adjustment of boards.

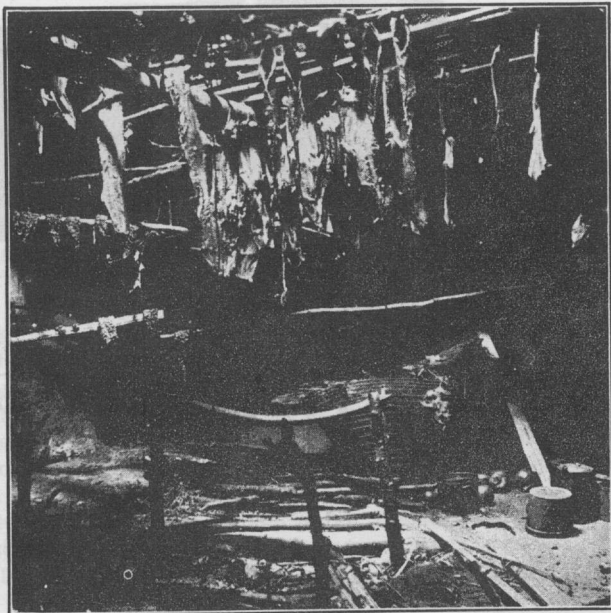
The door is a round hole about 2 feet in diameter, cut a few inches above the ground through a plank of exceptional breadth and thickness. This plank



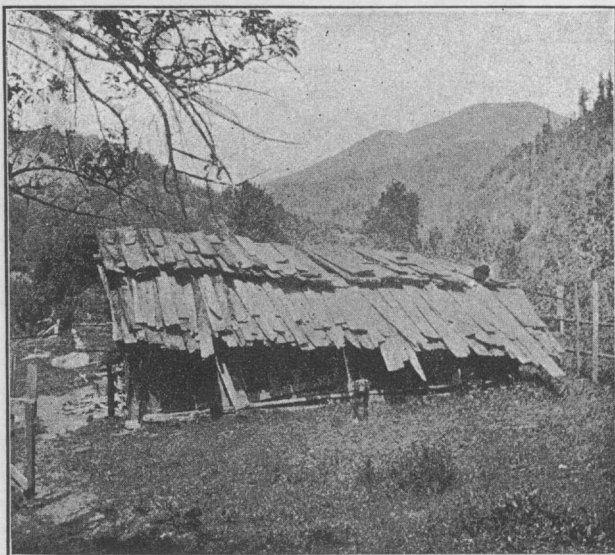
HUNTER'S HEADDRESS FOR DECOYING DEER. KAROK



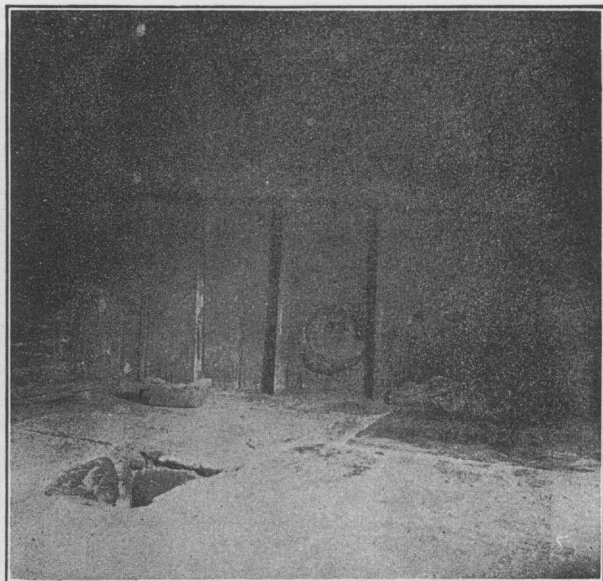
THREE ALIGNED HOUSES WITH STONE PLATFORMS IN FRONT, IN YUROK VILLAGE OF WAHSEKW



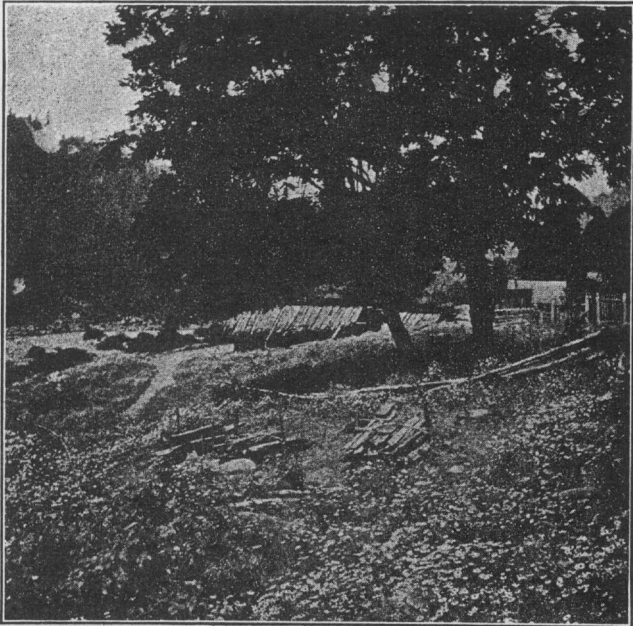
INTERIOR OF YUROK HOUSE AT WEITSPUS;
SALMON HANGING FROM DRYING FRAME



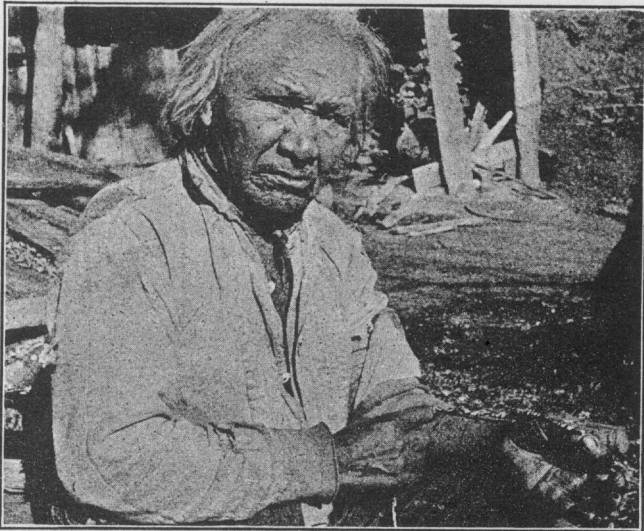
KAROK HOUSE, SIDE VIEW, SHOWING DOUBLE PITCH AND RAGGED SHINGLING OF ROOF



INTERIOR OF YUROK SWEAT HOUSE, WITH EXIT, FIRE PIT, FLOOR BOARDS, AND HEAD REST



YUROK TOWN; PLANK-COVERED GRAVES IN FOREGROUND



HUPA MEASURING DENTALIUM MONEY AGAINST TATTOO MARKS ON HIS FOREARM

is always near one end of the front wall. Two stones are planted as convenient grips just inside and often outside the entrance. The door proper is a plank that slides in a groove—often a piece of gunwale of an old canoe—and is held upright by two stakes. It can be tied but not locked. The plank in which the hole is cut is sometimes simply ornamented in geometrical relief. (Pl. 12.)

Just inside the door a partition extends nearly across the house 3 or 4 feet parallel from the front. The blind alley thus formed serves for the storage of firewood, and is often littered with carrying baskets and rubbish. This narrow compartment about takes up the excess of the length of the house over the breadth.

The square remainder of the interior is on two levels. The center, for about half the diameter of the whole area, is dug out from 2 to 5 feet. The surrounding shelf, some 5 or 6 feet wide, is at the natural level of the ground, or substantially so. The central depression is the cause of the pits that mark the sites of ancient houses. It is entered by a notched ladder (Fig. 4), sometimes as much as 2 feet wide. A second ladder may stand at the far corner from the door, for convenient access to the farther sides of the shelf. The corners of the pit are always cut off, sometimes to such a degree as to make it more nearly a regular octagon than a square. The sides of the pit are always carefully lined with thin, even, and smoothed slabs. These may reach a breadth of 4 feet. In the middle of the pit is the fireplace, a shallow excavation usually bordered by five stones. Above it, at less than a person's height, hangs a huge criss-cross of several tiers of poles in squares, on which salmon sides or other provisions are suspended. Those on the lower rungs are more easily taken down than avoided with the head. (Pl. 9.)

The "shelf" area serves for storage. In a prosperous house, it is largely filled with huge storage baskets, 2 or 3 feet in diameter, filled with acorns and covered with inverted conical baskets. The spaces behind and among these are often crowded with other provisions, baskets, and utensils temporarily out of commission. Occasionally an elderly relative has her bed on the shelf, but this is unusual.

The pit is the area in which women and children sit, work, cook, eat, and sleep, and men often take a seat on a cylindrical or mushroom-shaped block or stool. The hard earth floor is generally kept swept fairly clean, but most Yurok housewives are untidy, and cooked food, eatables in preparation, unfinished baskets, materials, implements temporarily laid aside, and a variety of apparatus litter the cramped space, while from above half-cured slabs of salmon may drip grease, or gusts of rain drift in. No matter how old and worn a utensil, it is rarely destroyed or deliberately thrown out; and an accumulation of property in good, poor, mediocre, and practically worthless condition cumbers most houses. Orderliness is found in individuals, but is not the rule.



FIG. 4.—Yurok house ladder.

Before the door many houses have a pavement of flat river-worn stones, which provide a pleasant seat in the sun, and on which, when the weather permits, the main or evening meal is generally eaten.

A hut was used by Yurok women in their periodic illnesses. This was a small and rude lean-to of a few planks, near the house or against its side.

SWEAT HOUSES.

The sweat house is smaller than the dwelling and dug out over its entire extent. The frontage is about 12 feet, the breadth 9 to 11, the

greatest height 6 or 7. The excavation is at least 4 feet. The longer sides are lined, but have no walls above ground; on the shorter ends, the planks rise 1 or 2 feet above soil level in the middle. From one to the other of these two little peaks runs a ridgepole, further supported, not quite at its middle, by a square post. From the ridge, the roof planks, overlapping along their edges, extend to the ground. These planks are usually much less shaped than those which cover living houses. Evidently lumber is used for them which is too small or too irregular to span the roof spaces of the dwelling. The ridge itself is crowned with a split length of old canoe, which effectually sheds rain from the joint, but adds to the ragged appearance of what little of the structure is visible above ground. (Pls. 13, 14.)

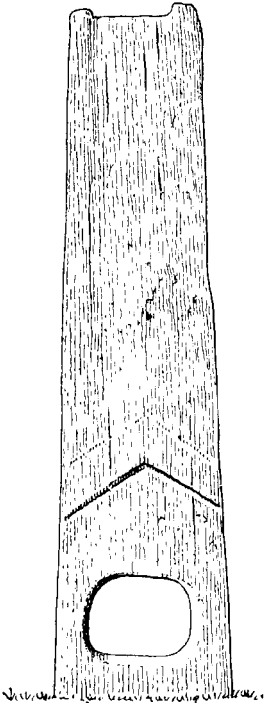
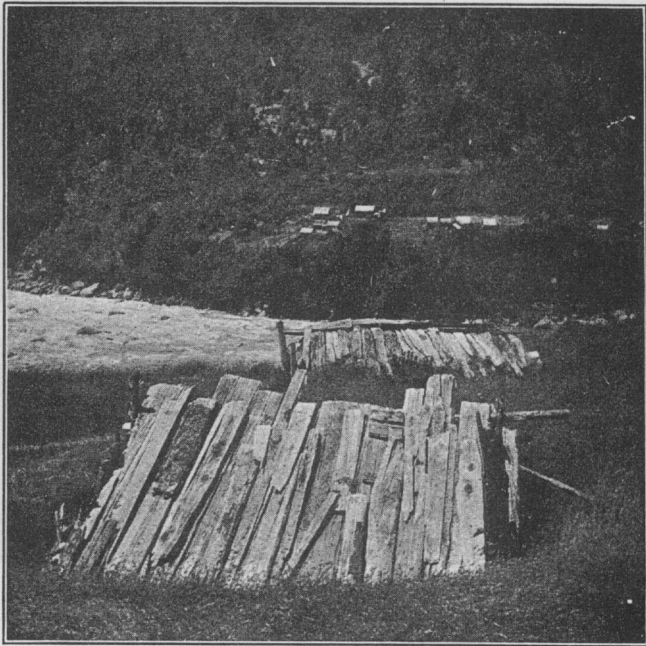


FIG. 5.—End plank of Yurok sweat house, with exit hole.

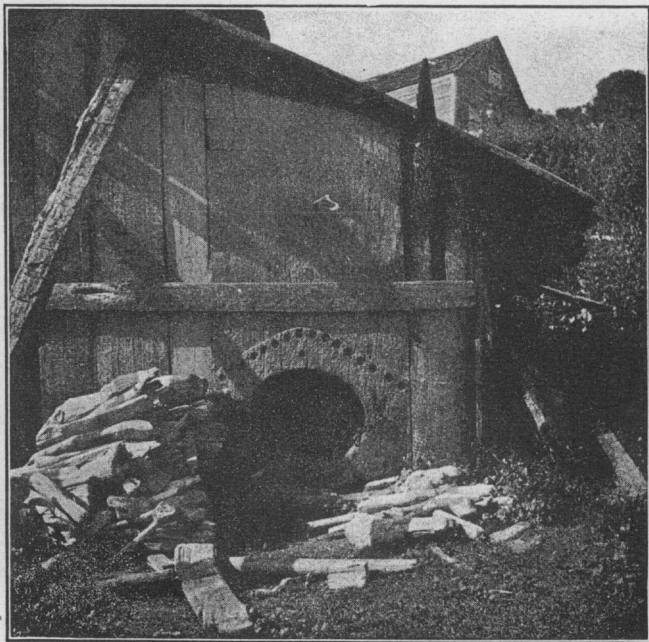
The interior is neatness itself. The floor is paved either with well-adzed planks which years of contact with human bodies have polished, or with carefully selected and fitted slabs of stone, often of considerable size.

There is no furniture about except a few block pillows, cut flat-faced out of redwood with concave top; perhaps a crotched stick or two on which an occupant has hung the net on which he was last working; and sometimes a little heap of firewood at the back. The floor is swept clean. Somewhat toward one end from the middle is the sacred post, toward the other end the fireplace, a cubical hole of a foot and a half, lined with flat stones. (Pl. 10.)

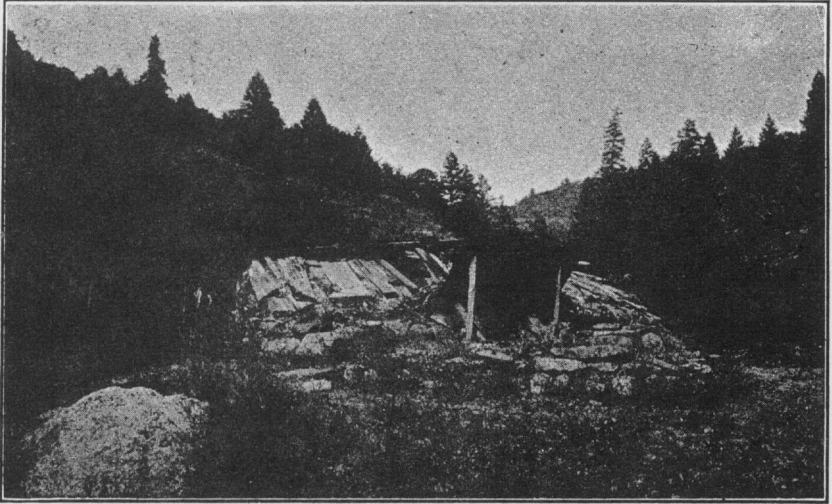
The door is in the middle of one of the long sides, and always faces the river or ocean. It is a roundish, horizontal opening of about a foot and a half, provided with a cover; inside, a ladder with a few notched steps leads down. It, too, is usually worn to dangerous slipperiness



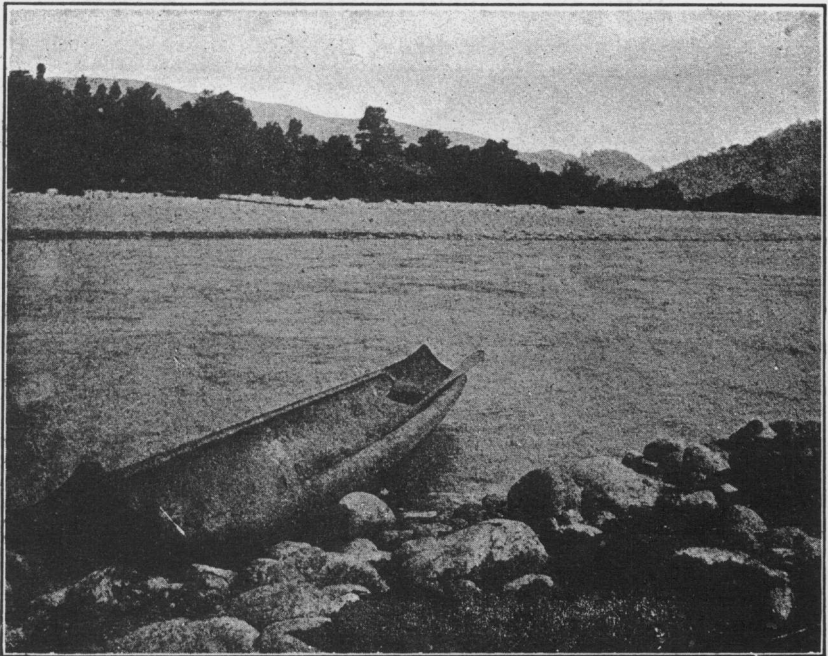
SACRED HOUSE AND SWEAT HOUSE IN KAROK
TOWN OF KATIMIN, WITH ISHIPISHI ACROSS
THE RIVER



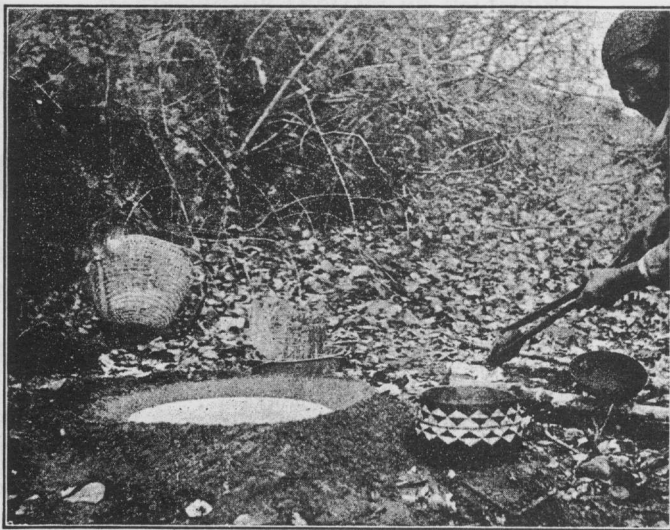
CORNER OF YUROK HOUSE WITH CARVED
DOOR PLANK, AT REKWOI



CHILULA SWEAT HOUSE



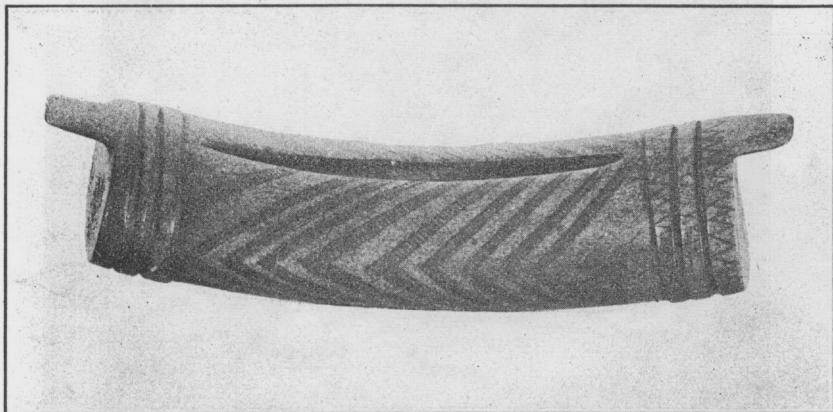
BOAT OF YUOK MANUFACTURE ON TRINITY RIVER AT HUPA



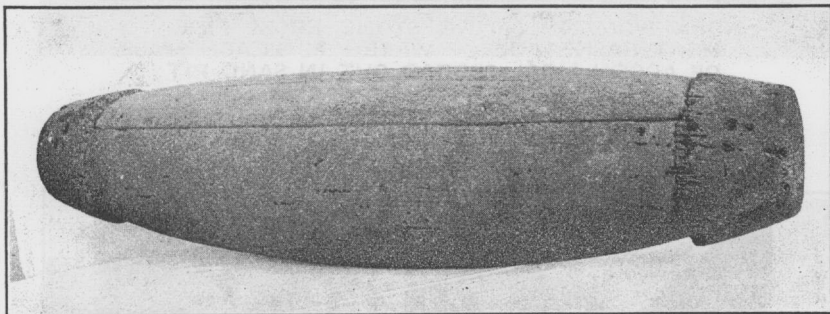
HUPA WOMAN LIFTING STONE FROM FIRE TO HEAT BASKETFUL OF WATER TO LEACH MASS OF ACORN MEAL SPREAD OUT IN SAND PIT



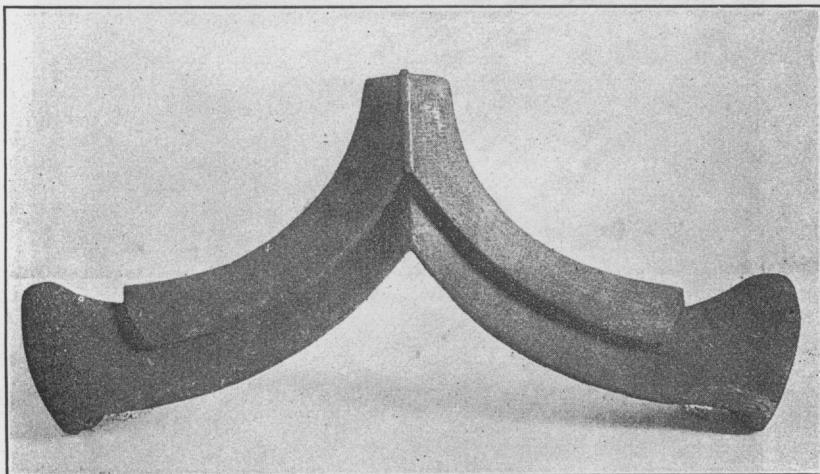
KAROK OLD MEN SUNNING ON STONE PLATFORM IN FRONT OF SWEAT-HOUSE ENTRANCE



ELK-ANTLER PURSE FOR DENTALIUM MONEY. YUROK



CYLINDRICAL BOX WITH LID IN PLACE. YUROK. THE BOXES VARY FROM 1 TO 4 FEET IN LENGTH



ORNAMENT SET ON PROW OF BOAT. YUROK

for all but bare feet. A second door, used only as exit, is at one of the small ends. This is a minute oval, often not more than 14 by 10 inches, cut through the base of one of the two planks that support the ridgepole (Fig. 5). It is closed by a snugly fitting wooden plug. Many of these exits seem too small for even a medium man to squirm through, yet are habitually used by a little company of varied sizes, as well as their guests. But the bodies are all naked, of course, and supple with perspiration. The exit is some 4 feet below ground level; consequently a pit is dug outside the wall to receive the emerger. The sides of this pit are held by cobbles, in well fashion. After the regular evening and morning sweat, which has a distinctly ceremonial character, the exit is used, because, the Yurok say, those who have completed the purification from corpse contact emerge by the larger door. When a man retires to the sweat house to work, idle, meditate, sleep, or sulk—the latter his usual course when offended—he comes out by the main entrance.

A considerable space in front of this entrance is stone paved, much like the "porch" of the living house, but more invariably so. Here the old men are wont to sun themselves after the "evening" or afternoon sweat, and at other times also.

Firewood for the sweat house is not lightly or randomly gathered. The proper method is to ascend the ridge, often at some distance from the village, climb a tall fir, and cut the branches from near its top. There are many trees in the country of the Yurok and their neighbors which have been trimmed in this way and which when seen against the sky, even at long distances, present the appearance of a gigantic head and outstretched arms surmounting the body. The natives do not seem to be aware of their likeness to the human form. The wood is cut or broken into short lengths, and kindled in the stone pit. Entrance and exit are firmly closed, the former stuffed if necessary, and a small fire soon produces intense heat, besides volumes of smoke. The sweater lies low on the ground and avoids suffocation. When the fire has burned down or out, he opens the exit, wriggles forth, and plunges into the near-by creek, river, or ocean. The smoke gathers in thick velvety soot on the lower side of the roof. The steam sweat bath is totally unknown to the Yurok and to all other California Indians, with the exception of a few groups in the northeastern portion of the State; and there recent influences from the north may have been operative.

All winter long, and often in summer, men and grown boys slept in the sweat house, and passed the evenings in talk and smoking. Seven sleeping places were recognized by name, and each of these was permanently occupied by the same inmate, except when he might yield it to a visitor. The place of honor was in the middle of the

end opposite the exit, the two worst by the entrance and in the middle of the opposite side (Fig. 6).

Yurok information as to the number of house and sweat house sites in 36 river and coast villages for which statement appears to be trustworthy, yields 263 houses and 83 sweat houses, a proportion of about 3 to 1. This would make about 23 souls, or 6 to 7 adult males, per sweat house. The omission of slaves and bastards would not materially reduce the number. In other words, most sweat houses appear normally to have had an occupant for very nearly every one of their seven named berths. The actual floor space was great enough to accommodate two men in one place; and this arrangement was presumably followed when necessary.

These figures appear dependable—263 divided by 36 gives over 7 house sites per village. On allowance for inevitable omissions after the lapse of many years, the 7+ would have to be raised to about 9; which, with the previously computed correction of one-third for house sites unoccupied at any given time,

makes 6 "live" houses per village—the correct number, according to all available data, and therefore a reasonable check on the sweat-house figures.

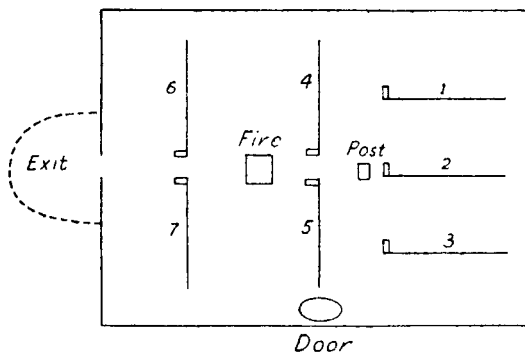


FIG. 6.—Plan of sleeping places in Yurok sweat house.
1, Metlku; 2, tepolatl; 3, hik'es; 4, nergernertl; 5, lega'l; 6, atserger; 7, kwina met.

BOATS.

The Yurok type of canoe, which was made also by the Tolowa and Wiyot and sold to the Hupa and Karok, is dug out of half a red-wood log, and is a clumsy but symmetrical and carefully finished vessel. It is used on the ocean, but is obviously a type devised for a rushing river full of rocks. Its square prow must be awkward in the surf, and is badly designed for cutting through waves or shedding spray. But the round belly of the boat and its gradually curving underside, without stem, allow a single stroke of the steersman's paddle to swing it as on a pivot, and in the rapids many a rock is approached head on and then shot by so close that the hand could reach it. Upstream navigation is tedious. Still reaches can sometimes be paddled through, but over many parts progress is by pushing along the shore or from rock to rock, which requires at least two occupants, while in the hardest places there is no recourse but towing. In every case the stream runs under the bottom of the boat and lifts it, and the square end meets no resistance. (Pl. 13.)

The paddle also is for river use. It is a combination of pushing and sweeping implement, a stout pole 6 to 8 feet long, spreading

below to a narrow, heavy blade, and used by standing men. (Pl. 67, *i.*) Only the seated helmsman holds a true canoeing paddle. (Pl. 67, *f.*) In quartering the river the front man always works on the current side, the steersman against him. This affords the latter the chance, by merely reversing his stroke, to turn the prow instantly with the stream, when his vessel is under fullest control. The worst rapids, at Kenek, can be shot at most stages of the river, but goods and passengers are often disembarked, since the passage can rarely be made without shipping considerable water. (Pl. 5.) Other stretches contain dangerous spots for the boatman who is unacquainted or unskillful.

The redwood is the only canoe material, on account of its size, evenness of grain, and softness under tools. It was rarely felled, fallen or drift logs being cut into sections and split. (Pl. 3.) The excavating was largely done by fire, the shaping with a stone-handled adze of mussel shell. The prow and stern rise a foot above the sides in a concave triangle. On them a wealthy man going on a visit sets a projecting cap, something like a huge yoke, which he calls the ears. (Pl. 15.) The upper part of prow and stern, being cross-grained, are the weakest parts, and, unless a boat is split lengthwise on a rock, are usually the first to break out. Such damaged boats are kept for ferrying in comparatively still water. At the top of the prow a sort of handle extends backward, but the Yurok are careful not to grip this in drawing the boat ashore, since half the front is likely to come out with it. This hook is called the boat's nose. The towing rope is fastened to a loop of stout grapevine or hazel, which, passing through holes in the sides, encircles the prow inside and out. This is the necklace. Gunwales extend the whole length, overhanging inward. They turn no wash, and must serve for strength only. At the stern a seat is left, and forward of this two foot braces, called by the same Yurok word as their house ladders. Toward the prow is a rounded knob, known as the heart, and of no apparent use, except that in recent days it is sometimes made to contain a socket in which a little mast is stepped to sail upstream before the afternoon wind for a favorable stretch here and there. Knot holes are plugged with pitch, cracks calked and pitched, or if threatening sometimes held together by lashings. Boats not in frequent use are carefully drawn high and dry under a bush or filled with leafy boughs, that the hot summer sun may not split them.

The Yurok canoes vary considerably in breadth and beam, and the largest must have three times the capacity of the smallest, but the length is standard at 3 fathoms and a hand, about 18 feet. A longer boat would be disadvantageous among the rocks. Measurements of actual beams and inside depths are 51 by 19½, 47 by 19, 45 by 17½, 40 by 13, and 34½ by 10½ inches. The draft is rather shallow, but attains about 6 inches and more in the middle if the boat is loaded.

FOOD.

The Yurok and their neighbors ate very largely of the acorn, the staple food of most Californians; but fish, that is, salmon, constituted a greater proportion of their food than was usual elsewhere. Small game is sufficiently scarce in their territory to make the taking of salmon much more profitable, ordinarily. Deer were abundant and their flesh esteemed, but seem hardly to have formed part of the daily food supply. Bulbs were dug in early summer; seeds were beaten off the open prairies on the ridges. Some varieties of the latter were eaten crushed and parched but uncooked, and were much relished for their flavor. Salt was furnished by a seaweed, *Porphyra perforata*, which was dried in round blackish cakes. The people on the coast secured quantities of the large ocean mussel, whose shells make up a large part of the soil of their villages. The stranding of a whale was always a great occasion, sometimes productive of quarrels. The Yurok prized its flesh above all other food, and carried dried slabs of the meat inland, but never attempted to hunt the animal. Surf fish were the principal species taken along the ocean; there is practically no record of fishermen going out in boats. The myths speak of canoe excursions only for mussels or sea lions. The food supply was unusually ample along both coast and river, and the Yurok ordinarily did not have to condescend to the grasshoppers, angle-worms, and yellow-jacket larvæ whose nourishing qualities other tribes of the State exploited. In time of stress, of course, they fell back on almost anything. The large yellow slug of California, which in the damp northwest grows to enormous size, would then be used. Famines are scarcely alluded to in the myths, but must have occurred, as among every people primarily dependent on one seasonal or migratory animal. The average Californian clearly passed most of his life on a much closer food margin than the Yurok, but the minuteness and variety of his diet seem usually to have saved him from dire extremity.

All reptiles and dogs were considered extremely poisonous by the Yurok.

The old custom was to eat only two meals a day and theory made these sparing. Only a poor fellow without control would glut himself, and such a man would always be thriftless. Most men at least attempted to do their day's labor, or much of it, before breakfast, which came late. Some old men still profess to be unable to work properly after they have eaten. The evening meal came toward sunset.

FISH AND GAME.

Salmon begin running in the Klamath in spring and in autumn. These are the periods of all the great ceremonies, whether or not these

refer directly to the fish. The river carries so much water, however—more than any California drainage system except the Sacramento-San Joaquin—that there is scarcely a month in the year when some variety of salmon can not be taken. It may be added that the stream is of undiminished volume up to practically the head of the stretch of Yurok ownership. Fish were taken with dip nets, seines, set gill nets, and harpoons, but of these devices the first was the most usual.

The dip net, or lifting net, as it may be called to distinguish it from a smaller instrument on an oval frame occasionally used by the Karok and other tribes to scoop boiling riffles and rapids (Pl. 6), was let down from a scaffolding built out over the water, almost invariably at some eddy or backwater. Here the fisherman sat on a block or little stool, holding the bone button of the string which closed the entrance to the pyramidal net stretched out in the current. This net was hung from the bottom of a long A-shaped frame with a bottom crossbar. The whole was hauled out as soon as a pull on the cord had inclosed a salmon, which was then struck on the head with a club. A single night's vigil sometimes produced a hundred salmon, it is stated—a winter's supply, as the Yurok say. At other times a man will sit for half a day without a stir. The old men are much inclined to this pursuit, which would be trying to our restless patience, but gives them opportunity for undisturbed meditation or dreaming or mental idleness along with a sense of profitable occupation. (Pls. 4, 7.)

Lampreys, customarily known as eels, much prized by the Yurok for their rich greasiness, also ascend the river in great numbers, and sturgeon are not rare. Both species are taken much like the salmon, though of course with a different mesh. In the lower river eelpots were also set. Trout in the affluent creeks are too small to be much considered by a people frequently netting 20-pound salmon.

Both salmon and lampreys were split for drying—the former with a wooden-handled knife (Pl. 16) of "whale-colored" flint, as the Yurok called it; the latter with a bone awl. A steel knife probably involves a different and perhaps a more precise handling, so that until a few years ago the old women clung to the aboriginal tools. Most of the fish was somewhat smoked and put away in old baskets as strips or slabs. The pulverized form convenient for packing, known also on the Columbia, was probably more prevalent among interior and less-settled tribes like the Shasta. Surf fish were often only sun dried whole and kept hung from poles in rows. They make a palatable food in this condition. Dried salmon is very hard and nearly tasteless, but rather satisfying and, of course, highly nourishing.

A long net was sometimes set for sturgeon. One that was measured had a 6-inch mesh, a width of 3 feet, and a length of 85 feet, but in use was doubled to half the length and double the width.

A measured salmon seine had a scant 3-inch mesh, a width of 3½ feet, and a length of over 60 feet.

Nets were made of a splendid two-ply cordage rolled without tools from fibers of the *Iris macrosiphon* leaf. The gathering of the leaves and extraction of two fine silky fibers from each by means of an artificial thumb-nail of mussel shell was the work of women. The

string was usually twisted and the nets always knotted by men. The mesh spacer and netting shuttles were of elk antler; net weights were grooved, pierced, or naturally perforated stones. (Fig. 7.)

The salmon harpoon, which could be more frequently used in the aboriginal period than now when mining renders the river opaque, had a slender shaft, sometimes more than 20 feet long. To this were attached two slightly diverging fore-shafts, one a few inches the longer, on which were set the loose barbs of pitched and wrapped bone or horn. The lines were short and fastened to the main shaft, a pay line being unnecessary for prey of the size of a salmon. In fact, an untoggled barbed spear would have sufficed but for the opportunity its resistance offers a heavy fish to tear itself free. This harpoon was made with no essential variation in practically all fish-

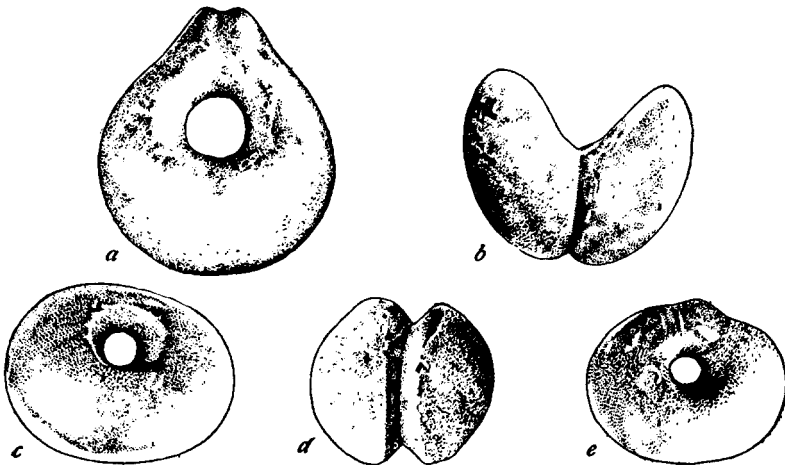


FIG. 7.—Yurok net weights.

able parts of California, and it is the only harpoon known, except for a heavier implement driven by the Yurok and Chumash into sea lions.

Sea-lion hunters took station on rocks, disguised in bear or deer skins. When the animals clambered up, the hunters barked and twisted their bodies, attracting the sea-lions' attention as they approached, then leaped up and harpooned them. The toggle head had two barbs in a row; the line was fastened to the shaft. No attempt was made to hold the bulky prey, but it was followed by boat, the shaft regained, and then at first opportunity the victim was speared again. Sometimes a canoe was dragged out to sea for half a day before the animal was dispatched. For this reason large males were not attacked late in the afternoon.

Deer seem to have been snared more often than shot before the introduction of rifles. They were often driven with dogs.

ACORNS.

Acorns were gathered, dried, stored, cracked, pulverized, sifted, leached, and usually boiled with hot stones in a basket. This gruel, usually known as acorn soup or acorn mush, though it is thicker than the one and more fluid than the other—the Maidu mix it with ten or twelve times the quantity of water—was the chief daily food of more than three-fourths of native California. It is about as tasteless as wheat flour cooked in water would be, nearly as nourishing, but richer in starch, and, when prepared from certain species, perceptibly oily.

In boiling, the hot stones must be stirred to insure cooking the contents equally and to prevent holes being burned through the containing basket. As in the greater part of California, a little paddle is used for this purpose by the Yurok. But they and their neighbors almost invariably carve the handle of this "mush paddle" into geometric ornaments, while among the average Californian tribe the instrument is wholly utilitarian and often short, rough, and unsymmetrical. The Yurok paddle is of *madroña*, *manzanita*, oak, or other hard wood, and sometimes nearly 4 feet long and quite unwieldy for a seated woman. (Pl. 17.)

The mealing was done on a hard, smooth slab of rock with a stone pestle usually a foot long. Exceptional specimens reach nearly 2 feet but were too highly treasured to be put into daily service. The better pestles have a raised ring or flange about a third of the way from the butt. (Pl. 16.) This is purely ornamental and makes a distinctive local type, which is evidently well established, since it occurs in ancient examples from the region. Even the commonest work-a-day pestles are dressed rather symmetrically, whereas most of the Californians often contented themselves with a convenient cobble. The acorn fragments and meal were kept from scattering by a flaring hopper of basketry; a soap-root fiber brush swept together what escaped this container. The mortar was not used by the historic Yurok, although specimens are occasionally washed out or mined in their habitat. They are so ignorant of the purpose of the utensil that they conjecture it to have been a cook pot or the like. A similar change of custom as regards the acorn mortar has taken place between prehistoric and recent times in a considerable part of California and constitutes one of the rare instances of a directly traceable cultural change.

The pestle is held near its upper end. As it is raised the wrist is turned until the stone is half horizontal; on the stroke it is twisted back and falls perpendicular. The wrist motion perhaps saves raising the pestle to its full height. The worker lays her legs over the rim of the hopper to hold it down and bring herself close to her labor. (Pl. 60.)

Among acorns, the preference of the Hupa, and presumably of the Yurok, is for those of the tanbark oak, *Quercus densiflora*, but the species *garryana*, *californica*, and *chrysolepis* are used if needed. Acorns were stored, most frequently in the shell, in large baskets set around the sides of the house. Some of these baskets are loose or open work; others have their stitches closely set and are patterned. They are usually covered with an inverted burden basket. Occasionally they are made larger than the door, but are easily moved out if it becomes necessary through the lifting of some planks off the roof.

Acorns were leached of their tannin in three ways. The commonest method was to pour hot water over the meal as it lay spread out in a basin of clean sand. (Pl. 14.) This is the usual Californian method. Cold water apparently also removes the bitterness if given time enough. Thus, acorns buried for a year in swampy mud come out purplish and are ready to be roasted on coals. Again, they were sometimes shelled, set in a basket until moldy, and then dug into clean sand in the river. After some time they turned black, and were then in condition for roasting.

TOBACCO.

All the tobacco smoked by the Yurok was planted by them—a strange custom for a nonagricultural people far from all farming contacts. The custom, which extends also to southwestern Oregon, and in the opposite direction probably to the Maidu, is clearly of local origin. Logs were burned on a hilltop, the seeds sown, and the plants nursed. Those who grew tobacco sold to those who did not. A woman's cap full or not full was the quantity given for a dentalium shell, according as this was of second smallest or shortest length—a high price. Tobacco grows wild also, apparently of the same species as the planted, but is never used by the Yurok, who fear that it might be from a graveyard, or perhaps from seed produced on a graveyard. The plant does seem to show predilection for such soil. Otherwise it sprouts chiefly along sandy bars close to the river; and this seems to have caused the choice of summits for the cultivated product.

The pipe was tubular, as always in California. Its profile was concave, with the bowl flaring somewhat more than the mouth end. The average length was under 6 inches, but shamans' and show pieces occasionally ran to more than a foot. The poorest pipes were of soft wood, from which it is not difficult to push the pith. Every man who thought well of himself had a pipe of manzanita or other hard wood, beautifully polished, probably with the scouring or horsetail rush, *Equisetum*, which was kept in the house for smoothing arrows. The general shaping of the pipe seems to have been by the usual northwestern process of rubbing with sandstone rather than by cutting. The bowl in these better pipes was faced with an inlay of soapstone, which would not burn out in many years. Sometimes pipes had bits of haliotis inlaid next the steatite; others were made wholly of the stone. The pipe was kept in a little case or pouch of

deerskin. It could be filled by simply pressing it down into the tobacco at the bottom of the sack. Pouches have been found in California only among the northwestern tribes. Tobacco was stored in small globular baskets made for the purpose. These receptacles are also a localized type. (Pl. 73. *e.*)

A few old Yurok were passionate smokers, but the majority used tobacco moderately. Many seem never to have smoked until they retired to the sweat house for the night. Bedtime is the favorite occasion for smoking throughout California. The native *Nicotianas* are rank, pungent, and heady. They were used undiluted, and the natives frequently speak of them as inducing drowsiness.

BOWS.

The bow was of yew, short, broad, and so thin that only the sinew backing kept it from breaking at the first pull. The grip is somewhat thicker, pinched in, and wrapped with a thong. The string is sinew. Only that side of the tree which faces away from the river was used for bow wood. The sinew backing is often painted with red and blue triangles; the pigment used before blue could be obtained from Americans is unknown. The usual length was 3 to 3½ feet, the breadth 1½ to 2 inches, and the thickness one-half inch, of which a considerable fraction was sinew, whose pull gave the unstrung bow a strong reverse curve. The following are some measurements in inches:

Width of limb.....	1½	1½	1½	1½	1½	2½
Width of grip.....	1½	1½	1½	1½	1½	1½
Greatest thickness	¾	¾	¾	¾	¾	¾
Length	32½	35½	36½	39	40	52

The fourth specimen is a shaped but unsmoothed and unsinewed stave. It appears that breadth and thickness vary in inverse ratio, rather independently of length.

Basically, this is the type of bow made throughout California as far as the Yokuts, at least for the nobler purposes of war and the deer hunt. But the extreme flatness is characteristic of the northwestern tribes, who often shave the sides of their bows to a knife-edge. Elsewhere even the most elaborate pieces become somewhat longer, narrower, and thicker. It may be that the material, which among far tribes is rarely yew, has something to do with this difference; or the northwestern extremity of form may be merely a trick of specialization. It is likely to have weakened rather than strengthened the weapon; but the workmanship commands admiration.

The arrow is of *Philadelphus lewisii*, a syringa, foreshafted with a hard wood, and tipped with stone. The length is about 31

inches—from 28 to 32—or so much that the arrow could not be drawn to the head. (Pl. 18.) The marking is in colored rings under the three feathers. The straightener is a little board or flattened stick perforated in the middle. The arrow shaft was bent through the hole. (Pl. 16.)

The usual arrow point was of whitish flint or obsidian. The former material was more abundant, but more difficult to work nicely. The points were small, slender, thin, and neat. Bone points were also known. These were sharpened on sandstone.

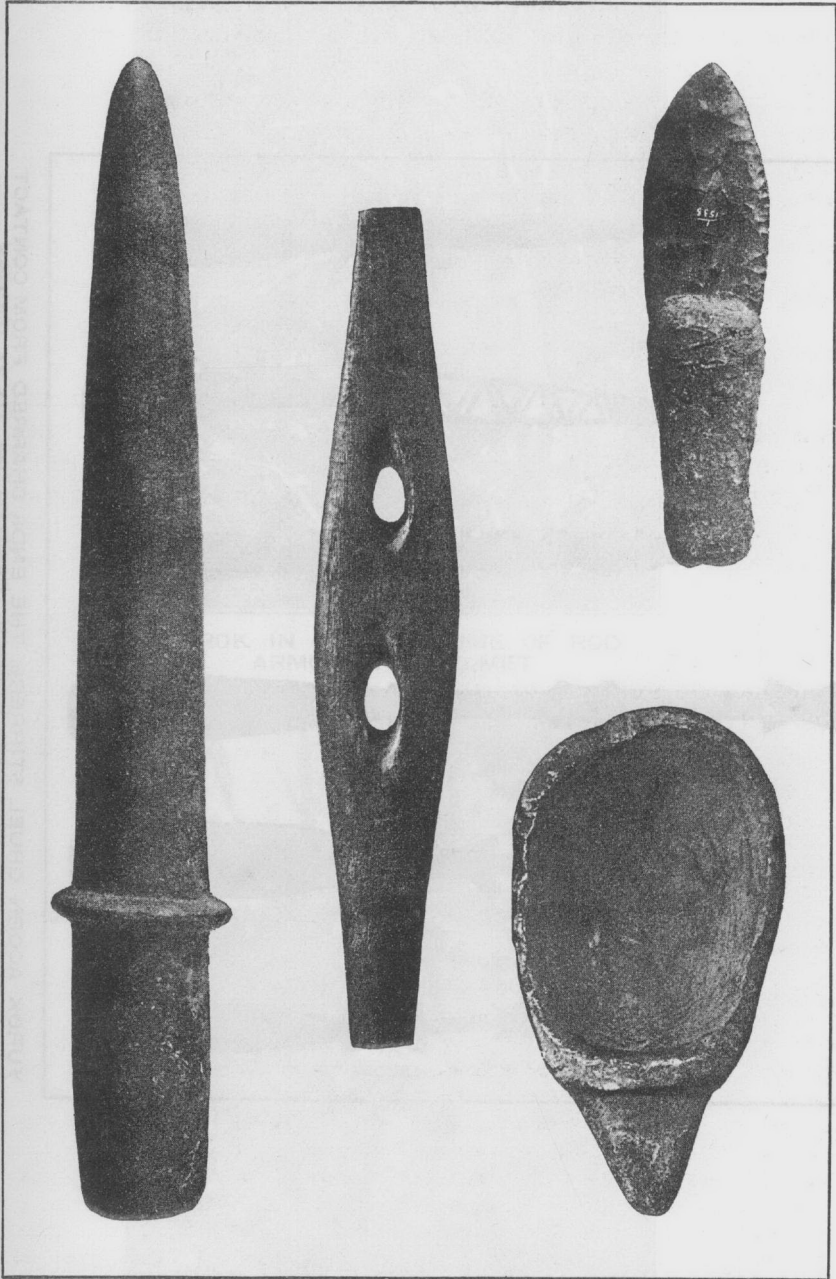
The quiver was a skin turned inside out. Otter and fisher fur made the most prized quivers, such as were worthy of gifts or of display in the brush dance.

BASKETRY.

The basketry of the Yurok and their immediate neighbors is the finest ware made in a style that extended with only minute variations south to the Wailaki, east as far as the Achomawi, and north at least to the Athabaskan tribes on the Umpqua River, if not beyond. If a number of specimens in the British Museum are representative, the ware of the Kalapuya in the Willamette Valley was similar.

This type of basketry is unusually specialized in the rigid limitation of its processes. Coiling, wicker, checker, and twill work are all unknown. Substantially the only technique is simple twining, with patterns throughout in "facing," that is, overlay. Three-strand twining is customary for starts and strengthening courses, and diagonal twining is known, but neither weave is regularly employed for entire vessels. Wrapped twining and false embroidery are common farther north, and lattice twining and three-strand braiding are used to the south, but are never followed in the local area constituted by northwestern California and southwestern Oregon.

The Yurok employ hazel shoots almost exclusively for their warps. The normal woofs are the split roots of conifers—pine, redwood, or spruce. For special purposes, such as the first courses of a basket or especially fine work, strands split from the roots of willows, grapevines, and other bushes are substituted. The conifer roots are of a gray or buff color, which turns brown with age. Service baskets have their patterns made by facing certain woofs with glistening whitish strands of bear grass or squaw grass (*Xerophyllum tenax*), a material used along the Pacific coast for long distances to the north. Ornamental baskets have the entire surface overlaid with this brilliant facing, except where it is replaced by patterns in glossy black maidenhair fern stems, *Adiantum pedatum*, or fibers of the giant fern, *Woodwardia radicans*, dyed red with chewed alder bark. Occasionally both colors are used on one basket, but this is uncommon except on caps. Rather infrequently yellow patterns are introduced, made by steeping *Xerophyllum* in boiled *Evernia vulpina* lichen, and



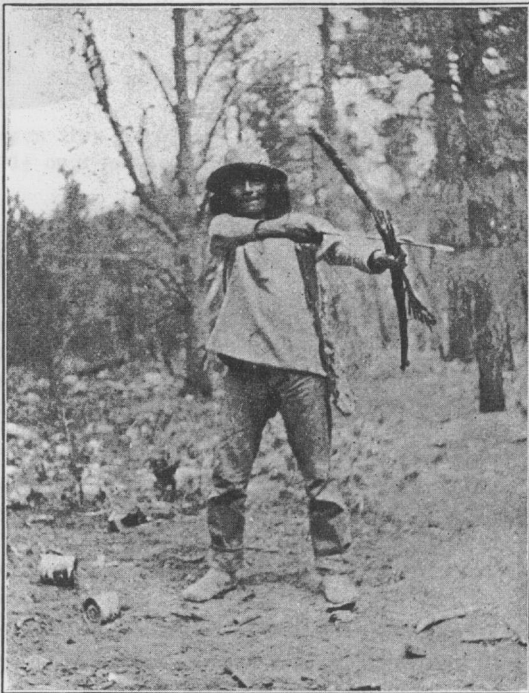
Yurok stone pestle; wooden arrow straightener; "whale colored" flint knife for dressing salmon, the wooden handle lashed with cord and pitched; salmon grease dish of steatite.



YUROK ACORN GRUEL STIRRERS, THE ENDS CHARRED FROM CONTACT WITH THE COOKING STONES. LENGTH, 26½ TO 37 INCHES



KAROK IN WAR COSTUME OF ROD
ARMOR AND HELMET



KAROK DRAWING THE BOW



a, Yurok stool of redwood; *b*, *c*, stone-handled adzes, steel replacing the ancient blades of shell; *d*, *e*, mauls to drive horn wedges.

still more rarely porcupine quills are treated in the same manner and inserted. The use of quills seems to have filtered down the river from the Klamath and Modoc. The Yurok keep the overlay constantly toward the outside, so that no color shows on the interior of the basket except where strand edges peep through the interstices. More easterly tribes twist the warp with its facing, so that the pattern is duplicated, though rather roughly, on the inner side. The materials mentioned are varied slightly by some tribes, but, on the whole, are employed without change as far as the type of basketry prevails.

Some 20 forms of vessels are, or were, made in this technique by the Yurok.

The cooking basket, used specially for acorn mush, is a bowl with vertical walls and usually a single band of rather light pattern.

A smaller basket of the same kind is used by individuals to eat from, or sometimes to cook in.

A vessel like the cooking basket, but somewhat higher, and often faced solidly with *Xerophyllum*, serves as a general receptacle around the house. The decoration runs either vertically or in horizontal bands, sometimes diagonally.

Large baskets, up to 3 feet or more in diameter and height, serve for storage. Vertical and diagonal patterns prevail.

Similar baskets are made in coarse or open work, often on multiple warps, naturally without decoration.

Loads are carried in a conical basket, which hangs across the shoulders from a strap passing over the forehead. These baskets are made very neatly in a wide spaced but even openwork. The type is known throughout California as far south as Tehachapi. (Pl. 9.)

Similar baskets for gathering seeds are made somewhat smaller in close stitch, usually faced and patterned.

The seeds are whipped in with a beater, a disk of coarse openwork on a handle.

Similar disks, somewhat more hollowed and lacking handles, are plates for individual portions of fish; and large trays of the same type abound in every house.

A close woven tray, riced and patterned either in bands or in radiating diagonals, is 1½ or 2 feet in diameter, and serves to gather and shake acorn meal.

This meal is sifted by the Yurok from a smaller, stiff, and entirely flat tray, which is tapped with a deer leg bone. The Hupa replace this sifter by one in the form of a very obtuse cone, which does not require tapping.

Similar to the Hupa sifter is a water dipper, used by both tribes. It is usually unornamented.

A very small bowl or tray, decorated inside, serves parched seed meal.

The *rumitsek* is a more or less globular basket in openwork, hung about the house to hold spoons, awls, snaws, and odds and ends. It is sometimes made very prettily with courses of crossed or gathered warp and a pleasingly equal mesh.

The tobacco basket is small, globular or deep, and sometimes provided with a cover of basketry or deerskin. It is overlaid, but commonly patterned simply.

The hopper for the slab on which acorns are pounded is stiffly reinforced, and usually bears an elementary pattern of bars or dots.

The dance basket serves for display only and has been described above.

The woman's cap has already been mentioned. The finest and evenest work is best combined in this article. The disposition of the ornamentation is fundamentally banded, but the principal zone most often contains a series of alternate blocks of triangular pattern. Sometimes the blocks are rhomboids disposed diagonally.

The cradle or baby carrier is a huge sort of slipper of openwork, stood on its toe or hung from the hoop which forms the heel. Some strands shut off the toe: on these the child is set and tied in, its feet hanging free. A more or less dangling round hood may be added to protect the face, but is commoner in specimens made to trade to Americans than in used pieces. This is a form of the "sitting cradle" that prevails in parts of northern California, as contrasted with the "lying cradle" that most Californians use. To the eastward of the Yurok, as among the northern Wintun, a simpler shape is used, which is little more than an ovate tray with a handle at the small end. To the south, the Pomo, a people of great mastery of the textile art, have developed a somewhat different variety of the sitting cradle. (Pl. 35.)

WOODEN IMPLEMENTS.

The only box known to the Yurok was a more or less tapering cylinder of redwood, from 2 to 4 feet long, hollowed out from the top. A lid covered the opening and was lashed on. Occasionally a rectangular specimen is to be seen, but the usual old form is the cylinder. It is difficult to explain this peculiar shape, unless by a transfer of the canoe-making technique. The boxes served to hold obsidians and other dance valuables and were normally transported by canoe; but a square receptacle would have lain on the round bottom of the boat substantially as well as the round form. (Pl. 15.)

Rectangular platters or trays for deer meat, and huge finger bowls carefully used after a repast of the same, were made of wood. The former are often white with hardened fat and black with smoke and dirt.

From redwood or other lumber were also made the only two movable articles of furniture ever reported from aboriginal California: a round block stool, from 3 to 9 inches high and somewhat flaring (pl. 19), of which several stood in every better house, and a pillow for the sweat house (pl. 10). The latter had somewhat the shape and size of a brick stood on edge with the ends a little spread and the top side hollowed. The stool, although in the living house, was used chiefly by men, who among the Yurok rarely follow the general Californian custom of sitting on the ground. Even outdoors they look about for a log or stone, and in default, kneel, squat, lean, or stand. This little habit is a powerful indication of a well-settled mode of life.

In the Southwest it sharply marks off the town-dwelling Pueblos from their nomadic neighbors. In neither region does the custom extend to women.

The standard fire drill was made—both “man” and “woman,” as the Yurok call the two parts—of willow root. (Pl. 77.)

UTENSILS OF ELK HORN.

Elk horn was used for the point of the flint flaker, for mesh spacers, and shuttles; sometimes for arrow straighteners, for spoons, and for purses. The spoon is truly such, not a ladle, with a rather flat, cross-grained bowl. The handle always bears some decoration, and often is worked into fairly elaborate zigzags and notches. Sometimes it is cut through longitudinally. One extremely interesting specimen has a thread winding around the handle. Unfortunately there is nothing to prove whether this device is aboriginal or suggested by an American screw. The spoon served for eating acorn gruel, but women contented themselves with a mussel shell or the top of a deer skull. Rich houses kept a store of fine spoons to bring out when they entertained dance guests (pl. 20). Modern spoons are made of wood, but these are likely to be imitations, devised when the supply of antler was no longer obtainable. Most Californians licked their daily gruel from the crooked index and middle fingers, but this does not seem to have been good Yurok manners.

The purse or money box was of the same shape as the large wooden box for dance valuables. It averaged 6 to 7 inches in length. Deer-horn specimens were smaller and less used. Several strings of dentalia could be folded back and forth into an elk-antler purse. The lid was then sprung on under a projection at one end and held in place by a thong wrapping. Now and then a different purse was made from the antler where it forks. This type was triangular. All the horn purses were usually incised with the triangles or zigzags which are the basis of almost all Yurok decoration. (Pl. 15.)

There must have been a needle, since rush mats were made by sewing a cord through the stems; but whether the instrument was of wood, horn, or bone, is not known. The mats were sat and slept on by women in the living house.

RECEPTACLES.

A curious receptacle, known only to the northwestern tribes, was a piece of deer hide, folded hair side out, and with a stick fastened along each edge to spring it closed. The whole somewhat resembled a quiver in outline, but was flat and opened along one edge. It was conveniently carried clamped under the upper arm.

A network sack, with mesh small enough to hold acorns, was much used to carry little objects, from food to money. The shape was trapezoidal, with a deerskin strap. This type was known over most of California, and was chiefly if not wholly man's paraphernalia.

Loose feathers and the like were rolled on a sort of mat of herb stems on which the leaves were allowed to remain and which were twined with string. The object is so shaped as to belly out somewhat when rolled up.

A similar mat case of tules was sometimes made for obsidians.

A small skin of soft fur, spread out flat, often had dentalia rolled up in it. At one end a thong was stitched on, which was tied around the bundle.

TOOLS.

The Yurok were tolerable workmen, but possessed few tools.

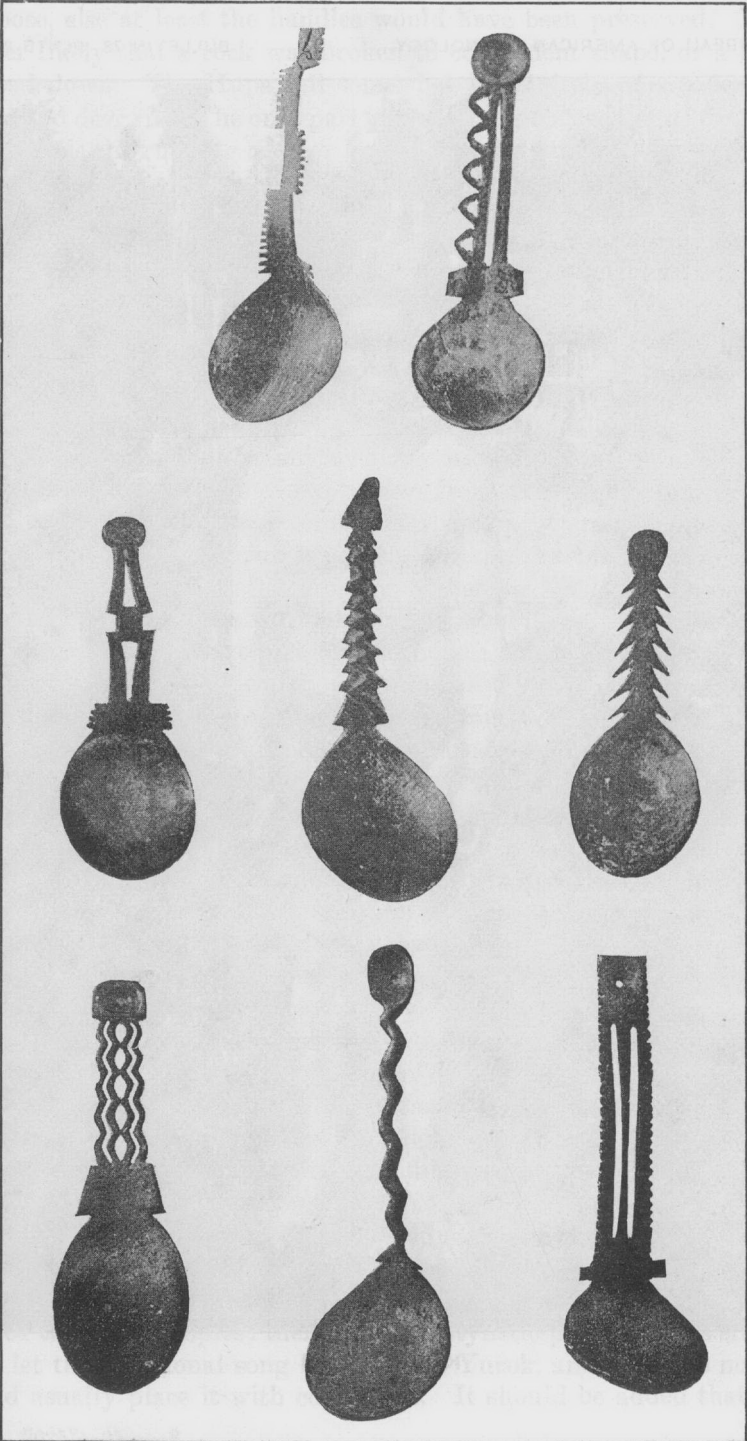
Logs and planks were split with wedges of elk horn from a few inches to a foot, and a half in length. Some of these were nearly flat, others sharply curved, according to the intended use. The edge was produced by rubbing on stone.

The wedges were driven with pear-shaped mauls, 6 to 8 inches in height, of basalt or mottled metamorphic rock. They are usually quite symmetrical and sometimes beautifully finished. Most California tribes were content with convenient stones. These mauls were one of two kinds of tools on which the Yurok bestowed much care. (Pl. 19.)

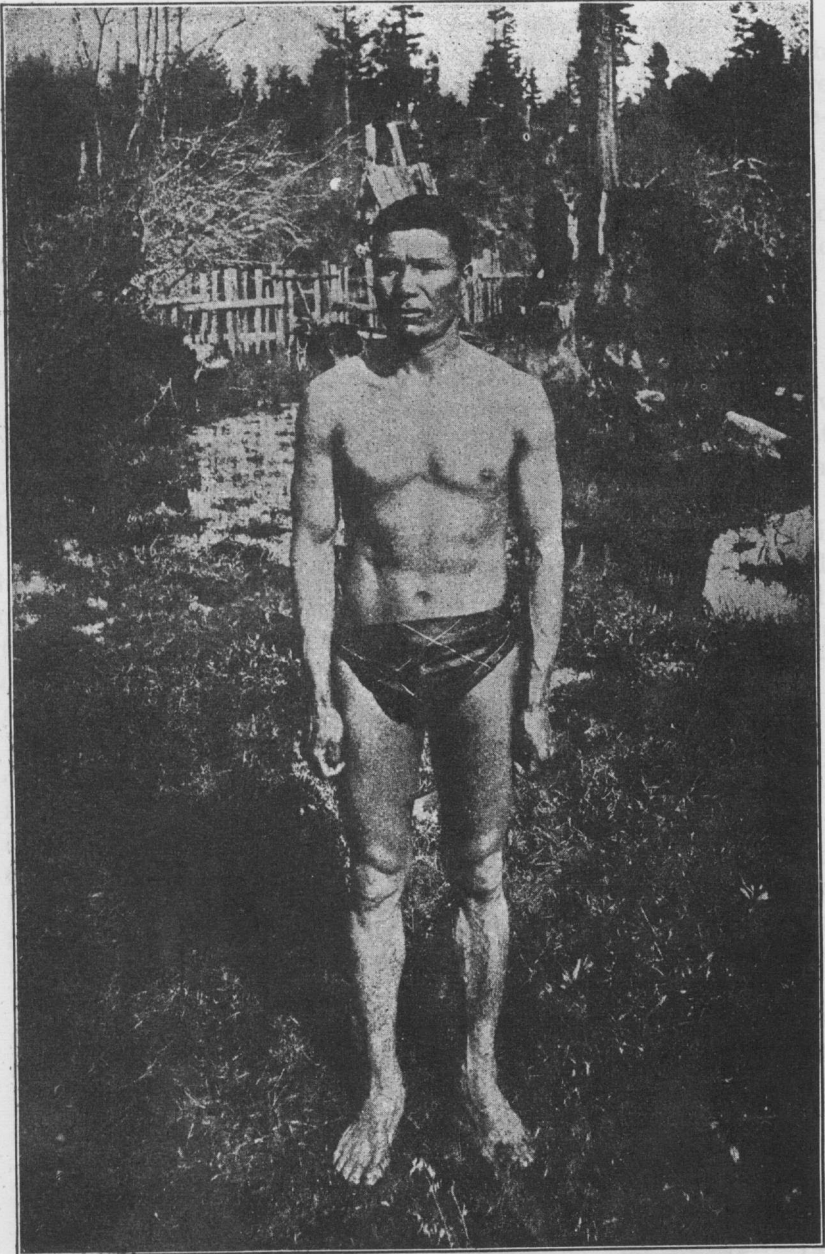
The other was the stone handle of the adze. The blade of this is declared to have been of heavy mussel shell. The handle was 6 to 10 inches long, curved up at the end, sometimes with a taper that seems almost too delicate for use. The other end was cut away to receive the butt of the blade, which was lashed on. (Pl. 19.) Most pieces bear two or three ridges or grooves to hold the lashings from slipping. Sometimes the handle end curls but slightly or is blunt and straight; but such pieces have probably been worked over after a break. Steel very early replaced the shell blades, but the stone handles continued in use as long as any members of the generation of discovery remained alive. This implement is restricted to the region in which the Yurok type of culture prevailed, but, like most of the distinctive utensils that withstand time, existed there in prehistoric times.

It is doubtful with what the Yurok did their finer wood carving, as on the acorn mush stirrers. Elk-horn spoons had their designs rubbed into form with sandstone. Purses, of the same material but hollow, must have been gouged with a sharper tool. The method of boring pipes of hard wood and stone is also unascertained.

The old skin-dressing tools were quickly superseded by steel blades. It does not seem that there were well-formed implements for this



CARVED ELK ANTLER SPOONS FOR ACORN GRUEL. YUOK



KAROK MAN

purpose, else at least the handles would have been preserved. It is rather likely that a rock was broken to convenient shape, or a bone rubbed down. The Hupa tell somewhat indefinitely of scrapers of stone and deer rib. The only part of the aboriginal technique that has survived is the rubbing of deer brains into the hide. These are preserved in cakes of moss, which are soaked before use. The process softens the skin. True tanning was, of course, unknown.

MUSIC.

Music, like art, is difficult to characterize without a special vocabulary that has grown up around it. Such vocabularies do not exist for most primitive arts because their essential qualities are too foreign from our own. Usually it is only certain incidental features of an alien art that have any meaning in our thinking and feeling. We detach these aspects of expression from their roots and describe them in terms which seem significant but are of real meaning only as they refer to our own schemes. It is only the individual endowed with exceptional sympathy or sensibility that can understand any primitive art without a long acquaintance; and since most people have not the interest to familiarize themselves with the art of their own civilization they are wholly incapable of knowing what a remote foreign one is about. Hence they prefer Indian baskets with bastard European patterns; and though they may find something vaguely pleasing in many primitive works of decoration—if seen sufficiently rarely—the quality which appeals is that of strangeness and the grotesque.

It is the same with music. The first impression of a native song is one of funny noises, grunts, deflected intonations; and the almost invariable report is of plaintiveness, wailing monotony, minor wistfulness—emotions which the hopeful lover, the religious devotee, the community celebrating a victory certainly were not trying to render when they uttered the song. A few examples in our inadequate notation convey but a terribly distorted impression. The music must be heard and heard and heard by those both willing and able to listen to it before it can be understood.

Nevertheless the most casual can discern with ease a distinctiveness in northwestern music. Hear again and again any half dozen songs of the Yurok, the Yana, the Pomo, and the Yokuts. Then listen to a new song from one of the latter three nations. Only a fairly proficient musician would venture its definite attribution to one of the three peoples: their range of stylistic peculiarity is slight. But let the additional song be from the Yurok, and even the novice could usually place it with confidence. It should be added that the

Yurok themselves can not distinguish their own music from that of the Hupa and Karok, and in many cases from that of other near-by tribes. But the difference of northwestern songs from those of central California in mass is considerable.

A few external traits can be mentioned. The northwesterner, particularly in the music of his great dances, loves to leap upward an octave or more to a long, powerful note, and then sink back from this by a series of slides, often of a continuous tonal transition. The accompanists at times chant a rhythmic bass pulse without definite melodic relation to the strain. The levels and climaxes vary enormously in pitch, in rhythm, in intensity of intonation. Central Californian music moves more uniformly in a narrower range of smaller intervals.

These are inadequate hints; but they reveal the rich and unexplored field that lies cultivable for understanding to him with sympathy, patience, and a catholic musical sense. For centuries hundreds of thousands of human beings in California have been forming a style, a variety of styles, according to nation and occasion, in which they expressed some of their profoundest feelings; and we can not yet make a single exact and intelligible remark about their accomplishments.

MUSICAL INSTRUMENTS.

In instruments the Yurok are remarkable for their paucity. The sole one was the flute, an open tube of elder wood with three or four equally spaced holes. It was blown diagonally across one end. If a man could sniff a melody into it with his nose, he was rated a virtuoso. Many did not even learn to play it with the mouth. The flute was associated with young men's courtship or unexpressed desires; but it was also played by their elders as they sat on sunny afternoons before the sweat house in idle meditation. The instrument is incapable of accompanying the voice. A bone whistle used in the Deerskin dance produces only a monotonous blast.

The northwestern tribes of to-day cover a cracker box with horsehide. This makes an effective drum to go with the songs that intensify gambling. But the device is not aboriginal. The Yurok say that anciently their sole drum was a convenient plank, preferably of seasoned white cedar, thumped with a stick. If a passer-by wished to join in, he brought his paddle up with him from the boat.

No sort of rattle was used by the Yurok, though several types are known from their nearest neighbors. The musical bow and the rhythmic rasp of other parts of California were also unrepresented.

This extreme poverty of instruments among a people not deficient in technical devices suggests a strong styclicization of their vocal music.

CONCLUSION.

In addition to the many sorts of baskets and a considerable number of dance paraphernalia, nearly 100 different kinds of implements of Yurok manufacture have been preserved in museums. Adding those which went out of use before they could be collected, it is safe to say that the group made at least 150, and perhaps 200, distinct types of utensils. This is evidence of a fairly rich civilization.

Here ends the description of the Yurok. The next account will be of the Karok, a group so similar to the Yurok in everything but speech that their separate consideration will scarcely be necessary except as their life is conditioned by their geography; and of two smaller peoples, the Wiyot and Chimariko. Next in order are the Californian members of the great Athabaskan family, in some ten divisions. The nearest of these, the Tolowa and Hupa, partake wholly of the Yurok type of civilization. From them southward a transition can be followed, from group to group, until with the Wailaki, and especially the ultimate Kato, another culture, that of north-central California, is wholly entered. The Yuki and Pomo and a branch of the Miwok come next in sequence along the coast as far as the Bay of San Francisco. Here the review leaps northward again to the Shasta, neighbors, through the Karok, to the Yurok, and participants in their civilization, although in modified and often diminished state. Beyond the Shasta the central Californian type of culture predominates once more. Some considerable traces of the northwestern civilization are still discernible among the Modoc, the Achomawi, the northerly Wintun, and even certain of the Maidu, but they become fainter and finally fade out.

The relations, intrinsic and distributional, of the northwestern culture to the others in California can thus be set forth with some distinctness. The bonds that link it northward with the cultures of Oregon can not yet be adequately portrayed, intimate as they appear to be. In comparisons in this direction lies the chief avenue to a broader understanding of this peculiar civilization.