Reports of the

UNIVERSITY OF CALIFORNIA ARCHAEOLOGICAL SURVEY

NO. 68, PART II

ETHNOGRAPHIC NOTES ON CALIFORNIA INDIAN TRIBES

II. ETHNOLOGICAL NOTES ON NORTHERN AND SOUTHERN CALIFORNIA INDIAN TRIBES

C. Hart Merriam

Compiled and Edited by Robert F. Heizer

University of California Archaeological Research Facility
Department of Anthropology
Berkeley

February 1967

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PART I. ETHNOGRAPHIC NOTES ON CALIFORNIA INDIAN TRIBES [Berkeley, 1966]

PART III. ETHNOLOGICAL NOTES ON CENTRAL CALIFORNIA INDIAN TRIBES [to be published]

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CONTENTS

ETHNOLOGICAL NOTES ON NORTHERN CALIFORNIA INDIAN TRIBES
YUROK
NER-ER´-NER 167
PO-LIK´-LAH 169
WE-YOT 178
HAH-WUN´-KWUT 181
LOLAHNKOK 190
TSEN-NAH´-KEN-NES 195
HOOPAH 197
KAROK 203
SHASTE 213
PIT RIVER TRIBES
A-JU-MAH´-WE 219
MODESSE 223
CHEMARIKO 226
KO´-NO-ME´-HO 230
IDENTIFICATION OF THE KO´-NO-ME´-HOO 235
KO´-NO-ME´-HO TERRITORY AND VILLAGES 239
KO´-NO-ME´-HO AND KAH-HOO´-TIN-E-RUK LANGUAGES . . 241
IDENTIFICATION OF THE NEW RIVER TRIBE 244

ETHNOLOGICAL NOTES ON SOUTHERN CALIFORNIA INDIAN TRIBES
CHUMASH 251
KAM´-ME-I 253
TOO^{CH}-E-PAH 255
A-WHAH´-KO-WAHK´ 255

ILLUSTRATIONS

Figure 27 Ner-er´-ner method of mending canoe . . 167
Figure 28 Karok meat drying rack 210
Plate 34 Hah-wun´-kwut smelt drying 186

ETHNOLOGICAL NOTES ON NORTHERN CALIFORNIA INDIAN TRIBES

YUROK

Ner-er´-ner Notes

Canoe Repair

On September 15, 1921 I examined a Ner-er´-ner[1] dugout on Stone Lagoon. It was an old one, about fourteen feet in length by five feet in breadth at the broadest part, and was surprisingly thin—the sides not more than an inch in thickness. It had been cracked on both sides and the cracks had been mended in an interesting way by inserting an hourglass-shaped plug across the crack, as roughly shown in the accompanying sketch (fig. 27). As may be seen, the waist or narrowest part of the inserted block is exactly on the line of the crack. The mortice hole is very carefully fitted and does not extend completely through the side of the boat, there being no indication of it from the inside.

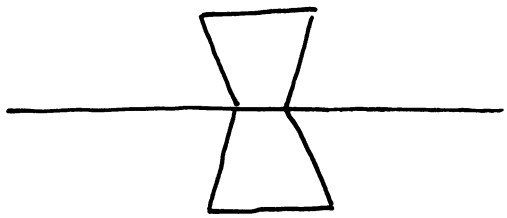

Fig. 27. Ner-er´-ner method of mending crack in canoe.

Acorn Bread

In addition to the ordinary acorn mush, called gog-gawk, the Ner-er´-ner made acorn bread by cooking the acorn flour on hot stones, which, however, should not be too hot. This bread becomes dry and remains good for a month or more.

Mythical Beings

The Ner-er´-ner, like their relatives the Poliklah, believe in Wild Indians whom they call Oo-ma´-ah. These Wild Indians are here all the time, living in the woods and keeping out of sight. Our people are

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[1] [Otherwise known as Southern Coast Yurok, whose territory lay between Big Lagoon and the mouth of Little River in Humboldt County. Ed.]

afraid of them. They kill persons at a distance by throwing tiny arrows which they carry in a sack. These miniature arrows or darts, as small as a match or even as a needle, are thrown from a distance. The person hit bleeds to death, or goes to sleep and dies while asleep.

Slugs as Medicine

The Ner-er´-ner of the Trinidad Bay region use slugs, which they call a-wah´-mah, as a remedy for boils. The slugs are mashed and used as a poultice, and are said to cure a bad boil in two days. The same material is used to cure the sore mouths of children.

Beliefs in Mammals and Birds

The Ner-er´-ner believe in a water panther which they call ka-get´. It is a very large, mythical beast. The same belief is held by the Poliklah.

Both Ner-er´-ner and Poliklah hold the white deer, called mon-cha-poo´-ook, to be a sacred animal, and believe it is a different and much rarer species than the common deer.

The Ner-er´-ner consider it good luck to catch a flying squirrel, which they call toop. They say it is worth ten dollars.

The Ner-er´-ner call the gray or Oregon jay (Perisoreus obscurus) ne-mok´-wet-paws, and say it is crazy; and that it will even come to the place where dead people are and light close by.

Both the Ner-er´-ner and the Polikla say that the valley quail (Lophortyx) is a newcomer in their country. They have no ancient name for it.

The Ner-er´-ner call the shrike (Lanius gambeli) mer-persh´ and associate it in some way with Coyote's whiskers.

Plant Notes

The acorn of the tanbark oak (Lithocarpus densiflora) forms one of the principal foods of both the Ner-er´-ner and their relatives, the Poliklah. The Ner-er´-ner call the tanbark tree hawk´-mon-naw, and its acorn, wen-nepl.

The tree (Alnus oregana) is called wer´-er. In their country the

leaves are always wet, which they say is because the alder is always crying because it has no father. Its mother is the earth.

The feverbush (Garrya elliptica) is called pe´-e´-te´. Its wood, hardened by fire, is used for mussel bars to pry the mussels off the rocks.

The cascara tree (Rhamnus purshiana) is called saw´-ah. Its bark is boiled for cathartic medicine.

The sage herb (Artemisia ludoviciana) is called met-cha´-nep. They say it is the grandmother of the fireweed (Epilobium angustifolium). They make a tea of it for sore eyes and itching skin, and use it as a lotion for sores. The fireweed they call met-cha´-nep a-koo´-cha, meaning sage herb's grandchild.

The edible seaweed (Fucus) they call che-ge. It is dried and eaten without cooking.

Po-lik´-lah Notes

I spent September 16 to 19, 1910 at Requa on the north bank of Klamath River about a mile above its actual mouth. There are a number of Indians here, all belonging to the same tribe—the Po-lik´-lah (commonly called Yurok in the books). Some of them were born here, but most of them came from villages farther up the river, between Requa and Wetch´-pek (at the mouth of the Trinity).

Requa, a small settlement with a salmon cannery, store, and roadhouse, was named from an Indian village, Rek´-woy or Rek´-kwoi, which was half a mile nearer the river mouth, below the cannery and on the same side (north).

The present Requa stands on the site of another old Indian village, named 'T-mer´-ra. Most of the Indians now live at 'T-mer´-ra. Across the river, opposite Requa (on the south side), was another village, Weshkwa´-o. A few Indians live over there now.

The Indians are well-to-do, making good wages working in the salmon cannery and catching salmon in the season, and working elsewhere at other seasons. The women are constantly making baskets, especially hats of the Hoopah style and small trinket baskets. These are usually well made and handsome.

The body material of baskets is spruce roots (Picea sitchensis) which are dug out and cut off in lengths of two and a half to three feet and from one-half inch to one inch in diameter. These are at once (while full of sap and soft) split into broad flat bands, and these in turn are subdivided by knife and teeth until the desired size is obtained—a little larger than coarse thread, about like small twine. The vertical rods are hazel (Corylus). The overlay is Xerophyllum. The design is commonly of black maiden hair fern stem (Adiantum) or salmon red strands made by dying the stem-bundles of Woodwardia fern with alder bark chewed.

Nearly all the women wear the basket hat (ek-kah´), with a long lock of hair hanging down on each side of the face.

They carry their burdens of firewood and odds and ends in an open work carrying basket (ka-woi´) by means of a flat headband (was´-skool) which passes around the middle of the basket and over the front part of the head, resting on the basket hat. They carry their babies in the regulation Klamath River baby basket (naw´-aws´), on their backs with the baby sitting on the seat part and facing out back (its back toward that of its mother), kicking its little feet as the mother walks along.

They are now drying salmon on racks or frames hanging down inside the houses, surrounding the fire. They cook acorn mush (ka´-go´) of the tanbark oak (ho-mon-no´, whose acorn is waw´-me^{ch}) in twined cooking baskets (mo-reep´) made of spruce roots, with only a small amount of ornamentation.

The Po-lik´-lah have an ornamented large storehouse basket (nep-pa´) for acorns and dried fish, which they cover by inverting over it an ordinary open work burden basket (ka-woi´) which serves to keep out mice and so on and at the same time admits the air.

The mush bowls (pa´-ver-kak´) resemble the cooking baskets but are much lower. They use the big leaves of skunk cabbage for lining the open work carrying baskets when used to gather huckleberries or salal-berries.

They also have a coarse open work shallow bowl (la'p-sek´-k^{oo}) which they use as a platter or plate to serve and eat from, and which is usually full of pieces of dried or cooked salmon.

The mortar basket is pa´-kwan; the tightly-woven and ornamented burden basket for gathering seeds, cha-lov; the seed paddle, law´-a-saw´;

the flat circular meal tray, na-wa´-tso-nep´. They do not use the deep conical winnower common to many of the coast tribes.

Most of the women wear a tight-fitting necklace of two to several strands of braided grass or Xerophyllum.

They believe in two kinds of water people: ka-a´-mus, bad water people, male and female, who may harm or drown people; and keg´-gor, another kind.

They say Thunder ('hlok^{ch}-ko^{tl}) lives in the dark, deep forest and thunders only when angry.

The Polik´-lah had thirty-five villages on Klamath River, beginning at Wetch´-pek, opposite the mouth of Trinity River, and extending down on both sides to Rek´-kwoi on the north side of Klamath mouth. Of these, twenty-two were on the north side (right hand bank) and thirteen on the south (left hand side). Besides these, they had one village (Um-man´) on the coast, five miles north of Klamath mouth, at or near the mouth of Willow Creek.

Ancient White People

When the Po-lik´-lah, on their way south from the far-off north country, arrived at Klamath River, they found there a nation of white people called Waw-ga. The headquarters of these people was at or near Waw-ker-rah, which is on the present Johnson ranch, about two hundred rods below the house. The Waw-ga were fine people, very intelligent and kind. They welcomed the new people from the north and shortly afterward left the country. They did not tell where they were going, but said that sometime in the future they would return. The Po-lik´-lah have been looking for them ever since.

Numerals

There are two or three distinct sets of numerals according to the sense in which they are used.

Wedges

Wedges of elk horn, called sacho, were used for splitting logs in order to obtain the planks of which houses were constructed. In addition to the wedges, elk horn chisels also were made for finishing the planks.

Ethnozoology

Any animal or bird was called hor´-am-mos. The word was used mainly in the old songs. The people believed in a Water Panther called K'noo´.

Aplodontia was called wes´-skem. Abundant in the region, they were best caught with onions for bait.

Flying squirrels were called toop´-toop´.

Jack rabbits are rare and occur chiefly along the beach. The people believe that they came from the Hoopah country and therefore call them Hoo-paw-ne her´-kwer. Her-kwer is the name of the common brush rabbit.

The dove is called ah´-row-we, the same name as that of the blue-belly lizard (Sceloporus).

The valley quail did not inhabit the redwood forests of the Lower Klamath country but came in after the whites had made clearings. Both the valley quail and the little yellow-bird are prized and protected by the ranchers for the reason that they eat thistle seeds.

The Junco (ta´-get-mor) is called the Owl's baby. The little chickadee (Parus) is called mer-pert, meaning pubic hairs, for a long time ago a man jerked out a handful of his pubic hairs and they turned into chickadees.

The little green heron (Ardea wirescens) is called cher-rik´-uk ne-merk, meaning the place where dead people go.

The hairy caterpillar marked with orange and black (one and a half to two inches long) is called che-er-re´ a-maw, maning bear louse.

Plant Notes

Among the vegetable substances used for food, the acorn of the tanbark (Lithocarpus densiflora) holds first place. It is made into mush and bread. The tree is called ho´-moh-no´, the acorn, waw´-mech.

The fever bush (Garrya), called pe´-e´-te´-oo, is used as medicine and made into a tea for colds.

The leaves and twigs of the common coast lilac (Ceanothus thyrsiflorus), called sah-sip′, are boiled to wash newborn babies.

The common coast huckleberry (Vaccinium ovatum), called che-e′-hre, and the red huckleberry (V. parvifolium), called slaw-is′-kat, are used extensively for food. The long, straight, green branches of the red huckleberry are used for brooms.

For arrows two bushes are used, namely: the wild syringa (Philadelphus lewisi), called mah′-er; and the coast spirea (Holodiscus ariaefolius), called ach-kaw′.

The coast honeysuckle bush (Lonicera involucrata), called kererts′-wer′-ner′, is conspicuous because of its big purple berries and red bracts. The berries are said to be poison and children are warned not to eat them.

The herb (Artemisia ludoviciana) called met-sah′-neh is made into a poultice for sore eyes.

The big leaves of the skunk cabbage (Lysichiton), called mach-po, are used as a temporary lining for open work baskets when used to hold berries.

The umbellifer Leptotaenia californica is a sacred plant, having a forked root from which the first woman was made. It is called walch-pa′, and is the most sacred plant of the tribe.

Another plant, the identity of which is unknown to me but which is probably also an umbellifer, is used as an antiseptic and disinfectant for bathing sores and corpses, and for washing houses and articles that have been near the dead, and especially in case of infectious diseases. The leaves are large; the plant grows in wet places and dies down in the fall. It is called ho-mon-nah.

Two kinds of so-called wild potatoes are used for food; one is called toi-ke, the other, tron-ko. The tops of toi-ke are said to be poison. Neither plant has been seen by me, but toi-ke is likely to be a small umbellifer.

The berries of the elder (Sambucus), called tah-am′-mo, are used for food.

The name of the madrone is sa-goh. The rhododendron is sa-gon, from sa′-gon, meaning madrone-like, or, resembling the madrone.

The blossoms of the manzanita are universally called se-um´. Everybody knows them by this name. The word se-um´ is never applied to any other flowers excepting by the old Doctors who in songs apply it to the flowers of other trees, using the expression kahl se-um´. But they never call any ordinary flowers by this name, but use the regular name for flowers, which is che-do.

Cutting Trees

Large trees were cut down by means of elk horn axes or adzes driven in by stone mauls. In felling a big tree, such as a redwood, the cut was made broad enough to let in the body of a man so that as men chiseled their way in they were able to crawl into the gap and thus reach the wood of the interior. Trees fully ten feet in diameter are said to have been felled in this say—a most laborious process.

House Slabs

After a big tree had been felled and cut into suitable lengths, the logs were split into slabs in a curious way. By means of elk horn wedges they were first split into halves and then into quarters. Then, in getting out the planks, the quarter-sections were "split bastard," which means that they were split parallel to the bark or outside of the tree (crosswise of the section), instead of across the log from one side to the other.

Villages

With the exception of Ah´-men, at the mouth of Wilson Creek on the coast six miles above Klamath mouth, practically all the villages of the Poliklah were on Klamath River, usually not far above high water mark. But there was also a village at some distance up on Blue Creek where the salmon fishing was good. The name of this village has been forgotten by the informant.

Canoes

The large dugouts were hewn out of the trunks of big redwood trees. The interior was dug out by means of the elk horn adz and chisel, assisted by fire. A good deal of burning was done, particularly on the inside finish.

Cave

Between the upper waters of Pekwan and Kappel Creeks is a rather large cave. Many years ago a Karok war party from the region of Orleans Bar made a raid into the territory of the Poliklah. They were discovered and driven into this cave, where it is believed that they perished. It is said that a number of their baskets still remain in the cave.

Sexual Differences in Speaking

Certain words are spoken differently by men and women. For instance the word for "my brother," as spoken by a man, is ne-pah; as spoken by a woman, ne-la-e. The word for "sister," as spoken by a brother, is na-wa; as spoken by a sister, na-let.

Baby

The word for baby varies according to the age of the baby and also according to whose baby it is. Thus a newborn baby is called chah-nooks or cha-a-nooks, from chan-ne, meaning lately; while an older baby is called cha-ken-ne, or sometimes, tser-erk. "My baby" is no´-ok-sah; "your baby," ko´-ok-sah; "his baby" or "their baby," ok´-sah. In speaking, the word ok´-sah is abbreviated to o'ks.

Sweat Houses

The sweat houses are called er-gerk´. These are rectangular structures approximately twelve by eighteen feet, and are almost wholly under ground, the edges of the roof being flush with the surrounding level. The roof slabs rest on a pole placed lengthwise over the middle of the sweat house so that the roof slopes to the ground on both sides. The slope is slight, the ridge pole being only about eighteen inches above the level of the ground.

The entrance is a small opening dug out on the middle of one side. The exit is at one end. It is a rectangular pit about six feet by three, with the long diameter against the end of the sweat house. This pit is lined with fir boughs on which persons emerging from the sweating rest long enough to cool off before plunging into the water.

Ceremonial Houses

In older times there were four ceremonial houses. They were at Pekwan, Rekwoi, Orick, and Big Lagoon. The Lodge Dance (now called Jump Dance), the most sacred of all, was held in them.

Some of the ceremonies were given in the sweat houses. The Doctors' dances were held there. But the brush dance was held in ordinary large dwelling houses from which the sides and roof had been removed. The houses were built of slabs set up on end and fastened with hazel withes so that it was not very difficult to take them down. The frame supporting the roof was not disturbed. The houses were large enough to hold about twenty-five people. The earth inside was excavated to a depth of three or four feet.

Death Customs and Beliefs

The dead were buried, not burned. The burial place is called ka-a-me^{chl}, the grave digger, kah-ma-tow. The body of the dead person was washed and sprinkled with water at the grave before burial. After death the spirit or ghost, called sah-e^{hl}, departs for the abode of the dead, called Cher-rik-kuk, which is a long way off. Before reaching this place it has to cross a big river, the name of which my informant forgets. The ferryman is called e´-lah. His canoe is only half a canoe, being split lengthwise. In this he ferries the spirit across the river of the dead. When the dead people on the other side see the canoe approaching, they run down to see if the spirit or ghost really belongs to their tribe. This they know by the nose stick (me´-per). If it is in place in the septum of the nose, the spirit is welcomed; if not, it is stoned. The nose stick consists of a long shell of "cheek" (Dentalium). It is never worn during life, but is placed in the nose hole after death as a tribal recognition mark for the spirit world.

Distance (travel)

If on level ground, the length of a journey is counted by days; if in mountains, it is reckoned by the number of ridges crossed.

Effects of Settlement on Animals

Several mammals and birds not originally inhabiting the dark redwood forests of the Lower Klamath have come in since clearings have been made. Among these are the gray ground squirrel (Citellus douglasii), the valley quail (Lophortyx californicus), and doves (Zenaidura). The gray tree squirrel (Sciurus fossor) was there before, though scarce in the dark forests.

Menstrual Hut

The women remained in this lodge ten days, bathing every day. They were required to eat special food and were not allowed to eat meat or fish.

Rainbow

The rainbow had two names. One was neg´-atch-a-pra. It was said that if a girl stood under a rainbow she became pregnant. Another informant tells me that the rainbow was often called wun-nows´-le pa-as-kon lets-ken-nik, meaning "won't drown children any more."

Kingfisher

If a kingfisher (che-le^{hl}) flies over a woman, she will at once begin to menstruate.

Dogs and Horses

The Poliklah have always had dogs. They are large and often called wolf dogs. The name for dog is chish´-shah. When horses came, they also were called chish´-shah, and to this day they are known by the same name.

Carrying Baskets

The coarse, open weave pack basket (ka-woi´) is used mainly for carrying acorns, firewood, and other coarse or bulky materials. A tightly woven kind, called cha-lo, is used for seeds and other small articles.

Different Words for Same Idea

In certain cases different expressions are used to convey the same idea: thus, to tell a dog to go away, one says che-nak; but to tell a person to leave, the word is no-saw-tos.

WE-YOT NOTES

The We-yot old men say that their country reached east only to the junction of Van Dusen River with Eel River, and south only to Bear River Ridge.

The We-ke of Humboldt Bay claim hunting ground as far east as Kneeland Prairie.

The Bridgeville tribe, whom the Soo-lah´-te-luk call Hah-ke´-der-we-tah´-lik (Ket-tel), came down the Van Dusen to its mouth.

The word for people is ko-wil´. Man is ko-we. The proper name of woman seems to be hom-mot-wil or hah-kah-botlch, but women are nicknamed kah´-kah-dow-we (meaning unknown).

There are two kinds of doctors: the shaman, called dahn- (or tahn-) ne-lot-wil^{ch}, who sang and sucked out the evil; and the medicine doctor, called we´-rah-kah-ko´-mish, who administered herbs.

After a person dies his name is no longer spoken. His spirit, called sher-rah-wahk, goes west over the ocean.

A Humboldt Bay Soo-lah´-te-luk man stated that he called his totem wal´-la-bok-kwuk´-se-klah, and that it came from the grizzly bear (mah^{kw}).

There are many things the young people were never told. They were never told much about trees or heavy timber. They were not told the names of inner bark and other things until they were old.

The striped June bug is called kat´-kus. The old people used to take a number of these bugs and small pieces of old rotten wood. In the dark of the moon each person would tie a small bit of the rotten wood to the June bug, usually to one of his legs, and then set fire to the wood and let the bug fly away with it. The person whose bug came down first, or whose fire went out first, would be the first to die. The person whose light was seen last would live the longest.

Both sun and moon are called tahm, but the moon is called also dot´-so-we-li´-luk-kwa.

The woman sometimes wore a buckskin short skirt, called hawk´-ker´. They wore handsome aprons called ah-vot.

In early days the men wore a breech cloth called puts-kah-ret´-san-

nil. It was of buckskin—fox or the so-called ring-tailed cat (Bassariscus), which latter was a favorite.

There were several kinds of blankets. The commonest were of deer skin tanned with the hair on. The warmest and best were those of the cottontail rabbit, of which as many as a hundred skins were sometimes used in making a single large robe, called ha-wa^{ch}. Coon skins and fox skins also were sewed together for blankets.

There were several kinds of money. Ordinary wampum, consisting of strings of perforated clam shell disks, was called chi-wah-chatch, but the most valued money consisted of the long Dentalium shell, of which thirteen composed a string, called e-ver´-re-kut kah´-ne. This money was used to purchase women and to atone for killing men.

There appear to have been two units of length: one, called koot-sa-vah´, measured between the tips of fingers of outstretched arms; the other, called sa´-pah, was from the outstretched fingers of one hand to the top of the biceps muscle.

Mammal Notes

The black bear is called skro-sig´-gah-dah or sets-kro´-kle´-ga-der, on account of its small eyes.

After the big tidal wave flood had gone down, the first track seen was that of the coon, called har´-rah-wesh´ and cha-pa´-tle utch-utch.

The sea lion (ko´-mah-yu´-lik) swims back and forth and north and south.

Jack rabbits (dah-nah-kla-wa-op-lo´-ke) were not known in the Eel River and Humboldt Bay country until after the white man came. They first appeared on the gravel bars along the river, where they are still common. For a long time our people were afraid of them. Our name for them means "long ears."

If you kill a flying squirrel (choop´-choo-kants) and throw it in the brush, it will continue to make its noise just the same as before you killed it.

The mole lives underground and holds the world up with his big hands. If he comes up on top of the ground he is frightened and dies.

The bite of the little shrew is poison. You must not let him bite you.

Dogs are called wah´-yeets. They were about the size of coyotes and had large ears. Our people always had them.

Bird Notes

The condor is called shah-ti´ or sha-tah´-ish. He is the biggest of all the birds. He is so big that when he flaps his wings it makes the wind. He used to be common but is not here now. My informant saw one on Salmon Creek when he was a boy of fifteen. Among the First People the condor was a powerful doctor.

The flicker (Colaptes), called te-awk and sometimes also called bah-te-te-tah-na-vik, was a helper to the doctor. When he comes to a person's house and hammers on it that person will live to be very old.

The purple finch (Carpodacus) was called chotch-kis. This bird is most powerful. It is the greatest of all birds and comes next to Coyote or Jesus.

The little wren, called ko-wil´ (person) and tah-kah´-tah la-wel, threw people's bodies into the fire; that is why he is called ko-wil´.

Plant Notes

The wild pea (Lathyrus) is good medicine for diarrhoea.

The white-stemmed everlasting (Gnaphalium) is strong medicine. Girls must stay away from it and on no account touch it; if they do they are likely to have a baby.

Wild tobacco is called a-kwahs´-wuk. The pipe had three names, of which mah-ses appears to have been the most proper. The stone pipe was called kas´-wah-kil and ku-u´-paw. Tobacco bags were usually of buckskin.

HAH-WUN´-KWUT NOTES

The tribe as a whole has no distinctive name for themselves, except Huss, the word for people. But they have definite names for village areas. Those living at the mouth of Smith River call themselves Hah-wun´-kwut; those at Burnt Ranch, about three miles south of the mouth of Smith River, Yahnk-tah´-kut; those at Crescent City, Tah-ah´-ten, and so on.

The territory of the tribe as a whole extends from Winchuk River (Um-sahng´-ten) on the California-Oregon boundary south to Wilson Creek (Tah-ges^{hl}-sah), about eight miles north of the mouth of the Klamath River.

The coast tribe immediately north (on the Oregon side of the line) is called Cheet or Che-te. Their language differs materially from that of the Hah´-wun-kwut, though most of the words could be understood. Only a single woman survives.

The tribe on the south, from Wilson Creek to Klamath River, is called Tah´-che-ten´-ne and Tet´-le-mus.

The tribe immediately east of the Cheet on the Oregon side of the California-Oregon boundary is called Ka´-ka-sha. Another name, Choc-ne, also was given, but I am in doubt as to whether or not the same tribe was meant. The Ka´-ka-sha live near Waldo on the north side of the Siskiyou Mountains and speak a language widely different from that of the Hah-wun´-kwut. They are said to be lighter in color than the coast Indians.

Dress and Ornament

The people used deer skin blankets called nah-hi´-ne, tanned with the hair on. Also blankets of rabbit skin, called wa´-gah hahs´-nis-te.

Deer skins tanned with the hair on are called nah´-ki-le.

The breech cloth formerly worn by the men was called rut´-soo and tat´-es-tat´. Moccasins (kus-ki´-a) of elk hide were worn by rich men.

The women wore a front apron called sahng, and on dress occasions an ornamented cloak-like skirt (chah) that extended all the way around and lapped over in front. They also wore basket hats, called ki´-e-traht´, and necklaces, the general term for which is ni-ta´-kle-ah. On occasions they wore ear pendants (bus-shra-mes-lah) of elk or deer bone. Nose bones or shells (mish-mes-lah) were sometimes worn; those of rich persons consisted of one of the long Dentalium shells. The chin is tattooed with three narrow lines called tah-ah-ru^{hl}-tes.

Nose Stick

The Hah-wun´-kwut never perforated their nose during life, but when a person died they charred a piece of poison oak to make it strong and sharpened it and bored a hole with it through the septum of the dead person's nose, and then put a Dentalium shell (money) in the hole before burying the person.

The To1-lo-wah of Crescent City and the Karok of upper Klamath River (Orleans Bay to Happy Camp) were the only Indians the Redwoods knew who dared wear the nose shell when alive; the other tribes were afraid to do so.

Houses

The house (munt) is square and built of planks or slabs hewn from redwood trees and stands up vertically, as in the case of those of the Klamath River Indians.

Ceremonial Houses

The ceremonial houses are called na´-stahs-ma´-ne. They are square and have a ridge roof. During important dances the front side is removed.

Sweat Houses

The sweat house is called shes´-kle and is large enough to hold twenty people. It is square or. rectangular, and the ground floor is excavated to a depth of about four feet. The roof is of hewn planks covered with earth.

Money

The ordinary medium of exchange is called trut, and consists of shells of Dentalium of which the valuable long ones are called tat´-tos and the commoner short ones, kle´-ah. Clam shell disks and buttons are called nah´-set.

Treatment of the Dead

The dead are buried in a grave (che´-slo). The people assert that they never burned their dead. They say that a spirit or ghost (nah-who´-tlan) goes out of the body after death and becomes a ghost.

Ceremonial Dances

Dances are called na´-stahs or nesh´-stahsh. A puberty dance, called chahs´-stah wa´-nish tahs, was held for the girls. Other important dances are held. Some last five days, others ten days.

The ceremonial drums, hah´-et-sah, differ radically from those of any other California Indians known to me. They are large cooking baskets, about two feet in diameter. Only new baskets are used in order that they may stand the drumming.

Rattles, called chah-pat´-chah, are made of the small hoofs of deer. Cocoon rattles were not used.

Whistles, called tut´-tle-nik, are made of large quill feathers of birds, not of bone.

The Stick Game

The stick game is a favorite of the people, as in most California tribes. It consists of a number of slender sticks called not-tra´-le, of which one, called chah-when´, is marked. The counters are called chun; the man who keeps count, chun-ting. A dressed buckskin is stretched tightly on the ground between the players, and when the game is called the sticks are thrown down upon it.

Baskets

The basketry is of twined weave called chet-too. The big storehouse baskets, called hawsh-tan, are closely woven and have a shallow saucer-shape lid. The large open work burden basket is called tus; the large cooking basket, met-too´-sil^{ch}; the small mush bowl, hah´-tsah; the large shallow meal tray, mes-chet´-te-gah´; the large open work shallow bowl, tre-kwahs´-tuk; the small open work plate or platter, kah-se; the sub-globular choke-mouth trinket basket, net´-tah; the milling basket, ki´-e-sut; the baby basket, kah-yu, and its shade, ne-whats-tah; the women's basket hat is called ki´-e-traht´. There is also a sub-globular open work basket called i´-a-loo´, with an arched handle for carrying on the arm.

The cooking bowls, mush baskets, and other small baskets are made of spruce roots, more or less covered with an overlay of bear grass (Xerophyllum) called too-te^{chl}, and maidenhair fern (Adiantum) called ke´-tsi-shah´-te, meaning "bluejay knees," because of the slender form and black color.

The roots used in the carrying baskets, baby baskets, and other coarse baskets are of hazel, called 'Kun.

The common black design in cheap baskets consists of spruce roots that have been buried in dark mud and called tah-che-cut kle-ah. They are ordinarily used in connection with the bear grass.

Hah-wun´-kwut Babies and Baby Baskets

When a baby is born it is put first into a large circular shallow basket of open work called tre-kwahg-tuk, which is flexible so that the sides can be brought near enough together to hold the baby in place. The baby is kept in this basket for five days and is then transferred to the regular baby basket, called kah´-yu. After it has grown too big for the small kah´-yu, it is transferred to a larger one. Short pieces of the medicinal plant called hrost´-e are tied together and fastened across the top of the basket. If the baby is a boy, blades of obsidian are tied to a string over the top to make the boy brave. If it is a girl, strings of beads of the short dentalia are suspended from the top and also hung on the sides. No other shells are used.

The baby's umbilical cord is trimmed with beads and hung across the top of the basket. In the case of old baskets, the cords of two or three babies may be found at one time attached to the baskets as they are not removed.

When the baby is asleep it will sometimes make faces. This is because it is dreaming of the small lizard (shre-moot). The strings of Dentalium shells are hung on the basket so that this little lizard will not frighten the baby.

Foods

A large variety of foods are eaten: meat (cha´-sun) of elk and deer, both fresh and dried; salmon and other fish, fresh and dried; marrow; tallow; salmon eggs, usually smoke-dried; clams of several kinds; fish milt, both fresh and dried; acorn mush and bread; and a number of roots, berries, and other parts of plants. Among the food berries are strawberries, blackberries, salmonberries, huckleberries, salal berries, elderberries, and manzanita berries.

Elderberries are mixed with blackberries and steamed in the ground oven; manzanita berries are mashed and mixed with smoke-dried salmon eggs.

Two kinds of kelp are eaten.

Root masses of the brake fern (Pteris aquilina), called tah´-sohn-ki, are cooked in the ground oven. They are said to be like milk and to have a fine flavor.

Salt is not used.

Wild tobacco is called yahn-se^{ch} vah-we and se^{ch}-yu. The pipe is straight and is called a´-chah.

Pits for Catching Elk and Deer

The Smith River Hah-wun´-kwut used to catch elk and deer in pits called song´-kit, dug in the ground along the runways. These pits differ materially from those of the Pit River Indians, being much shallower. No effort was made to make them deep enough to prevent the captured animals from jumping out, but an ingenious device was used to prevent them from jumping. The pits were only a little deeper than the length of the legs of the elk, but poles were placed across the top so that when the animal fell through, the body would rest on the poles so his feet could not touch the ground. This of course prevented him from jumping out.

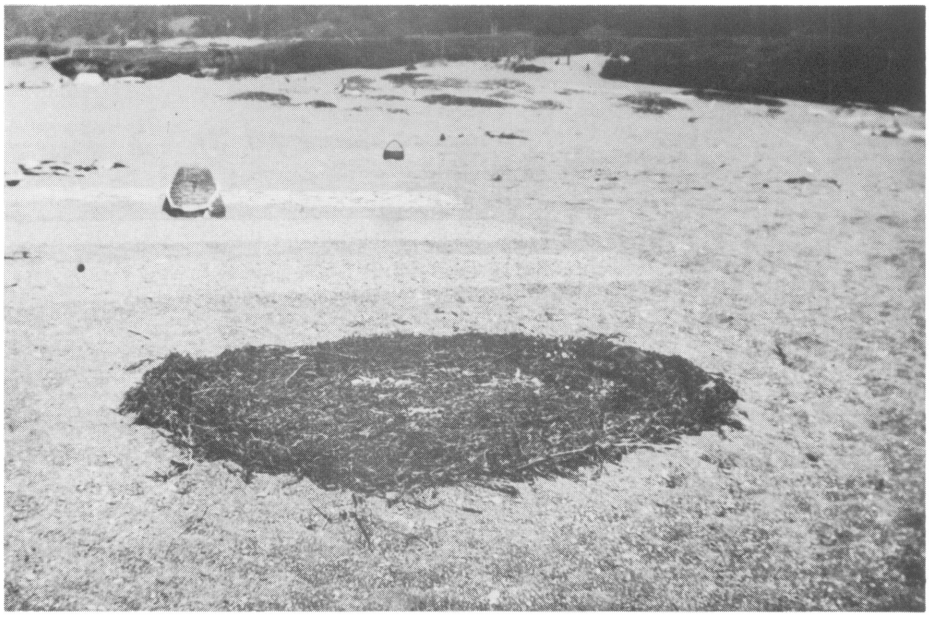
When "set," the pits were lightly covered with slender sticks, branches, and leaves to resemble the surrounding ground, but the cover was so frail that an animal the size of a deer would at once break through.

Smelt Fishery

Vast numbers of smelt, a small surf fish, are caught in nets by the Hah-wun´-kwut Indians. During a run at high tide, flocks of sea gulls hover over the incoming fish, thus making their approach known. The Indians catch them with nets. After a preliminary drying on a circular mat of brush, called the nest (pl. 34a), the smelt are transferred to the fish bed, a long flat rectangular and slightly elevated area built up of sand and capped with a layer of small smooth stones (pl. 34b). They are left on this till thoroughly dry.

Animal Notes

The bobcat (Lynx fasciatus) is called ne´-ti-us ah´-na. Its name is never mentioned in the presence of a baby. If the mother sees one before the baby is born, the baby will have fits and die.



a. "Nest" for drying smelt

b. "Bed" for drying smelt

Plate 34. Hah-wun´-kwut smelt drying

The falcon or duck hawk (tah-tes) was a high personage among the First People. He won the first battle for the Indians, standing on the first redwood tree.

The California condor (ta-long-yi´-chah) is so big and powerful that he can lift a whale. His name shows this, as it is from the name of the whale (ta-lah) and means whale lifter.

The dove (sroo´-e-gun´-sah) cries for his grandmother, especially in the spring of the year.

The purple finch is called klah´-nis-me´-tit-le, meaning many brothers, because the birds go together in small flocks.

The night heron (nah-gah´che yahs´-se) is known as the sickness bird.

Plant Notes

The maple tree is called cha´-she. Its inner bark is used for the ordinary everyday dress of the women.

The tanbark oak is the dominant species in the northwest coast region and its acorns (sohng´-chen) are largely eaten by the people.

Acorn meal before leaching is called rut-ta-gaht. If it is allowed to become mouldy, the bitter taste disappears so that it does not have to be leached.

Acorn bread cooked on hot ashes is called ses^{hl}-te.

The ordinary mush is called ma-guts-kush.

Massacres by the Whites

There were three notable killings by the whites. The first took place at Burnt Ranch, three miles south of the mouth of Smith River, at the rancheria called Yahnk-tah-kut, a name perpetuated by the district schoolhouse. Here a large number of Indians were caught during a ceremonial dance and ruthlessly slaughtered. The Indians say this was the first killing.

The second killing was at the rancheria of A´-choo-lik, on the big lagoon known as Lake Earl, a few miles north of Crescent City. The Indians were engaged in gambling at the time.

The third killing was at the large village of Hah-wun´-kwut at the mouth of Smith River.

Killing of Three Brothers near Smith River

At the time of the Indian troubles in northwestern California Chief Ki´-lis (named for ki-e-lus, the willow tree) was Chief of the Hah-wun´-kwut tribe.

Three young men of the tribe were active in resenting the aggressions of the whites and were said to have killed several of the early settlers. They were very clever and neither the settlers nor the soldiers were able to capture them. Finally the officer in charge of the troops at Fort Dick (a log fort on Smith River about three miles from the present settlement called Smith River Corners) told Chief Ki´-lis that he would be hung by the soldiers unless he captured the three young men in question.

It happened that the chief had two wives who were sisters of the three young men. The chief was in great trouble and called a meeting of his head men. They said that if the people would contribute enough blood money (which consists of the long Dentalium shells), they could pay the two sisters the price necessary to atone for the killing in accordance with the law of the tribe. The people agreed to this and raised the necessary money. The nearest male relatives of the young men were chosen to do the killing, but the young men could not be found.

One day when one of the chief's wives was getting mussels near the mouth of Smith River one of the young men appeared and told her that he and his brothers were hungry and wanted food. She designated a place on the point of a nearby ridge where she said she would take food, and it was agreed that the three brothers would come to get it in the late afternoon or early evening. She then went home and told her husband, Chief Ki´-lis, who in turn notified the nearest relatives of the young men. They went and concealed themselves near the spot, and when the young men came and were looking for the food their relations fell upon them and killed them. They were buried in the same place and the graves may be seen there to this day.

The officer in charge of the troops was greatly pleased. He and his soldiers arranged "a big time," giving the Indians plenty to eat and also some blankets. This ended the "Indian war" in that region.

There is a small island called Stun-tahs ahn-kot (fifty acres or more in extent) in the lower part of Smith River, half or three quarters

of a mile from its mouth. On some of the early maps it bears the name Ta´-les, after the chief. This island the officer gave to the Indians in the name of the Government, telling them it would always be theirs, and gave the chief a paper stating that it was given in return for killing the three outlaw boys. Sometime afterward this paper was burned.

After the Indians had been driven to the Hoopa Reservation and had come back, they were not allowed to go to their former rancheria, Hah-wun´-kwut, but were told to go to this island. Later the whites claimed the island and did not let the Indians have it.

The present Indian settlement, a mile or two north of the mouth of Smith River, was purchased for the Indians about 1908 by agent Kelsey of San Jose, and paid for by the Indian Office from a part of an appropriation made by Congress for the purchase of lands for homeless California Indians. It is occupied at present (1923) by ten or a dozen families.

This information was secured from Sam Lopez and wife and Lopez' father at the mouth of Smith River, Del Norte County, Sept. 16-17, 1923.

[The Hah-wun´-kwut are also known as Tolowa. Ed.]

LOLAHNKOK NOTES

The Lolahnkok did not fight much with other tribes but were sometimes attacked by the Che-teg´-ge-kah of the region north of Round Valley, and they think the Long Valley people also used to make raids on them to steal women.

Chief Lassik, whose name is often used in a tribal sense, belonged to the Kittel tribe, a tribe reaching from Iaqua south to Dobbin Creek.

Chalk Mountain was only a few miles east of the boundary between the Kittel and the Lolahnkok, and the Lolahnkok were permitted to hunt there.

Trees were felled by means of elk horn chisels called boh-cho, and stone mauls called sa´-tal. This was very tedious and laborious. When the tree had fallen the logs were cut in lengths by the same process. Planks were split off from these logs by driving the elk horn wedges into the ends of the logs. After several planks had been split off, one below the other, another set was started at right angles to the first.

The dugout canoes were made of redwood logs dug out by means of elk horn chisels. After the greater part of the inside had been removed, fires were used to char the wood which was then scraped away by the chisels. This was continued until the walls of the dugout were sufficiently thin. The fires were spread out thin in order not to burn too deeply at any one place.

Buckskin was tanned with deer brains, rubbed on with a stick rolled in ashes, after which the hide was placed on warm ashes until dried. It was then soaked and rubbed until soft.

Ethnobotany

Wild tobacco (Nicotiana bigelovi) was always used by the Lolahnkok. It was originally found growing on burnt-over places and the people planted the seeds in ashes, usually on a burned place.

Buckeye nuts, called lah-se´, were cooked in a basket with hot stones after the manner of acorns. They were then mashed and kneaded into dough, which was buried for a while in fine sand.

Wild ginger (Asarum) is called tan-nas-bos´ by the Lolahnkok. It is good medicine for pain in the stomach. The leaves are pounded and

soaked in cold water. The sick person drinks plenty of this water and vomits. After a little while he gets well and is hungry and eats.

A species of Angelica is called sol. If girl hold off, rub sol on your hands, and if you get a chance rub her neck, and she will give in. Sol is strong medicine.

An aromatic umbellifer (species not identified) is called sol´-che-but-tah´; the root, sol´-che. It is used for purification and as a disinfectant. The root is burned and the smoke wafted around to make the house more healthful. It does not grow on Bull Creek or South Fork Eel River, but grows on Rainbow Mountain and some of the other high ridges. The root is highly prized.

Ethnozoology

Slugs (Arion columbianus) are called nah´-tos. To prepare them for eating, a slender stick is thrust through the head to hold the slug easily. It is then cut open lengthwise on the belly and the dark insides removed, after which it is dried. When wanted, it is roasted in hot ashes and eaten.

The spotted owl (Syrnium occidentale caurinum) is called kah-ko´. He is a bad bird. If he flies close to a person the person will faint.

The dove (Zenaidura) is called bi´-yu. His grandmother was burned to death. Bi´-yu was asked to gamble and replied, "I'll gamble every winter; in spring and summer I'll cry." Now we always hear the dove cry in summer.

The red-shafter flicker (Colaptes cafer) is called mun´-chis-bul. He makes a rattling noise in the spring. He was told that by doing this he would make the horns of the deer grow. He was told also that when the deer become fat he would grow fat, but the people fooled him for he did not grow fat.

The yellowbird (Astragalinus tristis) is called sin-sun se-gahng-ti-ni tahs´-che, meaning to take away pain. If the old folks were suffering they would get him to sing to take the pain away.

The kildee (Oxyechus vociferus) is called ni´-til-yi´-che from the necklace (ni-tal-yah) on its throat. In the long ago time the water was very high and rough, big waves were coming in and the people were afraid to cross in their canoes. So they got ni´-til-yi´-che the kildee to take them. He was a high person among the Water People and could handle a

boat better than any of the others. The people talked about him and said he was the best and the only one to get them across. So he took them across and saved them.

The coyote (Canis lestes), called shu´-be, and the shrewmole, called ske´-cho (Neürotrichus), made the world and the people. Shu´-be the coyote had a number of children. Ske´-cho the shrewmole said that when people died they chould come back to live again. Coyote said, "No, there would be too many people, when they die they had better stay dead."

Ske´-cho agreed. After a while Coyote's children took sick and died. He wanted them to come back to life, but Ske´-cho said, "No, you said there would be too many people and you wanted dead people to stay dead, so your children can not come back." Then Coyote cried.

The raccoon (Procyon pacificus) is called nah´-ke-gis´-chah. A long time ago he was a doctor. He was able to talk to persons suffering severe pains and could draw the pain out. He would dance and sing and pull out the pains and fall back. One time he took a flint out of a sick person.

In the olden time the people tried to make the Elk (yes´-cho) out of the cottontail rabbit. They put horns on his head and sent him into the brush. But the horns stuck in the bushes and he could not move. Then the people called him Sti´-che, and told him he must always stay in the brush.

The bat is called nah´-ta-bahn´-se. He wore a robe of bear hide over his shoulders. A long time ago when the First People were at war they wanted the Bat to make peace and they hired him to make peace. The people told him to fix up good. He did so and said, "I am the one who can talk big." He sang, "Ho-wa´-nah han´-nah." The enemy agreed, and peace was made.

Tribe and Village Names

Chi-chin´-kah-ke´-ah is the Lolahnkok name for the band or sub-tribe between upper waters of Bull Creek and Elk Ridge. Flonko (Flonho, misprint) is a corruption of Lolonko, Lolonkuk.

Kahl-li-cho´-be, former Lolahnkok village between Englewood and Dyerville and southwest side main Eel River.

Kahs´-cho-boo-ah´-me, former Lolahnkok village and flat on east side of South Fork Eel River at Miranda. Fourteen and a half miles

south of Dyerville. It was called Kahs´-cho-gah´-me by the To-cho´-be keah.

Kohs-cho´-chin-net´-tah, former Lolahnkok village on Bull Creek, at Schoolhouse Flat seven miles from Dyerville.

Kahs-cho-gah´-me. To-cho´-be ke´-ah name for village and flat on east side of South Fork Eel River at Miranda; called Kahs-cho-boo-ah´-me by the Lolahnkok.

Ken´-tes-cho´-be (or Kun-tes-cho´-be). Lolahnkok name for rancheria on flat of same name on east side South Fork Eel River near Myers Roadhouse, about eight miles south of Dyerville and ten miles north of Ket-tin-tel-be (sometimes called Phillipsville). Called Kun´-tes-cho´-tung by To-cho´-be ke´-ah.

Ket´-tin-tel´-be. Lolahnkok and To-cho´-be-keah name for Lolahnkok village and flat on edge of redwood forest on east side of South Fork Eel River, eighteen miles south of Dyerville and eleven miles north of Garberville. Place often called Phillipsville.

Kun-tes-cho´-be; see Ken´-tes-cho´-be.

Kun´-tes cho´-tung. To-cho´-be ke´-ah name for Lolahnkok village near Myers roadhouse on east side South Fork Eel River, eight miles south of Dyerville. Called Ken´-tes-cho´-be or Kun-tes-cho´-be by Lolahnkok.

Lah´-sa-se´-ta. Former village at Shively on main Eel River, claimed by the Lolahnkok.

Lo-lahn´-kok. Tribe on Bull Creek and lower part of South Fork Eel River from its mouth upstream to Ricky Glen Creek (Se-tes-kok) on the east side and to Redwood Creek on the west side; also claim main Eel from Shively to Scotia. Their name for themselves. Erroneously united by Goddard with "Usal" (Yo-sawl) to form his "Sinkyone."

Synonymy: Flonho (typographical error), Mason, 1902
Flonk´-o, Flonko. White man's corruption of Lo-lon´-kuk, Powers, 1877
Lolonko. Kroeber, 1907:145; Handbook (from Goddard MS), 1910
Loloncook
Loloncooks. Bancroft (from Powers MS), 1874
Lolonkuh, Mason, 1902

Lo-lon-kuk, Powers, 1877
Lolonkuk
Loolanko. Kroeber, 1907, from MS, 1902

Sah-na-che´, former Lolahnkok village on west side South Fork Eel on flat opposite Miranda. Site now nearly washed away.

Sin-ken´-ne, tribe or language. North or northeast of Upper Mattole, apparently on west side of Elk Mountain Ridge.

Sinkyone. Name applied by Goddard to tribe on Bull Creek and South Fork Eel River (including the Lolahnkok and To-cho´-be ke´-ah). The Bull Creek Lolahnkok and Briceland To-cho´-be ke´-ah tell me there never was any such name. Doubtless derived from Sin-ke´-kok, the name of South Fork Eel River.

This information secured from George Burt, a fullblood who was born and raised on Bull Creek, the northernmost tributary of South Fork Eel River.

TSEN-NAH´-KEN-NES NOTES

Tsen-nah´-ken-nes (otherwise known as the Wailaki) is the name for all tribes and bands from Blue Rock Creek north, on the west side Eel River, to Chemise Creek, and on the east side nearly to Kekawaka Creek.

The name Tsen-nah´-ken-nes means straight talkers, and is synonymous with Wilakke (which is not our language). Wilakke is a Wintoon name and means north talk, or north language.

Customs

Each band had its own chief and its own hunting, fishing, acorn, and seed grounds. In winter the families of each band were scattered along the river in small rancherias, each consisting of from four to seven families, mostly blood relations, living together in two or three houses. Usually there were seven or eight people in each house.

The winter houses were of split pine slabs, standing upright or sloping in at the top to form a conical house.

People dying at home were buried. Those dying at a distance were burned (cremated) and their burnt bones were wrapt in buckskin and carried home in a packbasket and then buried.

Ethnozoology and Ethnobotany

They call the badger ye´-ku-gus´-cho, meaning "he pulls into his hole."

In speaking of related species, they often indicate the larger by the suffix cho, the smaller by che. Thus, the Steller crested jay is chi´-cho´, while the California jay is chi´-che. A small owl is bis-chil-lo-che; the great gray owl, bis-chil-lo´-cho´. The crow is kah-chan´-che; the raven, kah-chan´-cho´.

The bluebird is a dangerous bird. If a person throws a stone at him, he should shout first to attract its attention. Otherwise it will throw a pain to the person.

The junco is a great "rustler," always busy hunting for food.

The chewink or towhee, called nahl´-tse, was instrumental in procuring the first fire. In the very early days his parents threw him out.

Nahl´-tse located the fire and coyote-man went and got it.

The kildee plover is called nah´-til yah´-che, meaning necklace wearing.

The toad is called rough frog.

Cicada is used as a remedy for headache. The live insect is pushed up into the nose, where by kicking around it makes the nose bleed, thus curing the headache.

The dragonfly feeds rattlesnakes.

Oak galls, called kim-mos, are excellent for sore eyes, and also for suppression of urine in children. For weak eyes, the fresh juice of a green gall is dropped into the eye. It is astringent and an excellent remedy, and is a common eye drop among many California tribes.

The oak mistletoe is used as a medicinal tea, also as a head wash, and sometimes for bathing the entire body.

The thick creamy juice of the milkweed is called snake milk.

The Tsen-nah´-ken-nes say that some of their people eat a very small katydid in order to become good singers, believing that the song of the katydid will strengthen their own voices.

Among the Tsen-nah´-ken-nes, as among certain other Athapascan tribes, many of the bands are named from the valley, river, or mountain on which they live. For this purpose the word ke´-ah-hahng, meaning "belongs to the place," is added to the locality name.

HOOPAH NOTES

According to the Hoopah, the First People are called Kit-tung´-whi or Devil People. They used to fight and kill and eat one another. Later they turned into animals. After the Flood real (Indian) people came.

In early days the Indians used to get drunk from inhaling the fumes of Indian tobacco (min´-ta itch´-wah) which, by deep breathing, they would take into the lungs. Their word for drunk is ho-ha^{ch}-wih^{ch}. The expression for "many people drunk" is yah, ho-na^{ch}-we^{ch}.

The word for an old person is kis´-te-ahn; for an old object, tah´-ne.

There are two words for good: chung-whoom, for a good or kind person; and noo-whom, for a good thing or object. A bad person is to choong-kom, while a thing that is not good is to noo^{ch}-kom.

Chin-tahs, for slow, is said to mean also heavy; but the word given me for heavy is nit-tahs´.

The word ho´-chit, meaning real or genuine, occurs frequently. Thus, deer skin tanned with the hair on is called ho´-chit-te, te being any blanket or toga. Similarly, the ordinary woman's apron made of pine nuts and braided grass is ho-che-ke-ah; the women's hat, ho-che-kos-tahn, or real hat; moccasins, hoch-ya´-che-tahl; the bow, ho-che tsitch-ting; the stone arrow point, ho-che tin´-ti; Indian or wild tobacco, ho´-che min´-ta-itch´-wah; the elk horn box or purse for valuables, ho-che´ kin-chah.

The Hoopah say that their people did not use the nose-bone or nose-stick, but had a name for it, hun-choo whang-i. They say these were worn by Indians farther north.

The women tattooed the chin, usually in three broad vertical bands similar to those of the Klamath River tribes. Tattoo marks are called wil´-tahch´.

Place Names

All place names along the rivers were at one time the sites of villages or rancherias. The village always takes the name of the place.

The word for house is hon´-tah or hun´-tow; the ceremonial house,

ma´-min-sin-til; the sweat house, tah´-keo; the menstrual lodge, mintch; the brush wickiup, ma-nah-si; the brush blind or hut for concealing the hunter, kew´-wong-wil´-min.

They say that they never burned the dead, but buried them in graves dug exactly knee-deep by measure. The grave was called hot-yung ho-sin. The body was fastened to a slab of wood of the proper length, and when laid in the grave was covered with the belongings of the dead person and then with earth.

While they do not burn the bodies, they burn clothing and other belongings. But the Chemareko of Hyampom burn their dead.

They believed in an evil spirit or Devil called Kit-tung´ hwoi.

A peculiar custom was practiced in extending a certain courtesy to an enemy who wanted to cross the river but had no boat. If a person having a canoe crossed the river and his personal enemy found the canoe, he would go and sit down near it and await the return of the owner. When the owner came he would back out into the stream and then push the bow ashore at the nearest point to his enemy. The enemy would step in and sit down, neither speaking a word. The owner would then paddle the canoe across the stream to his own side, and the enemy would jump out and proceed without remark.

There were two kinds of doctors: the real doctor or shaman, sometimes known as dance doctor (kit-ta´-tow); and the medicine doctor who never danced (kim-mow´-chil^{ch}-weh).

Gambling Game

The common gambling game, called ke-now´-we, was played with a bunch of slender sticks seven or eight inches long, called hol-che-king. One of these, called hung (ace, or lucky stick), has a black band around the middle. The game consists in guessing in which hand the opponent holds the marked stick. There are eleven points or guesses. One stick is given up at each wrong guess.

Small hail stones are called klew´-hahn min´-nah, from klew´-hahn, an eel, and min-nah, eyes, because of the resemblance of small hail stones to the white eyes of the eel. Big hail stones are called ke´-lo-ung-hot.

An earthquake is nin´-mah-ah tin-ni^{ch}-chwit, meaning "turns over on edge of world."

Money

The unit of value, which we call money, consisted of the valuable kind of Dentalium shells, long specimens of which reached from the base of the finger to the base of the terminal joint. This was called ho´-che naht-te-ow, or real money. Small or broken Dentalium shells, from half an inch to an inch in length, were called mit-tatch, and were used for beads.

Scalps of the great pileated woodpecker or cock-of-the-woods (Ceophlaeus pileatus), called kis-ta-ke´-keo, also passed as money.

Early Inhabitants of Certain Villages

The Hoopah say that after the flood there were many people at the rancherias at the junction of South Fork with the main Trinity. One of these villages, Hlal-tung, was at the mouth of South Fork where it joins the main Trinity; another (Ii-koo-et-sil´-a-kut) was on the bench on the north side of Trinity River opposite the mouth of South Fork.

If some one at either of these villages shouted when birds were flying over, the birds dropped dead.

"Yuke" Bear-men

The Hoopah call the "Yuke" of Round Valley Ho´-ning Wil-tatch, meaning tattooed faces, because the men tattoo their cheeks. They also call them Kit-tung-whoi, meaning devils.

Some of these tattooed Yuke used to imitate bears. They would put on the skin of a grizzly bear, first lining the hide with bark and shaping it like the body of a bear. They would get into this skin and act and walk like a bear. In the hand they would carry a spike made of the antler of a deer, with which to kill the Indians they attacked.

The Hoopah Indians learned this and learned how to tell real bears from these human enemy bears. They say that a real bear slobbers at the mouth, while an Indian man dressed as a bear never slobbers.

Acorn Food

Sahah is the Hoopah name for their acorn food. They first bury the acorns and soak them until the shells crack open. This removes the bitter taste. They then roll the acorns, rub off the outer skin, and pulverize the meats by pounding with a stone pestle in a large hollow

stone mortar with a bottomless basket set on top to act as a rim to keep the material from spilling over. When sufficiently pulverized they wet the acorn meal with water, making a sort of thick paste of it. This is made into cakes and laid on sand to dry in the sun. When wanted for food a piece is broken off and put in a sahah basket (woven of fine pine roots and grass) over which water is poured. The hot stones are dropped in whereupon the sahah immediately thickens into mush and is ready to be eaten.

Of all the acorns in the Hoopa country, those of the tanbark oak are considered the best for food. They make the best mush and bread. Many of the present-day Hoopah, who in the main live like whites, mix tan-oak acorn flour with wheat flour for biscuits, pancakes, cake, and so on.

One of the several ways of preparing acorns is by burying them for a year in a running spring. They then turn black, but by the following year the bitter element has disappeared and they are sweet.

Bread and cake made of tan-oak acorns will keep for months. It may mould a little on the surface and oil show up on top, but when this is brushed off the cakes are sweet and good.

Fresh flour made of tanbark acorns, spread on burlap or other porous cloth and placed where cold water will trickle over it all night, becomes sweet and ready to cook after a single night.

Tan-oak acorns roasted in hot ashes till the shells pop open may be eaten without further treatment, but plenty of water should be drunk with them.

Ethnozoology

The grizzly bear had two names: me-cha-e-sahn and me-kwo-ah. The mountain lion or cougar is called min-ning mi^{ch},hla-til-loo, meaning kills with his face.

They speak of a spotted panther of large size, called kit-sah, which has not been seen for a number of years. It used to make a great noise.

They speak also of a water panther (mythical) called Ho-tsi-tow, said to have lived in holes close to the water of lakes and pools, never in rivers or on land. Its head and shoulders were heavy and covered with long shaggy hair, but the hinder parts were nearly naked.

The otter is called 'klok-e-te-til-le, meaning he likes the salmon.

The weasel—and this is particularly interesting—is called klew^{ch} mu-hung, meaning snake's husband, a term doubtless suggested by its snake-like form and actions.

The mole is called min-ni e-ting, meaning eyeless; the bat, maht-la nah-mut, night flyer.

The porcupine is 'k'yo. Its quills, usually dyed yellow, were used to ornament basket hats, and also to pierce the ears for earrings. When a quill was stuck lightly into the lobe of the ear, it would slowly work its way through.

The common gray ground squirrel (Citellus douglasi) is called tse 'ket-yahng-a, meaning rock sitting on.

The jack rabbit, oddly enough, is called nah^{ch}-ah-tah 'hits-'hlahn-hahn, meaning dry ground deer.

A Hoopah Ceremonial Gray Fox Skin

The skin was cased (opened along the hind legs, the belly not slit lengthwise). The front feet had been cut off, but the skin of each leg was slit in six or seven strands of narrow ribbons about three inches long.

The skin had been turned inside out and decorated in places, then turned and left with fur outside. The skin of the hind legs was painted deep red. The tail also had been slit open on the underside and the skin painted with the same red paint, and a tuft of pure white feathers four inches long was sewed to its tip.

The most surprising marking was a double ring or belt band of red and blue painted around the inside of the skin about two inches above the base of the tail (and therefore hidden when the skin was fur-side out). The two bands, each about half an inch wide, were in actual contact all the way around—the anterior one deep red, the posterior deep blue.

The skin itself is of interest as being unmistakably the dark, northwest form of the species Urocyon californicus townsendi. The upper parts are very dark grizzle, the dorsal stripe from neck to tip of tail is almost pure black, and on the tail it is about an inch broad. The

flanks, inner sides of legs, and under sides of tail are fulvous, palest on the belly. The specimen is an adult male.

This information was provided by James Chesbro of Burnt Ranch, 1921.

KAROK NOTES

The Karok state that their territory extends along Klamath River from Sciad Creek downstream, southwesterly, to Bluff Creek. In the northeast their country adjoins that of the Shaste; on the southwest, that of the Poliklah.

There are two divisions of the tribe: an Upper Division calling themselves Kah-rah-ko´-hah or Kah-rah´-ko (called Kah´-hah-ar´-rah by the Lower Division), extending from Sciad Creek downstream as far as Elk Creek, some say to Clear Creek; and a Lower Division calling themselves Ah´-rahr, occupying the river canyon from the Upper Division downstream as far as the mouth of Bluff Creek.

The uppermost village of the Upper Division appears to have been Wah-hah´-e-wah, on the south side of Klamath River at the mouth of Walker Creek (Brickleys); the next was Kwe-ahts-wah at the mouth of Grider Creek, also on the south side of Klamath; while the uppermost on the north side was Ah-show´-roo at the mouth of Portuguese Creek.

The lowermost village of the Lower Division was As-pev-ne-te-hatch, on the north side of Klamath River just above the mouth of Bluff Creek.

Bluff Creek appears to have been neutral fishing ground, as both tribes say they camped there amicably for the winter salmon fishing.

Below Bluff Creek, the next Indian village belonged to the Paoliklah or Lower Klamath tribe and was called Ot-sep-por.

Rancherias of the Middle Klamath

The following is a comparison of lists given by:

Gibbs: MS map, 1852; and Journal in Schoolcraft III, p. 151, 1853;

Redick McKee (Indian Agent): Sen. Doc. 4, Special Session, pp. 161, 194, 211, 1853;

Carl Meyer: Nach dem Sacramento, p. 282, 1855;

A. S. Taylor: after a letter from G. W. Taggart to Walter van Dyke, Orleans Bar, 1856, published in California Farmer, March 23, 1860;

C. Hart Merriam: MS, Vocabularies obtained on Upper Klamath, 1902, and October 1 and 2, 1910.

YUROK

Gibbs 1852, 1853	McKee 1853	Meyer 1855	Taylor 1856	Merriam 1902
Otche-poh	Ut-chap-pah Ut-cha-pah Ut-cha-pas	Ut-scha-pahs		Ot-sep-por Muh´-rook´-throov (Karok name)
Sehe-perrh (possibly a Karok village)				Se-per´-rah

KAROK

Gibbs 1852	McKee 1853	Meyer 1855	Taylor 1856	Merriam 1910
Oppegoeh (map) Oppegach	Up-pah-goines Up-pa-goine	Up-pa-goines	Woo-pum	Woo´-pum Up-pa-goin
Shah-woo-rum	Sa-vow-ra Sa-ron-ka Sa-ron-ra Sa-vour-as	Sa-wa-rahs		Sah^{ch}-woo-rum (Su-war-rum)
Tshei-nik-kee	Cha-ma-ko-nec Cham-ma-ko-nec Cha-ma-ko-nees	Tscha-wa-co-nihs		Chah-me-knee´-nutch
T'shah-nee (map) Tchai-noh or Skeina (Journ.)	Chee-nah Cheina	Tschih-nahs		Te-shun-neek
Pa-nom-nik (name of chief)	Cockomans Coc-ce-man Coc-co-man Coc-ko-nan (Chief = Pa-nam-o-nee)	Cok-ka-mans		Pah-nahm´-neek and Yu´-sah

Gibbs 1852	McKee 1853	Meyer 1855	Taylor 1856	Merriam 1910
Kah-tee-pee-rah (Azocrs?)				Kah´-te-pe´-duc
T'cheh-nits			Chee-nitch	Che-nitch
T'sof-ka-ra			Tuck-a-soof curra	
Oppe-yoh (Journ.) Ashanahm-ke (map)	Op-pe-o(s) (Chief = Ya-fip-pa)			Ahs-sah-nahm´-kar-ruk
Tish-ráwa				
Eh-qua-nek (Journ.) Con-harik (map)	He-co-necks Ke-ko-neck (Chief = Hou-a-puck-if-ma)			Woon-whar´-ruk on Salmon River
Eh-nek (Journ.)	In-neck		A-mi-ke-ar-rum	Ah-ma-ke-ah´-rahm
Mik-iara				
Sche-woh Isshe-pishe-rah	Si-wahs, Sewah (Chief = Es-se-pish-ra)		Ish-e-pish-e	Ish´-she-pish´
Kah-ose			Sun-num Sum-maun Couth Soo-pas-ip	
Yutoo´-ye-roop Hakh-kutsor = Yurok name (Kroeber)				Yuch-too-e-re´-pah Os´-se-puk
			E-no-tucks	In-noo´-tuk´-kutch

KAROK [cont'd.]

Gibbs 1852	McKee 1853	Meyer 1855	Taylor 1856	Merriam 1910
				Kwat-te^{ch} (A-kwah-te)
				Ook-rum´-ke-rik
			If-terram	Ish-e-rahn´-he-ruk
				Een´-peet
				Ip-poon´-war´-rah
			I-yiss	I´-yeech-dim or I´-ye-e´-thrim (at I´-yess Bar)
			Soof-curra	Thoof-kah´-rom
				Te
			Pas-see-roo	Pus´-se-roor´-re
			Home-nip-pah	'Hoom´-ne´-pah^{ch}
				Oo-ri´-e
				Oo´-roo-hus
			E-swhedip	Ish´-we-dip´-te
				Ah^{ch}-rah´-hah-soo´-ruk
				Oot´-ke

Gibbs 1852	McKee 1853	Meyer 1855	Taylor 1856	Merriam 1910
				Tah-sah^{ch}´-kahk
			Home-war-roop	Hoo-mah´-ro
				Tin^{ch}-hoom´-ne-pah
			E-nam	In-nom´ or E-nahm´
				Yu^{ch}´-too-e-re´-pah (Mover from vicinity of Salmon River, probably after fire of 1852)
				Ik-ku´-re-rus´-so
				Kus-am-we-rok
			As-sif-soof-tish-e-ram (at or near Indian Creek	A-the´-thoof

Ethnozoology

The Karok have two names for the grizzly: pe-rish-kah-re, from pe-rish, bush, and kah-rim, no good, meaning bad in the brush; and nan-nutch-kahm, meaning older sister.

The mountain lion is called yup-soo-ke-ra, meaning green eyed.

The Karok have two names for the coyote, the proper name, pe^{ch}-nef-fitch (or pe^{ch}-na-fitch), and tish-rahm-ish-koon-te, meaning valley watching.

The big wolf is called ik-kow-o-nahm-itch (or ik-kahv-num-itch), meaning howler.

The Karok believe in the existence of a water panther which they call ahs-kahm yoop-soo-ke-rah. They say it is a large spotted animal living in ponds or lakes. One lives in a pond on a mountain north of Orleans; another in a pond on Trinity Summit. Lots of deer bones lie on the slopes around ponds where the water panther lives. He appears only at night and kills Indians by sucking their brains out of the top of their heads.

The mink is called hon-thoon-ahm-wan, meaning crayfish-eater.

The flying squirrel has two names, ahtch-haht-kaht and poo-yah-hah-rah, a dead person or corpse and the name of an insect said to frequent dead bodies. The reason for the name I did not succeed in obtaining.

The name of the beaver is sah-pe-neetch, meaning "down low old man."

The name of the Aplodontia is mah-pe-neetch, meaning "up high old man." It is also called tin-kan-nan^{ch}-noo-pitch.

The old time Indian dog, which was as big as a coyote and had stiff upright ears, was called chish-she. When the white man brought horses into the country the Karok called them also chish-she or yr-rus-chish-se, from yu-rus, the ocean, and meaning ocean dogs as they came from over the ocean. The Karok at Happy Camp call horses op-se-pum-rah-wahn, meaning grass-eaters, from ok-seep, grass.

The Karok say that the raven, hot-ta-nah-sahk, and the crow, ahn-nahtch, were the first birds to appear after the water went down.

The crested blue jay, kah-chah-hahtch, is said to make rain. The Oregon-Canada jay (Perisoreus) is called as-koo-re-tam-wahn, meaning deer-fat eater, from ahs-skoo-nit, fat.

The kingfisher is called ahs-skoop-ahm-wahn, meaning trout eater.

The flicker (Colaptes) is called thoo-wook or thook. When he calls some one will come, today or tomorrow. He has no more fire and catches cold every winter.

The hairy woodpecker (Dryobates velosus) is called chem-noo-pah, and is said to be the mother of the great pileated woodpecker.

The red-breasted sapsucker (Sphyrapicus ruber) is called koo-nah-nitch and is said to be the little brother of the great pileated woodpecker.

The barn swallow is called hahn-thoon-moo-vah-sun, meaning crayfish's bad friend."

The dragonfly is called ah-ti-rum sish-kah-rah, meaning long-tailed star (from ah-ti-rahm, star).

Medicinal Plants

The ash tree was used as place to put weather medicine on. At Sandy Bar, just above Orleans, medicine to make rain was put on an ash tree by the old doctor, Sandy Bar Bob, during my stay just after the middle of September, 1921.

Mistletoe.

Ginger root (Asarum).

Milkweed. Gum made from juice used for chewing gum.

Wild tobacco (Nicotiana bigelovi).

Aromatic mint (Monardella).

Small lace fern. Medicine used in childbirth.

Blue stinkweed (Trichostema).

Everlasting (Gnaphalium).

Vancouveria vine, called nas´-sah-kahn´-nitch. Tea drunk during pregnancy to make baby small so it will be born more easily.

Wild celery. Rood used for medicine. Also burnt in room and smoke inhaled as disinfectant.

Cottonwood (Populus trichocarpa), called ah-sah´-pe-e´-pa. Leaf buds in spring used as glue to stick feathers on arrows.

Measure

The unit of measure is called is-sah-ah-kik, and is the distance between the thumbhold of the extended arms (not of one arm). It is therefore about double the length of the unit used by many tribes.

Poison Arrows

The poison arrow, called pe-ke-rev-ker-roo-po, was prepared in a curious way. The arrow was addressed in a ceremonious manner, after which the point was spit upon. There was another kind of arrow, called ip-pesh-re-hap-po, which was not shot into a person at all, but after a certain ceremony was put in a "bad place" where it was left over night. This appeared to endow it with magic power to injure the person in view.

Purse

A purse or small receptable for valuables was made of the base of an elk horn. It was called ah^{ch}-roo-he or wa-shoo-rah ah^{ch}-roo-he. In addition to these two names, the Orleans Karok assured me that the real and proper name was ah^{ch}-pah-hah^{ch}-ro-e.

Houses and Other Structures

The houses in early days were always built of slabs laboriously split and hewn from big trees, set up endwise. The ordinary house was called e-ke-ve-rahm (usually slurred to kre-ve-rahm). The sweat house was mainly underground, little more than the roof appearing above the ground. It is rectangular in shape, with a low ridgepole, and is built of slabs covered with earth on top and is big enough to hold eight or ten people. It is called im-chah^{ch}-rahm by the Happy Camp people and ik-ke-mahtch-rahm by the Orleans Bar people. The menstrual hut is rectangular, about six by eight feet in size, and built entirely of slabs placed vertically. It is called yah-whoo-rak-e-kev-rahm. A camping ground is called ik-kwa-she-re-he-rahm. The acorn camp is called pah-koo-he-rahm. Brush blinds for hunting are e-kroon-te-he-rahm; the scaffold for drying meat (fig. 28), e-ke-ke-var-rahm. The acorn leach is called tah-ke-re-rahm, while the act of leaching is ther-rum-pook.

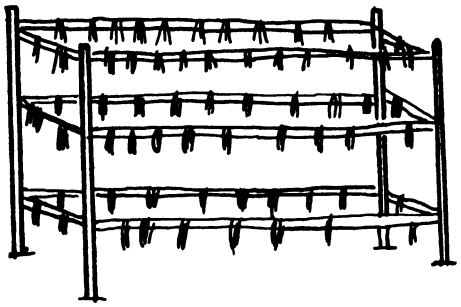


Fig. 28. Karok meat drying rack.
A fire was built in the center.

Hats

The men as well as the women, though less universally, wore basket hats called ar-rar-up-hahn. The man's hat is a basket bowl similar to the woman's but deeper (that is, with higher crown). There were two kinds of hats, the common everyday kind, called san-no-mop-hahn, rather coarsely woven of roots and lined by a few strands of light material; and the best or dress-up kind, called pan-yu-rah-op-hahn, nearly covered with design and an overlay of bear grass or Xerophyllum. The tobacco basket, o-sip-nook, is sub-globular in form and choke-mouthed, and when in use the opening is closed by buckskin held in place by a lace-work of thong over the top.

The common basket materials were the roots of ponderosa pine and willow, with an overlay of Xerophyllum. Hazel sprouts were largely used in the coarser baskets.

The Spirit or Ghost

The Karok believe that a spirit called ik-kra-me-ah-ahm-tahp (from ik-kra-me-ah, wind, and ahm-tahp, ghost or spirit) leaves the body after death but stays around for five days before taking its final departure. It is sometimes called poo-yah-har-rah, meaning person's shadow. The people say this is sad and they dislike to talk about it. The people sometimes cut their arms for better luck and to keep the devil away. They call this arm-cutting sut-tuk-yeeth.

Treatment of the Dead

The dead are not burned. They are buried a day or two after death. Every night for five nights fish, acorns, and other foods are burnt near the grave to feed the dead.

Doctors

The Karok have several kinds of doctors: one called a'm scarifies and sucks and also dances and sings; another called ar-rar-rah hoos-oo-mahn takes care of people's senses; a third kind, called an-na-keah-wahn or medicine doctor, makes medicine of various herbs.

Points of the Compass

The Karok do not have definite terms for points of the compass, but use the terms "upriver" and "downriver." For east they say the direction where the sun comes up, and for west the direction where the

sun goes down. The name of the sky is che-mooch-is-wi-koo-nish, meaning "blue like the lizard's breast," from chee-mooch, the blue breasted lizard (Sceloporus).

Soaproot

Both large and small kinds of soaproot are roasted and eaten by the people. The bulbs of the large kind are put into an earthen oven and deeply covered with maple leaves and earth; it is then allowed to cook over night. Then they are good to eat.

Milkweed Chewing Gum

Many tribes in California use the juice of the milkweed (Asclepias) for chewing gum. They drop the thick milky juice into a basket of boiling water where it soon floats on the top as a rubber-like substance which can be chewed. The Karok of Klamath River call the milkweed gum im-shah^{ch}-wo.

Spoons

The Karok make and use three kinds of spoons: one called sik-ke$^{ch'}$-nook is of elk horn, and one called ah-hop-sik'-ke is of manzanita root. The root is carved when freshly cut, at which time it is relatively soft and easily carved. The third kind of spoon is shaped from shells of clams and sea mussels which they get in trade from their neighbors, the Po-lik-lah, whose range extends to the ocean.

Karok Money

The common money or medium of exchange consisted of Dentalium shells, called ar'-rah-rash-pook, meaning people's money, or simply, ish-pook. The Dentalium money was commonly carried in strings of five or ten. The strings of ten were valued at thirty dollars of our money.

The splendid red crowns of the pileated woodpecker (Ceophloeus pileatus) also were used as money, valued at one dollar each.

SHASTE NOTES

The Shaste occupied an extensive area in northern California, overlapping into southern Oregon where they extended from Applegate River on the west, easterly beyond Medford and Ashland to the Cascades, and southerly over the Siskiyous into California. In California they ranged continuously from Seiad Creek, a northern tributary of Klamath River, easterly to the mountains immediately east and south of Shovel Creek; thence southerly over the Bogus and Goose Nest Range to Mt. Shasta, with their southernmost village near Edgewood; thence westerly to the lofty Salmon Alps which separated them from the Ko-no-me-hoo on the southwest and in part from the Kah-rok or Ah-rahd on the west. But in Klamath Canyon they came in direct contact with Ah-rahd whose territory on the north side of Klamath River began at Seiad Creek, and on the south side began at Walker Creek.

Therefore, in northern California the territory of the Shaste embraces Klamath Canyon from Seiad Creek easterly to Shovel Creek, and the whole of Shasta, Little Shasta, and Scott Valleys, including the entire course of Scott River to its junction with the Klamath.

The Shaste came in contact with the following tribes: on the north or northwest, the Takelma; on the east, the Modok; on the south, the Wintoon and Wimuck (= Okwanutsu of Dixon); on the southwest, the Ko´-no-me´-hoo, a related tribe of Shastan stock; and on the west, the Northern Kah´-rok or Ah´-rahd.

The tribe called A-te by the Mo-des-se has several other names. It is called E-chah´-tah-is´ by the Achomawe of Fall River; Wi-muk by the Northern Wintoon; Oo´-chah-hah-roo´ chah´-wich by the Yreka Shasta; and Ok-wan´-u-tsu by Roland Dixon who gave it the Shasta name for the tribe. But this appears merely to be the word for "south people."

The Wintoon and Modesse tell me that this tribe is now entirely extinct, and that they spoke a language related to Shasta. In October, 1925, I visited two very old women, sisters, who belonged to this tribe and were born and raised in Squaw Valley. One of them failed to remember the tribal name; the other gave it as O-kwah-noo-tsoo.

Villages

The Shaste had a very large number of villages. I have been able to locate and secure the names of 121 of these; 64 are on Klamath River, including Willow and Bogus Creeks, 24 in Shasta and Yreka Valleys, and 33 in Scott Valley (including Moffit Creek and Scott River).

The name of the rancheria or village is usually the same as that of the locality where it is situated. In cases where there are several rancherias in a valley or on a stream, the principal or largest village is the one that takes the name, and in many cases it was the home of a chief.

The term applied to the inhabitants of a village is generally the name of the village followed by the word soo-ish or choo-ish, denoting "inhabitants."

In connection with the location of some of the rancherias, it should be remembered that in Shasta Valley there are two Willow Creeks: one flowing northerly from Bogus Mountains and emptying into Klamath River at a place called Thrall; the other rising in Scott Mountains and flowing past Gazelle toward Shasta River, into which it probably empties at times of high water.

Mortars and Pestles

Deep stone mortars do not appear to have been used by the Shaste as they pound their acorns, manzanita berries, and other things in the ordinary milling basket called ik´-noo, resting it on a flat stone called hah-too, and using a stone pestle. The pestles are of two kinds, a short kind about six inches long, slightly spreading at the bottom, called to-koo and ats-mut´-tah, and a long kind about fifteen inches in length, called it´-ah-hoo-vi´-ik.

Acorn Caches

The acorn cache of the Shaste differs from that of most California tribes by being placed underground instead of on a rock or post or in a tree. It is in a hole dug in the ground and is covered with pine bark.

The Shaste and Konomeho tribes had a good sized underground cache (watch´-nah) for acorns, dried fish, and dried meat of deer, elk, and bear. It had a framework of posts and was made of bark with leaves next to the ground to keep out dampness.

Meat of deer, elk, and bear was roasted on coals and also cooked in the ground oven, called hep´-se-ro-hahm´-pik.

Colors and Dyes

The Shaste Indians of the Upper Klamath Canyon made their red

CLASSIFICATION OF TRIBES OF SHASTAN STOCK (1925)

Family	Tribe	Locality
Shastean	Shaste or Kekahts	Klamath River from Shovel Cr. to Seiad Cr., south to include Shasta, Yreka, and Scott Valleys
	Konomeho	Fork of Salmon region
	Kahootineruk[1]	South Fork Salmon to New River
	Okwanutsu	Upper Sacramento Canyon Upper McCloud River and Squaw Creek
Achomawan	Modesse	Big Bend of Pit River
	Tomalinchemoi	Pit River above Big Bend
	Ilmahwe	Pit River below Fall River
	Ajumahwe	Fall River Valley
	Atwumwe	Big Valley
	Astahkewiche	Hot Springs Valley
	Hawesidoo	Alturas to Goose Lake
	Hammahwe	Likely Valley and Upper South Fork Pit River
Atsookaan	Atsookae	Hat Creek region
	Apwoorokae	Dixie Valley to Eagle Lake

[1] Little is known of the Kah-hoo´-tin-e´-ruk (called Ah-moo-tah´-kwe by the Hoopa, and New River Shasta by Roland Dixon). They may be the Chimalakwe of Stephen Powers. Their rank may be much higher than "tribe."

paint, called koo´-pah-mah, from a species of mushroom which grows on old fir trees. This was roasted to produce the color. Yellow paint, called itch-um´-pah-ke, was made from the inner bark of an oak, scraped off and used dry. Black paint, called mah-ter´-rah-he, was made from charcoal rubbed up in grease. White paint, e´-ti, was made of a kind of white chalk found in the hills. The names used by the Shasta and Yreka Valley branch of the tribe for red, black, and white paints are respectively: oo-kwah-hah´-ch-tik, mah-ter´-rah-he, and e´-ti.

Bird and Reptile Beliefs

The echo, called koo-che-rah-kik, is believed to be a lizard answering from rocks.

The nighthawk is called cho´-pah-kwan-i-kook, and they say that when it swoops down making the characteristic booming sound, it is "stretching" a fawn to make it grow, and that if a person goes to the spot beneath the diving bird he will find a spotted fawn.

The gopher snake or bull snake (Pityophis) they call a-ha´-se-sa-ket, and state that when it sticks out its tongue, it makes freckles on one's face.

The meadowlark, according to the Shaste, wears on its breast a necklace of the black seeds or nuts of the sugar pine.

Cave on Klamath River

When visiting the upper Klamath Canyon in 1907, a Shaste woman told me about a deep cave high up on the rock cliffs on the north side of Klamath Canyon in which Shaste Indians used to take refuge when pursued. A number of them resorted to this cave during a so-called war with the whites many years ago, when they were pursued by soldiers and men from Yreka. Details of this attack by the whites may be found in county histories. The Indian woman in question offered to take me to the cave, but unfortunately I was not able to remain.

Then, visiting the old Shaste chief, Bogus Tom, at his home on Deer Creek on the south side of Klamath Canyon in the latter part of September, 1919, I inquired about the location of this cave, and was told that it is on a high promontory on the north side of the canyon, nearly opposite Deer Creek.

Ceremonial House

The round ceremonial houses of the Shaste in Klamath Canyon and Shasta Valley are called o-kwahm′-mah. They had a large center post with four posts around the circumference. The top was covered with brush and earth.

The small sweat houses—the framework of arched willow sticks over which was spread a blanket—are called koos-took-hum′-pik. The smaller conical huts were covered with the bark of the incense cedar.

Necklaces of Bear Claws

Among the Shaste Indians of Shasta and Yreka Valleys, and of the upper Klamath Canyon, necklaces of bear claws were worn by doctors only. The Shaste of Klamath Canyon near Shovel Creek call the bear claw necklace aht-sa-loo′-a-rah-hah, while the branch of the tribe living in Shasta and Yreka Valleys call it ah-pah′-kah-ram.

Arms and Utensils

The bows, called how and how-he-yu, were made of the wood of the yew (Taxus brevifolia). Arrows were made of young shoots of serviceberry bushes (Amelanchier). The blunt-pointed arrows were called mah-get′-se-gah′-sik; the stone pointed arrows, ah-ker and ah-ket. The stone point itself was called hah-kwi′. The fish spear (two tined and three tined), he′-sah-hi; the sling, ah-ne-he-mit; the snare, kah-pe′-rik; the stone knife, ah-kah′-ri; the skin scraper or the dressing knife, for which deer ribs were sometimes used, e-dah′-che′-ke. The fire drill was made of cedar and was called by the Yreka and Shasta Valley Indians, hoo-row; by the upper Klamath Canyon Indians, ho-dow′-bit; the block under the fire drill was nah-hoo.

The mortar in which the acorns were pounded consisted of a milling basket, called ik′-noo, resting on a flat stone, hah′-too. The stone pestle had two names, to′-ko and hahts-mut′-te. The small stone for splitting acorns was called by the Indians of Shasta and Yreka Valleys o-pe-hah′-rit; the grinding stone or metate, hi-yu-ho′-k. The understone rubbing on the metate, hi′-e-rook. These three stones in the language of the Upper Klamath Canyon Shaste were called, respectively, ook′-kik, its-ski′-ah-hook, and its-skah′-he-rook.

The acorn leach was called kwah-po-am-pik; the acorn cache (woven of tules and holding about four grain sacks), hah-pah′-ris-poo-ahs.

The hot stones used for cooking in baskets were called by the Shasta and Yreka Valley Indians, too-tah´-gah itch´-ah; the stirring stick, ahk´-tah-we-ke.

The two sticks for taking the hot stones out of the fire, ah´-kwah; the digging stick, kwahs; the chipping horn for shaping flints and arrow points, wah´-pah; the bone awl used in making baskets, ech-wah; the brush of soap-root fiber, haht; cord or rope, po-kwe-ruts. The carrying band which passes over the forehead or front of the head, oo-ter´; the fish net, ah-row´; fishhook, hah-mi-rook; dugout canoe (burnt out of fir log), ik´-we; the paddle, ah´-ket.

PIT RIVER TRIBES

Editor's Note: The following ethnographic notes refer to the A-ju-mah´-we of Fall River Valley and were secured by Dr. Merriam from Charles Green in March, 1928. A second set of data refer to the Modesse tribe of Pit River peoples and were secured from W. Hulsey in 1907 and 1923. They are supplementary to the information contained in his monograph on the classification and distribution of the Pit River Indian tribes of California, published in Smithsonian Institution Miscellaneous Collections, Vol. 78, No. 3, 1926.

A-ju-mah´-we

Taboos

The Pit River people did not eat coyote, grizzly bear, skunk, loon, pelican, cormorant, night heron, or shitepoke. They did eat bobcat, mountain lion, and swan, and some even ate mink.

When a woman has a child neither she nor her husband may eat meat or fish. The husband must go to a distant place, usually a mountain, and remain over night. He may resume eating in the usual way in a few days, but the wife must not touch meat or fish until she is entirely well.

The prohibition relates not only to eating but to the smell of cooking meat or fish. She must be far enough away so that this smell could not possibly reach her.

Signal Fires

Signal fires are called e-se-an´-no-e-mat. This refers to signal fires visible at a distance.

But when the enemy has entered the Pit River or Fall River country everybody keeps watch, and whenever anyone sees an enemy he immediately builds a signal fire. Thus, as one man after another locates the enemy, a series of fires spring up at intervals, one after the other. These signal fires in series are called ta-mat´-soo-ge.

Torches

All of the Pit River tribes carried fire from place to place by means of torches. The torches were ingeniously made of strips of frayed

bark of juniper or sagebrush, or both. The frayed bark was twisted or rolled into the form of a club fifteen or eighteen inches in length and tied at intervals so that it would not open out.

A small coal placed inside ignited the frayed bark, making a low, glowing fire which burns a long time. It may be carried all day long and never goes out. In this way it is easy to carry fire from place to place. When opened and exposed to the air, it bursts into a blaze.

Salmon Spearing

The Big Valley tribe and our tribe used to go down Pit River to the falls where the salmon stopped, to catch and dry salmon. Large quantities were dried and brought home in pack baskets.

A mile or two above the mouth of Burney Creek a stream enters Pit River from the south. Its name is Mah-pe´-dah-da, called Salmon Creek by the whites. It is less than half a mile in length, but during the salmon run it is packed with these fish. Naturally it became a great resort for neighboring tribes of Pit River Indians, some of whom came from as far up river as Big Valley. A long time ago the Indians established a village there, naming it after the stream, Mah-pe´-dah-da. Here the salmon were cleaned and dried, and when dry were packed home by the several tribes.

The Fire Corral

In former days it was the custom to hold a fall deer hunt in the White Horse Lake country in September or October, when the deer were fat and the leaves dry. This hunt was called da-oo´-te. It was made jointly by two closely related tribes, the Fall River A-ju-mah´-we and the Big Valley At-wum´-we.

Men with torches started together and ran in opposite directions, enclosing a very large circular area—a thousand acres or more. They set fires as they ran so that in a short time a huge circle of fire, spreading toward the center and constantly contracting, surrounded the deer and other animals. They were confused and blinded by the smoke and easily killed with bow and arrow. There was no escape.

After each hunt two or three years were allowed to pass in order to give the pine needles time to accumulate before the next hunt.

Deer Hunting with a Rope Circle

A rope was stretched around a large area at a height of three or four feet and held in place by fastenings to trees, brush, and stakes. Men were stationed along the line and branches and brush were attached to the rope at intervals. By striking the rope with clubs these were shaken, making a noise to keep the deer within. This hunt was carried on by the Ham-mah´-we of the South Fork of Pit River. It was a spring-time hunt. The rope circle was called dil-loo´-wah-te.

Deer Driving in Winter

In winter, usually when the ground was covered with snow, deer drives were made over considerable areas. Good shooters were stationed at points where it was known the deer would come out. Then a number of people beat the forest and undergrowth, driving the deer toward the shooters. The name of this hunt was do-too´-te.

Edible Crickets

The Pit River Indians are found of the large black or dark brown cricket, called ah´-tsah; it is good food. It is good when dried and keeps well, lasting all winter. The females, when full of eggs, are the best of all.

Juniper Berries

Juniper berries are eaten raw. Some are too strong and these are not eaten. Trees bearing the sweet berries are selected. The berries are pounded and boiled, making a tea which is taken for coughs and other troubles.

Wokas

None of the Pit River tribes ate wokas. Members of the tribes say that they never eat anything that does not grow in their own territory.

Salt

Originally the Pit River tribes had no salt but were in the habit of adding a little alkali to their food. The name of alkali is te, which name nowadays is used also for salt.

Enemies of the Nos-se

In a battle with the Nos-se or Yah´-nah (called Te´-si-che and Yam´-muk by our people) our Fall River Valley people usually came out ahead because we had more fighting men. During one fight one of our men (Charley Green's father-in-law) captured a girl baby. She was treated as his own child and grew up with our tribe. When she had grown up somebody told her she was not his daughter, that she was only a slave.

When the Government was moving the Indians to reservations, she went with a number of others to Red Bluff, where they were loaded on boats and taken down the Sacramento River to San Francisco, and then up the coast to the Mendocino Reservation. This was in 1859.

Poison Arrows

Poison arrows were used for grizzly bears. The poison was made by mixing rattlesnake and spider venom in a rotten liver and adding the juice of hab-be-kos-lah, the poison parsnip. Sometimes also the root of the narrow-leaf Wyeth sunflower was added. These things were crushed and pounded in a mortar hole in the rock and were mixed with water.

The arrows were straight and of hard wood, usually rosebush or sarvis berry. The tips were of hard wood tipped with flint.

The old witch doctors, magicians, used to look at the poison mixture through a thin flake of obsidian in order to see which was the strongest poison, and would dip the obsidian tips in this to kill quickly.

Armor

The Klamath, Modok, and Pit River Indians when fighting wore a kind of heavy robe or overcoat, and also a corset armor called ska-lam´. The ska-lam´ was made of pieces of hard wood, usually sarvis berry (Amelanchier). Besides these, there was another kind of armor called bow´-we, made of very thick hide, usually elk hide, and sometimes doubled. It came up over the lower half of the face. The Klamath-Modok Indians used to wear these when they raided our country to steal boys and girls for slaves.

Two Ham-mah´-we women, old Sally and her sister, were captured by the Piutes and kept as slaves for many years.

Modesse

Foods

The principal vegetable food is the acorn, of which the favorite is that of the black oak (Quercus californica), called ta-tah´-cho. The acorn is called ta-tahts´.

Hazel nuts (chim-ko´-ke) are prized for food, as are the nuts of the sugar pine, called skil, though the tree is called ah-sow´-yo.

Nuts of the buckeye (Aesculus californica), called pahs, require special preparation but are eaten in times of need. The buckeye tree is called pah´-sil-lo´.

The vine maple (Acer circinatum) is called tah´-pah-kah´-jil-lo. Its branches are used for the frames of snowshoes.

The long shoots of the creek dogwood (Cornus glabrata), called sul´-woh, are used for some of the baskets.

The wood of the mountain mahogany (Cercocarpus parvifolius), called by the Indians kas´-wow-yo´, is used for digging sticks and also for spear points.

The western redbud (Cercis occidentalis), called pis-sah´-kah-yo, is used for the red design in baskets.

Wood of the smoke brush (Ceanothus cuneatus), called il-loo´-che-chal´-lo by the Modesse, is used for making the slender needle used in piercing the lobe of the ear of young girls. After this had been worn about a month it is replaced by a larger one made of the wood of the aromatic sumac (Rhus aromatica trilobata), called by the Indians chah´-cha-lo´.

The leaves of the snow brush (Ceanothus velutinus), called by the Modesse e´-che-cho´ (or e´-ke-cho´), are made into a tea for fever and coughs.

Fruits and berries extensively eaten are wild plums (Prunus subcordata), called pah-te; chokecherries (Cerasus demissa), called bol; sarvis berries (Amelanchier alnifolia), called pe´-tah; blackberries (wal-lop´-lo´-pe); thimbleberries (lom´-ki); huckleberries (kan´-nah-nah´-pe); and manzanita berries (paj´-je-soo´). Of less importance are wild currants (chah´-ho) and gooseberries (has-chig-ge).

The wild syringa (Philadelphus), called tah-pahk´-pe, is used for some of the spear tips.

The coffee berry or cascara (Rhamnus californica), called chow´-wah-hah wel-lo, is used as a cathartic and also as a medicine for rheumatism.

The Oregon grape (Berberis), called in´-nah-mah´-ki´-kil-lo, is made into a tea which is highly regarded as a blood medicine. It should be taken for a full month. A jelly made from the berries is equally good.

The azalea (Azalea occidentalis), called lah-si´-yo, is regarded as a remedy for poisoning.

The seeds of the yellow waterlily (Nymphaea), called ha-bil´-le-lo, which form an important food in the case of the Klamath tribe, are not eaten by the Modesse.

Stems of milkweed (Asclepias), called mahts-ke´, are used for making string and cord.

The horsetail or scouring rush (Equisetum), called jim´-how-che by the Modesse, is used not only for polishing arrows but also as a tea for coughs and for bladder troubles.

The large green leaves of the ginger root (Asarum), called nah-tah´-kil-lo, are strongly antiseptic. They are believed to be the best remedy for cuts and boils. They are put on fresh, not cooked or heated.

A fine mountain grass, called cha-ha´-ni-yo, is pounded fine and soft and used in place of diapers.

The turkey mullein (Eremocarpus setigerus) is called che-sah´-ye. When picked at the right time (about August 23 or 24) and dried for a year it takes on great power and is the best of all medicines for dropsy.

This plant is the favorite plant of the little summer star, awl´-o-e-chah-mek´, who comes out for only about twenty days each year in the month of August and appears a little before midnight (eleven o'clock) high up and about northeast or a little east of north. When awl´-o-e-chah-mek´ is seen in his place in the sky he puts dew on che-sah´-ye every night; this gives the plant great power, and this is the time to gather and dry it.

The principal ingredient for the poison used for the stone arrow tips was the yellow lichen (Evernia) which grows on pine and fir trees in the mountains. The arrow points were embedded in masses of the wet lichen and allowed to remain an entire year. Rattlesnake venom was sometimes added.

Attacks by Grizzlies

In the old days Indians were frequently attacked by grizzly bears, especially when met at close quarters on the trails.

Some years ago, when Hulsey's father was a young man, a woman of the A-te tribe was picking manzanita berries on a high hill on To-pah^{ch}-lo-da Creek, the first big creek south of Horseshoe Bend (three or four miles south of it). Two young men who were hunting in the neighborhood heard the woman scream and cry out as it attacked. They ran to her and found that a grizzly was holding her down on the ground. He had wounded her in the neck and chest, apparently with his claws. The young men shot ten or twelve arrows into the bear but did not kill him and he chased them. One of them ran around a tree, while the other ran off to tell the people. A hunter came with a powerful hunting bow and shot the bear. It went into the water and with its fore paws rubbed the arrows off and washed the blood off. After a while it was found dead in the brush. This happened during the lifetime of Hulsey's father.

Once when his father and other men were out hunting they saw a cub bear and tried to catch it. The old man called to them not to catch it, but they did catch it and it squealed and the mother came running in, and the men ran away. But Hulsey's father stayed and shot the bear and killed it. Then he screamed as if the bear had hold of him (to see if the boys would come back), but they kept on running and never came back.

CHEMARIKO NOTES

Editor's Note: The following are excerpts taken from a series of six letters written in longhand from Burnt Ranch, Trinity County, by John P. Harrington and addressed to Dr. Merriam. Harrington's informant was one Mrs. Sally Noble, who was also known to Dr. Merriam, and the two ethnologists had a kind of partnership of interest in her as a repository of information on the culture and language of the Chemariko Indians. Merriam had discovered this last speaker of the language some time before and let Harrington in on the find. Harrington, usually secretive about his informants to other linguists and ethnologists, seems to have had a different relationship with Merriam over the Chemariko and several Costanoan (Olhonean in Merriam's classification) informants. In the letters are numerous pleas for Merriam not to mention to anyone at all (including Harrington's own chief at the Bureau of American Ethnology in Washington) that he was at Burnt Ranch working with a Chemariko informant. Now, with all parties deceased, there seems to be no reason to withhold the interesting bits of Chemariko ethnography which Harrington communicated so freely to Merriam, and their appearance here may be considered a kind of joint publication by Harrington and Dr. Merriam. The parts of the six letters which deal strictly with Chemariko ethnology are as follows:

I. September 11, 1921

The name for ant-lion is curious: it is you-rah-mah-cho-li-da, mourning dove's grandmother. I got both names for the rabbit species only yesterday, one came to Sally in the night. They are: hee-wee-nol-lam, cottontail rabbit; he-moo-hol-lah, jackrabbit. The Che-mah-re-ko also have two names for tick species: tsee-na, large wood tick; and teep-hoo, very small tick species, known also as he-moo-hol-lah teep-hoo-ee-dah, jackrabbit tick. Having no word for beans, they dubbed them also tse-na, literally ticks!

A curious anatomical term is chach-hi. This is said to be the name of a muscle, the size of one's little finger or smaller, and resembling a worm, which occurs in the shoulder of the deer. Indians when eating boiled deer meat used to throw it away in disgust. It was carefully explained that it is not a worm or parasite, but a muscle. Am also getting the place names straightened out and will write you at length in a few days about these and other interesting points. She sticks to it that the Che-mah-re-ko called Ironsides Mountain A-woo-treh-dah, literally great mountain. The first people used to make pilgrimages to the top of that mountain when they got old, and would pray there and descend young again. The mountain

called Big Mountain by the whites is not Ironsides, but the peak opposite Mrs. Noble's ranch, the Indian name of Big Mountain being Moo-neh-nah-tse. Thus this matter is also straightened out.

Did you ever hear of the tribe known as the Hoppa as Sah-ya? If not, this may yield important results. They are said to live down the coast and it may turn out that they are the "Nongatl." At any rate it is a tribe south of Eureka somewhere. Another interesting matter is that the tribal name Che-mah-re-ko has the initial sound clicked. I did not notice this the first day, but now hear it plainly every time. It should be written Ch'e-mah-re-ke, with clicked ch'. I got the etymology of Chem-too-wahk-tah, white man, yesterday. It elided from Chem-tah Hoo-wahk-tah, chem-tah, meaning across the ocean or on the other side of any body of water; and hoo-wahk-tah being the term for "comer." The word therefore means from across the ocean.

They call horse the same as dog, and domestic cat the same as wild-cat, with "white man" sometimes prefixed to these names.

II. September 30, 1921

Sally Noble has at last remembered the real old name of Ironsides Mountain. It is Cha-lee-dan Ah-woo. It came to her in the night and is connected etymologically with Chal-dah-som, the Chemareko name of the New River Tribe. Thus the name throws light on tribal boundaries.

III. October 15, 1921

I have had important information from Mr. Zach Bussell, half-breed Chemareko, that Ketinchow (a place fifteen or twenty miles south of Hyan-pom and near the headwaters of the Mad River—I am not sure how to spell it and cannot find it on the maps that I have here) is a Chemareko place-name, and Sally agrees to this too! It means the place of a kind of wild onion. I also have information that Sam-nah-ma, a flat near the mouth of North Fork Trinity, is Chemareko territory!

IV. October 19, 1921

The grammatical material also is looming up in large proportions. The language has quite a rich structure, one might almost say intricate. There are indicative, unreal, negative, and interrogative forms of the verb and one of the fullest tense systems that you can find in any language. The future tense alone may be rendered by the following suffixes, each evidently with a particular and definite sphere of usage: -h, -han, -han'i,

-hanan, -hanat, and -ni. And all these are in common use, and when she volunteers a word a second time she may give a different suffix from that given at first pronunciation.

V. October 28, 1921

I have apparently information to show that the Chemareko territory extended far enough up the Trinity River to include the Chatman Ranch which is situated thirteen miles upstream from the confluence of the North Fork of the Trinity! The Chatman place is described as a flat on the south side of the Trinity at or near the confluence of Soldier Creek with the river. The Chemareko territory also included Kechinchow, fifteen or twenty miles south of Hyampom, and not shown on the maps accessible to me. The downstream boundary line was somewhere in the vicinity of William Noble's place. The tribe at the Forks of the Salmon was called Hoo-nom-nich-hoo (note the presence of distinct h after the ch), and Mrs. Noble says that William Noble's wife's mother talks that language fluently and is at present at Grants Pass or at least somewhere in that vicinity in southern Oregon.

I am now in my eighth week with Mrs. Noble and she is remembering more and more. It is vital to this work for to stay right on with her while I have the language memorized, and stay with it till the whole language is rescued. And such an interesting language! It has aspects just like Polish or Russian, a perfective and imperfective. E. g., lu'tin, I took a drink; but lu'it, I drank. Lu'idinda means the same as lu'it but emphasizes the progressive connotation of the imperfective. Another curious feature is that in telling a story they frequently just mention the name of the speaker and omit the word that means "says" or "said." This is the same as is done in our dramas. They name the speaker and the quotation immediately follows. It is curious to find this in a so-called "primitive" language.

We spent several days on anatomical terms, and obtained one very curious one. It seems that inside the fat of the groin of the deer there is a worm-shaped piece of muscle or "meat" which the Chemareko have a special term for, namely, Ko-chun. They throw these glands, or whatever they are, away in disgust because of the worm-like appearance. Now I could not understand Mrs. Noble well on this subject, but Frank killed a deer recently and I told him to be sure and let me see the Ko-chun. I secured a specimen and am enclosing it in this letter. When fresh the gland is of livid or bluish color and about one inch and a quarter long and a quarter inch in diameter. It is entirely encased in fat or suet, apparently Mrs. Noble thinks that these also occur on the shoulder of the deer, at the apex of the shoulder. The name Ko-chun is also applied to a kind of worm, a

specimen of which was also luckily obtained. This too I am enclosing. It is apparently what is popularly known as the "galley worm."

VI. January 6, 1922

I made a special trip to ask Mr. Zack Bussell, half breed Chemareko, further about the place names, and read to him the section of your letter that deals with the Chemareko-nor'-rel-muk boundary. I am sorry to state that he has no definite knowledge on the subject, but says that his mother, who talked Chemareko fluently, told him that Hettinshaw is a Chemareko word and that the place was Chemareko Territory. He sticks to it that the mouth of Soldier Creek was a Chemareko rancheria.

It is a curious information about the calling of inguinal glands and myriapods by the same name isn't it? [See discussion of these in letter of October 28, 1921.]

KO´-NO-ME´-HO NOTES

Konomeho ethnographic data given here were secured in 1921 from Mrs. Hugh Grant, whose maiden name was Ellen Bussal. Her mother was a full-blooded Indian woman from Etna Mills on the western edge of Scott Valley. Her father was a Frenchman or French Canadian. When a little child she was brought by her parents to Salmon River, to the Indian village known as Wahp-sah-kah-ah^{ch}-te-ah (known to the whites as Inskips) where she grew up and spent her early life among the Konomeho. The only language she ever learned was Konomeho, which she speaks fluently. Later she married Hugh Grant, a white man, who established a ranch at Butler Flat, where she has lived for the past thirty years.

The fact should be recorded that this woman possesses a very unusual intellect. Her memory is remarkable, and her sense of order and sequence surprising. She dictates her answers and her stories like a textbook, speaking slowly with delightful clearness, a word or syllable at a time, exactly as they should be, never withdrawing or altering a syllable.

While I was with her, she got breakfast before daylight, and we began working about six-thirty, continuing all day till the beginning of darkness in the evening, with only a half hour's intermission at noon. In other words, the day's work covered nearly twelve hours.

Thus far I have obtained Konomeho material from two persons, Fred Kearney of Forks of Salmon and Ellen Grant of Butler Flat. Two points of difference were noted in the words as spoken by them. Terminal o as spoken by the woman was nearly always oo as spoken by the man. Thus he said Konomehoo, while she said Konomeho. And the syllable cho spoken by the man becomes tso when spoken by the woman.

Ceremonial Houses

The Konomeho had ceremonial houses, called ko-hah-a-hem-pik. They also had an out-of-doors dancing place called kos-tah-hem-pik.

The ceremonial house was partly underground, and was circular in form. The sides were of broad slabs split and hewn from big trees. There was a stong post at each end, supporting a long top log. The roof was of hewn planks, the inner ends of which rested on the ridge-pole; the outer ends rested on the wall slabs. The fireplace was in the center but there was no center pole. There was no brush or earth on top, only the plank covering. When a dance was going on the top plank was removed to enable

the people to look in. The slope of the roof was moderate, not steep. The side planks were two and a half feet or more wide and at least three or four inches in thickness. There was only one entrance, from it steps led down from the ground level to the level of the floor.

In felling the trees and hewing the planks or slabs for the houses, the people used elk horn wedges called hoo-pa-had and, singularly enough, curious iron axes with very broad blades and a long pointed pick, like a pickaxe on the back side. No one knows where these axes came from. They are called ap-kah-choo-rah-ke.

Miscellaneous

Salmon were speared. The spear pole was called he-tso-se-re; the points, har-ro-wah-cho. They were of hard wood painted with carbonized salmon head glue.

Quivers were of wildcat skin.

Black flint or obsidian was found in old campsites where Indians had lived. Where it came from originally, no one knows.

Women were purchased; their value in Indian shell money was the equivalent of two hundred dollars of our money.

Treatment of the Dead

Dead people were called mo-ha-rah. They were never burnt, but were buried in deep graves in the ground.

A coffin, called mop-ha-rah ha-ha-pum-mah, was hewn out of a big tree and the body of the dead person put into it for burial. The body was first washed, then dressed in the person's finest buckskin clothing and moccasins, and decorated with Indian beads and Indian money. The body was then laid on a long plank in the house of the deceased. The people came, and sang and cried while they walked around the corpse, throwing in strings of beads. The man in charge raised the corpse each time a string of beads was thrown in and put it on the body, raising the head and upper part of the body for the purpose, and putting the strings of beads around the neck and under one arm so that it crossed the chest obliquely. The alternate chains were placed on alternate sides, each string passing over one shoulder and under the other arm in such manner as to cross on the middle of the breast. Thus the attendant kept lifting the body and putting on more and more strings of beads as the procession of mourners continued to pass, a

line on each side. When carrying the dead person out of his house, the body was covered with a blanket of skins and dry ashes sprinkled upon it. The body was so covered that the ashes did not touch it. The line of people throwing beads on the body was out of doors, not in the house. The body was never taken into the ceremonial house.

The grave was exactly six feet deep. It was dug with a hard wood bar, hardened in the fire, and called hit-so-ker-re. With it the earth was loosened and was thrown out by means of strong basket trays called chap-po. The wood used for the digging bar is from a small tree called kwo-sa-ho. It grows on the hills at Forks of Salmon, a little above the Forks, and in some other places. The wood and leaves are grayish (color of concrete). The tree is small and smooth, something like a willow but with broader leaves.

The Sweat House

The sweat house, called kos-took´-hum-pik, is about eight feet by twelve feet. It has a fire in the center but no smoke-hole. It is heated by means of a large fire, but no rocks and no water are used. When the fire burns down the men go in, four or five at a time, and lie down. Soon they begin to sweat. After a while they come out and jump into the cold stream.

The sweat house is dug deep in the ground. The top is covered with slabs and earth, and projects only a little way above the general level of the ground. There was a single middle post from which the roof rafters radiated.

Menstrual House

Women went to the menstrual hut for five or six days. On coming out they went to the sweat house where they took a big sweat and then jumped into cold water. After this they went back to their house.

Childbirth

Women about to give birth to children went to the menstrual house for delivery. They were always accompanied by one or two, sometimes three, old women. After the birth of the baby they remained in the menstrual house for one month.

During delivery the woman always sat up, never lay down. One of the old women sat behind her with her knees against her sides. Another

old woman, standing behind her, held her head, while usually a third held her feet down. The woman standing behind with her knees pressing against the sides rubbed the abdomen with her hands continually to keep the baby's head in the proper position in order not to let it turn. The reason the woman was made to sit up, not permitted to lie down, was that if she lay down the bad blood would run all through her body, while if she sat up all the bad blood drained out.

After the baby was born the woman took a sweat once every day for a month, the baby sweating with its mother. The husband was not allowed in. After the month was over the woman went home with her baby. The after-birth and cord were burned. While this was being done, the cord must stick up, i.e., must not turn down.

Penalty for Illegitimacy

When a young unmarried girl was found to be with-child, she was dressed in her best buckskin clothing, with all her beads and ornaments, and was told to run a race. Her mother and father went away so they could not see her burnt. The people built a big fire and when the girl was running the race, pushed her into the fire where she was consumed.

The Konomeho people would not allow a child to be born without a [legal] father.

Summer Camps

When drying salmon in summer the people lived in brush huts called o-pis-ah-kwi-ruk. The leaves were left on the brush of the houses. When hunting deer the people lived in bark houses called soo-nah-too-ahn-mah.

Permanent Houses

The permanent houses were called ah-mah. They were made of slabs of planks hewn out of large timber. They were circular in form and fifteen to eighteen feet in diameter, with a fireplace in the middle. The smoke hole was called kwah-wa-wah^{ch} and was in the roof directly over the fire. The entrance was called ow-o-kah-hah. It was closed by skin or door called hah-o-kah-hit. The bed was called hitch-mah-sa-kook.

Tobacco Gardens

The Konomeho cultivated tobacco. There was a tobacco garden at

Butler Flat and others at other places. Every spring after burning the brush and logs, wild tobacco (o-bah) was planted.

Acorns and Food Caches

Acorns (ah-po) were treated in several ways. Some were buried in cold springs and allowed to remain with the water running over them all winter. But the main supply was kept in huge storehouse baskets called ah-nah-ek. These baskets were closely woven of pine roots and hazel shoots, ornamented with design in bear-grass (Xerophyllum). They were about the height of a man's body and four feet or more in greatest diameter, tapering at the top, the top opening being much smaller than any part of the basket. The opening was covered with a flattish basket called hitch-o-kah-hahn-nit.

The Shaste and Konomeho tribes had a good sized underground cache (wahtch´-nah) for acorns, dried fish, and dried meat of deer, elk, and bear. It had a framework of posts and was made of bark, with leaves next to the ground to keep out dampness.

Meat of deer, elk, and bear was roasted on coals and also cooked in the ground oven called hep´-se-ro hahm´-pik.

Basket Materials

In making baskets the usual materials are roots of the yellow or ponderosa pine and shoots of hazel, the hazel for the coarser baskets. The overlay and design are mainly of bear-grass (Xerophyllum).

The pine roots are obtained and treated in the following manner. A root is exposed for a distance of about ten feet from the trunk and then dug out and cut off in three foot lengths. At this point the root is about four inches in diameter. A number of these root lengths are buried together in sand. Water is poured over them and a fire built on top. The fire is kept up so that the roots will steam in the sand for a day and a half. They then split easily and are split into the fine strands used for the baskets.

Dress

Two deerhide with hair on were sewed together to make a blanket (ah-rah´-o-tah-choo´-pah-ha). The apron (hah^{ch}-ya´-hur), the shirt (hah-na-ta-a-mah) for men and women, and pants (hah-koo´-i) were made of buckskin. Fish ribs were braided in twigs to make a hair comb (her´-rah-kwas´-wit).

Identification of the Ko´-no-me´-hoo

The Ko´-no-me´-hoo are a Shastan tribe occupying the basin of the Salmon River from Oak Bottom Creek, about four miles (air line) from the junction of Salmon with Klamath River; southerly to the high mountains known as the Salmon Alps; and southeasterly along South Fork Salmon as far as Plummer Creek, at the mouth of which their last village was situated.

They had at least seventeen villages. My informant (Fred W. Kearney, whose Indian name is E-shan-pom) could not remember the names of the two rancherias on Wooley Creek, nor the one at the mouth of Plummer Creek.

The territory of the Ko´-no-me´-hoo joined that of the Kah-rok or Ah´-rahd of Klamath River on the west and northwest; that of the Shaste proper on the east and northeast (the intertribal boundary being the high summits of the lofty Salmon River Alps; and that of the Kah-hoo´-tin-e´-ruk on the southeast (and possibly south also).

So little is known of the Ko´-no-me´-hoo that any extended discussion of their culture, customs, beliefs, and ceremonies is out of the question, and their degree of differentiation from the Shaste proper can only be determined by a comparative study of vocabularies.

Unlike the Shaste they had no chief, but at their festivals or ceremonies they had a master of ceremonies called kem´-pe wah-te´-kwah, meaning literally big man, who usually owned the ground where the ceremony was held. They had both men and women doctors, the man doctor called ke-poo-soo´-mi-kwe´-ke and the woman doctor, ke-chok-ka-ha-rah^{ch}.

They did not cremate but buried their dead. They believed that the body contained a spirit or ghost, called mop-ha´-rar, which after death remained in the vicinity for five days and then went away never to return.

They had rattles, called hah-ne´-ker´-re, which differed from those of most tribes in containing no stones or other loose objects, but consisted of the dried skin of a squirrel fastened on a stick, which when shaken made a crackling cound. And they had bone whistles called he´-he-tah´-er-re, music sticks of split elder called kim´-pe he´-he-tah´-er-re, and drums made of hide stretched over a frame, called hah-ne´-kah´-re-kah´-re.

Like the Shaste they have no specific terms meaning north, south,

east, and west in the usual sense, but use terms referring to the direction of their principal river, upriver (o-kwah´-to), downriver (o-ro´-to), or to the rising or setting of the sun.

Language

The language of the Ko´-no-me´-hoo is essentially Shastan, the great majority of the words being identical with those of Shaste proper; yet there are important differences. Some words are wholly different, and there is a notable peculiarity of intonation. It would be an exaggeration to say that the words are sung; at the same time many of them are uttered in a rhythmical half-singing way with alternate rising and falling of the voice. In other cases the difference consists in the change of an initial letter, the addition of a syllable, or the position of an accent. Aspirated h (or k) is much more common than that in Shaste.

The letter p, which in Shaste is sometimes difficult to distinguish from b, has in certain cases, as in he-wah-pe (the chipping horn), a half-whispered explosive sound not occurring in Shaste. The same is sometimes true, though much more rarely, with the letter k when it begins a syllable, a very different sound from aspirated k, which is common.

The numerals from one to five, and ten, are the same as in Shaste, but six is quite different, seven, eight and nine slightly different, and the teens from eleven on, widely different.

The personal pronouns are essentially the same in both, although you (singular) in Ko´-no-me´-hoo is mah´-e and in Shaste, mi´-e; yours (possessive) in Ko´-no-me´-hoo is mah-ah´-moo, in Shaste, mah´-moo.

The word for father in Shaste, ah´-tah, becomes tah´-tah in Ko´-no-me´-hoo.

Many words (and some syllables within words) which in Shaste begin with a vowel, in Ko´-no-me´-hoo take on an h before the vowel. Thus the well known Shaste word for people, ish, becomes in Ko´-no-me´-hoo, hish. Now and then an individual Shaste may be found who uses the initial h in some of these words, but such cases are exceptional.

Among the numerous cases of this kind the following may be cited:

	In Shaste	In Ko´-no-me´-hoo
people	ish	hish
shoulder	o-kwe´-we	ho-koo´-e-we
arm	ah-chaht	hah-char´-rah
foot	ah´-koos	hah´-koos
leg	ar´-rah-wi-e	hah´-rah-we-e
heart	e-wah´-soor	he-wah´-soor
anus	o-pah´-te	ho´-pah-te
acorn bread	esh-ne	hesh-ne
sticks to take hot stones from fire	ah´-kwah	hok-ahk-kwah
basket hat	ah´-chik	hah´-chik-ke
rosin or pitch	e´-ne	he´-e-ne
this place	o-an-hah	hoo-wah-hah
chipping horn	e´-wah-pe	he´-wah-pe
bear	e´-hah	ha´-hah
mountain lion	e´-she	he´-she
wood mouse	ahp-hah´-te	hahp-hah´-te
golden eagle	ah-choo-pah	hah´-choo-pah
great horned owl	its´-muk-kah-rah-ap´-se	hitch´-muk-kah-rah-hap´se
blue grouse	ok-wuk	hok-wuk

Words identical in the two dialects: The most important words of the language are identical, or practically so, in Ko´-no-me´-hoo and Shaste. Among these may be mentioned: man, woman, father, mother, son, daughter, uncle, aunt, old, baby, hunter, head, forehead, eye, ear, chin, mouth, tongue, throat, hand, back, female breasts, belly, navel, and a number of other parts.

Words wholly or materially different: In a few cases a wholly different word is used in Ko´-no-me´-hoo and Shaste. Among these are:

the old people

elder brother

younger brother

grandfather and grandmother

widow

the First People

whole body

nose

back of neck

side

elbow

ankle

saliva

strong

dead

old

young

lazy

hungry

buckskin

snowshoes

village

sweat house

footbridge

quiver

stone knife

stone under milling basket

medicine

sweet

grave (in ground)

spirit or ghost

bone whistle

river (may be specific)

creek

wet

mountain

hill

you

Ko´-no-me´-ho Territory and Villages

Territory

Basin of Salmon River from Butler Flat up the main river to mouth of Little North Fork; and up South Fork from Forks of Salmon to Plummer Creek where their country abutted that of the Kah-hoo´-tin-e´-ruk. Below Butler Flat were the Karok of Klamath River.

Villages

1. Kwah´-soo-ne´-pah. Indian Bottom, on ridge between Butler Flat and Indian Bottom.

2. (Name forgotten). On top of bluff on south side Morehouse Creek at Sourkraut Mine (back up east from Salmon River). Large village.

3. Tis´-kun-nok-ke. On west side Salmon River opposite Bloomer Mine (which is between Morehouse and Crapo Creeks). Village on top of Tis-kum Mountain (nok-ke means on top).

4. Ke´-mah-kwah´-mah. At junction of Nordheimer Creek with Salmon River (on north side mouth of Nordheimer and west side Salmon River).

5. Is´-se-put´-chup. On bluff on east side Salmon River, on north side Crapo Creek.

6. Am´-mah-hah´-wuk´-kah-wah. On bluff on east side Salmon River, on south side Crapo Creek. (Place now all mined out.)

7. Kes-ap´-po-whe´-wah ka-pak-how. On point on east side Salmon River half or three-fourth mile above mouth Crapo Creek (now all gone, mined to bedrock).

8. Wo´-stik-nah-kah. On east side Salmon River, half or three-fourth mile above Inskips (now McNeil's place).

9. Wahp´-sak-kah-ah^{ch}-te-ha. On southwest side Salmon River opposite Inskips.

10. Wah-soo´-re-a-wah. At Forks of Salmon.

11. Ko-hah´-pah. On south side Salmon at Bonalys.

12. Chah^{ch}-watch. On north side Salmon River, on east side mouth of Sawmill Gulch.

13. Ko-huk-ke´-nah. On south side Salmon River at Shanks (Red Bank). All mined off now.

14. Ah´-re-kwe. On south side Salmon River, opposite mouth of Little North Fork (near Ahlgren School House).

15. Te´-po-i. On south side South Fork at mouth of Knownothing Creek.

16. Ko´-pitch-ke. On southwest side South Fork, a little below mouth of Hotelling Creek.

17. Cho-pah-wah´-how. On southwest side South Fork opposite mouth of Niggerville Creek.

18. Ko-tse-tsah. On both sides of South Fork at mouth of Methodist Creek (site of Yocumville on north and Orcutts on south).

19. Hoo-wi´-e-took. Mouth of Indian Creek.

20. We´-row-we-te´-nah. At mouth of Matthews Creek.

21. Hoop-po-ho. At mouth of Plummer Creek. Uppermost and southernmost village.

The Ko´-no-me´-ho and Kah-hoo´-tin-e´-ruk Languages

In 1903, Dr. Roland Dixon visited the Forks of Salmon at the suggestion of Drs. Kroeber and Goddard, in hopes of finding remnants of a tribe of which next to nothing was known and which was feared to be extinct. The supposed new dialect, he states, "proved on more careful investigation to be not essentially different from the Shasta as spoken on Klamath River."[1] But at the same place (Forks of Salmon) Dixon found two women who remembered a number of words of a widely different language which they spoke of as "the old people's talk." From them he succeeded in obtaining seventy-five words and short phrases. He learned that the name of the tribe at Forks of Salmon is Konomihu (Ko´-no-me´-hoo), and believed that the words of "the old people"s talk" obtained from the two women belonged to that language. At the same time he learned of the existence "of what seems to be a second new dialect in this region," spoken by a people on "the upper courses of the two forks of Salmon River above the Konomī´hū" and extending (southwesterly) "even over the divide, onto the head of New River." Of the language of this tribe, which he calls New River Shasta, he obtained (he does not state from whom) seven words, only three of which were secured also in the language which he calls Konomī´hū. Of these three, two are practically identical in the two languages, while the third appears to be the result of a slight misunderstanding. It is the word given by Dixon for man in his paper of 1905, and corrected to Indian in 1907.[2] He gives this word as kis´apuhī´yu´ in Konomī´hū; and the possessive mine as yahpoe´na, which, as heard for the first time, might easily be written apūhiyū. Hence, if I am not mistaken, his kis apuhiyu as written by me would be hish-yah-poe´nah, meaning my people; and his New River equivalent, ge-ic, if I interpret it correctly, would be ke-ish,[3] meaning young people.

In 1911 I was fortunate enough to discover two survivors of the Konomehoo tribe living near Forks of Salmon, and obtained a vocabulary of five hundred and fifty words of their language. Two years later I made a horseback trip up the narrow Indian trail from Somes Bar at the junction of the Salmon and Klamath to the home of an aged Konomeho woman on Salmon River below the Forks. From her I obtained more than a thousand words.

Dixon, as already stated, learned of an extinct tribe farther south, extending from South Fork Salmon over the mountains to the upper waters of New River. The name of this tribe he did not ascertain; he called them New River Shasta. The Konomehoo tell me that the name of the tribe was

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[1] See p. 243 for end notes.

Kah-hoo´-tin-e´-rook (pronounced by one informant as Kah-hooch´-e-ne´-rook), and that they spoke a language very different from either Shaste or Konomehoo. The Shaste call them Ho-hah´-pah soo´-ish and Tah^{ch}-i´-ish; the Hoopa call them Klo´-me-tah´-hwa; the Chemarreko call them Hoo-num´-ne-choo.

Now, as I have just pointed out, the words recorded by Dixon as Konomihu and New River Shasta fail to show any real differences—the slight apparent dissimilarity being due to difference in meaning, so that I regard them as one and the same language.

The vital question arises as to what this language is. I believe it to be his New River Shasta, the proper name of which seems to be Kah-hoo´-tin-e´-rook. My reasons for this belief are: (1) that nearly all (all but four out of thirty-three)[4] of the words recorded by Dixon as Konomehoo differ radically from the corresponding words of Konomehoo secured by me; and (2) that Dixon himself states that on visiting the Konomehoo territory at Forks of Salmon, "this supposed new dialect proved on careful investigation to be not essentially different from the Shasta as spoken on Klamath River." This accords entirely with my own study of the two languages, since in comparing more than one thousand words of Konomehoo with corresponding words in my very full vocabulary of the Shasta language, I find a very close relationship, amounting in numerous cases to actual identity.

Summing up, it seems obvious that the words published by Dixon under the two heads, Konomehoo and New River Shasta, are the same, and that they almost certainly belong to the latter language, Kah-hoo-tin-e-rook. This appears to be a wholly distinct language, very remotely, if at all, related to the Konomeho which, as already stated, is essentially the same as Shaste. And it seems to be equally distinct from the other languages of northern California—in other words, to constitute a distinct linguistic family. Unfortunately, the tribe appears to be wholly extinct.

Notes

1. R. B. Dixon, The Shasta-Achomawi: a new linguistic stock with four new dialects. American Anthropologist 7:213-217, 1905

2. R. B. Dixon, The Shasta. Bulletin American Museum of Natural History, 17:5:497, 1907.

3. It should be made clear that owing to the different alphabets employed, the word for man, which in Shaste I write ish, and in Konomehoo, hish, is written by Dixon ic and kis, respectively.

4. The only four words given by Dixon as New River which in any way resemble Konomeho are:

	Dixon's New River Shasta	Konomeho obtained by me
eye	ki'oī	oo-e´
Indian people	kis´apuhī´yu	Hish (yah-poenah)
hazel	xas´kīpama	hah´soo ko-ho
cedar	kin´axō	in´-nah-hah´-ho

Identification of the New River Tribe

Editor's Note: The five letters reprinted here are of some interest in connection with the controversy between Dr. Merriam and Professor Roland B. Dixon over the identity of the New River tribe (see C. Hart Merriam, The New River Indians, American Anthropologist, 32:280-293, 1930; and R. B. Dixon, Dr. Merriam's "Tlo´-hom-tah´-hoi," American Anthropologist, 33:264-267, 1931) and over the accuracy of Dr. Merriam's phonetic method of recording Indian languages. These letters are made available here since they throw some small light on the view of each worker.

June 11, 1926

Dr. Roland Dixon
Harvard University
Cambridge, Mass.

Dear Doctor Dixon:

In examining the results of some of my field work on New River and Salmon River Indians, in comparison with your published results, I find myself perplexed on several points. For instance, practically every word of your "Konomihu" vocabulary as published in the Bulletin of the American Museum (pp. 497-498, 1907) differs radically from the word for the same object obtained by me from different members of the tribe in different years. This leads me to suspect that the words given you as "Konomihu" were really in the language of your New River tribe. The two seem to be transposed.

In your paper on the Shasta-Achomawi: a New Linguistic Stock (American Anthropologist, Vol. 7, No. 2, 1905) you record seven words as New River, but do not say where or from whom they were obtained. In your later paper (Bulletin American Museum, 1907) you make no mention of the New River Indians except on the small map. What is to be inferred from this?

Very truly yours,

C. H. Merriam

June 21, 1926

Dr. C. Hart Merriam
Lagunitas, Calif.

Dear Doctor Merriam:

I am afraid I cannot help you in the matter of the discrepancy between your results and mine on the Knonmihu and New River languages. The facts as I obtained them are given in the papers, and if your results differ, why all that can be done is for you to give your material as you got it. I have no means of going back to the statements made to me at the time, and cannot, as you are able to, make any attempt to get further data.

Very truly yours,

Roland B. Dixon

Harvard University
January 13th, 1927

Dr. C. Hart Merriam
Washington, D.C.

Dear Doctor Merriam:

I hope you may be able to get more information on the New River Shasta. I can only say that the material I obtained was from "Buck Kid's mother," and that she and all others from whom I secured information at that time were consistent in stating positively the facts as I gave them.

Many thanks for your paper on the Pit River Indians. I have read it with much interest and feel that you have given us a good deal of valuable data. I do not understand, however, your belief that your linguistic material from both Achomawi and Atsugewi is so "much more extensive" than mine. My vocabularies are very full, and I have several hundred pages of texts; I very much doubt whether your material is more than a fraction of that in my possession. My material has never been published, since I have no way of securing publication.

I note also that in your reference to the, to you, "disquieting, special and abnormal" phonetic spellings in use among all those doing scientific work with language, you have made at least three errors. Since you do not propose to use any accurate phonetic rendering it is not a matter of any moment, but you might at least have stated your "case" against all linguistic students correctly.

There is no use in arguing over the use of hyphens, but I might simply call your attention to the fact that the major danger of their use is that without a knowledge of the structure of the language, one is liable to subdivide words wholly wrongly.

I congratulate you on the excellence of the photographs. I hope we may see other publications of yours on the neighboring tribes published shortly.

Sincerely yours,

Roland B. Dixon

Harvard University
January 22nd, 1927

Dear Doctor Merriam:

In the matter of size of vocabulary there is no doubt at all but that your lists must be far fuller in regard to animal and plant names; I fancy, however, that for other than nominal forms my lists are considerably larger.

In the matter of phonetic recording I think you have made a number of mistakes in hearing the sounds, since you generally write "ch" for what I and others who have worked with these tribes always hear distinctly as "ts." This mistake is not an infrequent one. Unless I am greatly mistaken, you have confused two quite different consonant sounds, and sometimes omitted sounds which are significant.

The whole matter of an exact phonetic method of spelling is obviously too complex to discuss by letter. Of course there has been lack of uniformity, although this is now pretty generally outgrown. Under any circumstances, however, the sounds were accurately rendered, a thing which the

English alphabet cannot possibly do. The three errors I spoke of in your fourth paragraph on p. 2 are tc for ch (spelling church, tchurtch). If you had thought a moment you would see that your example is a contradiction. If tc = ch then ch would not be used! Church would be spelled tcurtc.

s for sh; so far as I remember no one ever so used s. What you are thinking of, probably, is š, an obviously different matter.

ts for s; this also I do not remember ever to have seen. The two sounds are totally different.

One might note, also, that you can't "aspirate" an aspirate!

You speak throughout as if you were the first to recognize the differences between Achomawi and Atsugewi. If you turn to my paper, The Shasta-Achomawi (p. 216), you will note that the differences were quite definitely pointed out at that time. The question as to whether the resemblances and differences are sufficient to put the two together as a "family" must rest on comparative studies of both with Shasta, etc. I note that on p. 6 of your paper you say that you omit from your comparative lists purely dialectic forms within each of the main groups, yet in the lists you give, a very considerable number of cases show merely dialectical differences between Achomawi and Atsugewi. Your treatment therefore is quite illogical it seems to me.

Pray don't think me hypercritical. I'm only trying to point out that this whole matter of linguistic relationship is not as simple as you appear to think, and that it must rest on much more than any comparison of vocabularies, however large these may be.

Your abundant and carefully checked materials are most valuable and all students of the Californian area must always be grateful to you for them. As I said before, I trust that your other papers will be coming out soon. You have had the advantage which others of us have not had, or have not had in anything like such full measure—that of revisiting an area repeatedly so that you could check up on data. My Achomawi and Atsugewi material, for example, has been lying for nearly twenty years, awaiting the chance which has never offered, to clear up a lot of doubtful points in the texts.

Best wishes for your continued work in this whole field,

Sincerely yours,

Roland B. Dixon

Harvard University
March 22nd, 1927

Dear Dr. Merriam:

As regards the use of s for the sound of English sh, I hadn't happened to note its use by Gilmore. Of course the use of wholly unusual and quite unaccepted signs by a single writer—who is not a linguist—does not in any sense constitute "usuage." It would be comparable to an untrained naturalist using a new and unaccepted name for an ordinary animal.

I think you quite misunderstand me in the matter of the tc and ts sounds. They are, of course, closely allied, and are not infrequently interchangeable. I know that you have gathered a tremendous mass of lexical material in California and Nevada, and never for a moment should dream of suggesting either "carelessness" or "inexperience" as the reason why there seems to be a rather consistent difference between sounds as recorded by you and by other students. Since two or three independent other investigators had more commonly recorded the sound as ts rather than tc, I could hardly help wondering if the difference was not due (as such cases usually are) to your "ear." My own "ear" is none too good, and had my hearing not been fortified by some corroboration I should not have ventured to doubt your version. The difference is, after all, not a matter of very great consequence.

I am quite horrified that I should have written you that I thought you were claiming to be the first to recognize the distinction between Achomawi and Atsugewi. No such idea was consciously in my mind, and in view of the wholly explicit statement on p. 4 I can't imagine how it happened. It's quite appalling.

My misunderstanding again, apparently, in regard to the "dialectic differences etc." on p. 6. Your statement is perfectly clear and I certainly must have been very sleepy to have so misconstrued things.

There is always the danger of doing anthropological, and especially linguistic, work mainly with one or two informants. In the linguistic case the very obvious reason is that there are very few good linguistic informants, so that the investigator is often limited very sharply. As vocabularies are the least important material to be gathered, one has to depend mainly on the usually very few persons who can and will give text materials and grammatical data. Every investigator tries to check up a

portion of the lexical material from a number of other informants, and usually does find similar individual differences to what one finds in English. Such variations are discussed when treating of the phonetics.

I envy you your opportunities to carry on your work season after season. As I have had no chance to complete work begun thirty years ago, and have had no opportunity to get into the field for about twenty years, my material consists in the main of unfinished beginnings. Power to your elbow!

With best wishes,

Sincerely yours,

Roland B. Dixon

ETHNOLOGICAL NOTES ON SOUTHERN CALIFORNIA INDIAN TRIBES

CHUMASH

Editor's Note: The following note, copied from Dr. Merriam's Journal for 1911, provides useful information on the Santa Inez Chumash.

October 4, 1911

Visited the remnant of Santa Inez Indians living on a small creek a mile or two below (southwesterly from) the present village of Santa Inez.

Talked with several of the Indians, including an intelligent old woman, and learned much of their distribution and lore, and got lists of names of mammals, birds, and reptiles.

They call their language Kah-sah´-kom-peh´-a and say that their territory extended easterly about twenty-seven miles—into the mountains; southerly to the high main range of the Santa Ynez or Santa Barbara Mts.; westerly nine miles down the Santa Ynez River to a place called Ahn-sahn on the present Buell ranch (line passes close to the ranch house); and north for at least thirteen miles—into the San Rafael Range. Their territory included Zaco Lake which they call Ko-o, which they visited to hunt and fish.

They gave me the names of six of their rancherias or villages, all in the Santa Ynez Valley (broadly speaking), as follows:

Ah-ke-tsoom´, about twenty miles east of Santa Ynez.

Mis-stah´-ke-wah, about sixteen miles ESE, at San Marcos Ranch.

Kal´-al-wah-sah´ (or Kal´-a-wah-sah´), on south bank of Santa Ynez River three or four miles below Santa Ynez village. This was the largest rancheria of the tribe.

Saw-taw-no^{ch}-mo´ (or Saw-taw-nah^{ch}-mo´), on north bank of Santa Ynez River directly opposite the large village of Kal-lah-wah-sah.

Hoon-hoon´-na-tah´, near present Zaca station on railroad two or three miles west or northwest of Los Olivos.

Me-wah´-wan, at the base of a big white mountain in the San Rafael Mts., about twelve or thirteen miles north of Santa Ynez.

They say that a tribe called Ah-moo´, speaking a dialect of their (Chumash) language, lived to the west and north from La Purisima and Lompoc, to Santa Maria, and up the Santa Maria and Sisquoc valleys. They could understand some but by no means all of this language. Farther north was the San Luis Obispo language which was wholly different.

The tribe inhabiting Cuyama Valley they call Kah´-she-nahs´-moo´ and say they differed from both themselves and the Ah-moo.

The tribe at Santa Barbara they call Kas-swah´. They speak a language similar to, but somewhat different from, the Santa Ynez Kah-sah´-kom-peh´-ah.

KAM´-ME-I

A Yuman tribe inhabiting the southern part of the Colorado Desert from San Felipe easterly to, or nearly to, the Colorado River, and from the south end of Salton Sea southerly across the Mexican border into Lower California.

Their neighbors are: on the north the Cahuilla; on the east the Yuma; on the southeast the Kokopa (Cocopa); on the west the Kam´-me-i (= Diegueno).

They were visited more than a century ago by Cortez, Garces, and Kino, and Garces states that they are called Quemeya by the Yuma. Harrington calls them Kamya. Their territory was defined by Whipple in 1849 (Exped. from San Diego to Colorado River, 31st Cong. 2nd Sess. Senate Ex. Doc. 19, p. 5, 1851). Whipple found them meeting the Diegeenose (= Diegueno = Kam´-me-i) at San Felipe, a deep mountain valley between Warner Valley and the desert, and in a narrow valley a few miles east of Vallecito, but their headquarters seemed to be along New River, which they call Hah-withl-high. Later Whipple mentioned them as "scattered from San Felipe across the desert to the mouth of Rio Gila" (Pacific R.R. Reports, III, Pt. 3, p. 125, footnote, 1856).

Of their numerous villages, the only one whose name I have seen is Quathl-met-ha, and referred to the Lower Colorado River region. The four other villages mentioned in the Handbook of North American Indians (under Comeya) are included by error, being Luiseno.

Synonymy

Co-mai´-yah, Comeya, Comeyas, Comeyei, Comoya, Co-mo-yah, Comoyah, Comoye, Comoyee, Comoyei, Como-yei, Comoyatz, Comogei, Camilya(?), Kamya (Kam´-Mya, Harrington, Yuma name), Kamia-akhwe (Kroeber, Mohave name), I´-um O´-otam (Zeitschr. f. Ethnol., Pima name), Yum (Heintzelman), Axua (probably Kokopa name), Quemaya, Quemeya, Quemexa, Quemeyab (Yuma name).

Prieto tells me that he was born on the Lower California (Mexican) side of the line, and was a member of the A-wah^{ch}-han´-yo, as they called themselves (called by the Kam´-me-i, A-whah´-ko-wahk´), but for many years has lived at the rancheria Es-na´-ah-kah-ton on Manzanita Reservation and speaks both languages, many words of which are closely similar if not identical. In some cases it is not certain whether the words he gave me are Kam´-me-i or A-whah´-ko-wahk´. The tribal name Kam´-me-i he pronounces exactly as do the Kam´-me-i themselves. The Spanish name Diegeno in common use for this tribe he invariably pronounces Ye´-ge´-no or Ye´-ga´-no.

The country of the Kam´-me-i extends easterly from the coast of Southern California over the Cuyamaca Mountains to, and out upon, the Colorado Desert as far as New River and Blue Lake. Blue Lake they call Hah-choo-pi´. Their permanent rancherias were in the mountains and foothills, not out on the desert proper. They visited the desert at certain seasons to cultivate corn, melons, and other crops, but no Indians ever lived permanently at either Mountain Spring or Coyote Wells, both of which are merely water holes used when traveling. Their easternmost villages appear to have been at Palm Spring (Hik-koo-o´), not to be confused with the Palm Springs of the Kaweah, and at Carriso Spring (Hah-pow´-o), both on the old road from San Felipe and Vallecito Spring (Hah-we´) to the Colorado River at Yuma. Thus on the east their territory adjoined and abutted upon that of the Yuma, whom they call Ku-chan´, without the presence of any intervening tribe. Hence the term Ko-moya, usually spelled Comoya, which as been applied to Indians of the Colorado Desert, appears to be the Yuma name for the Kam´-me-i.

Kam´-me-i rancherias in and adjacent to the Cuyamaca Mountains are:

An´-yah-hah, a few miles west of Cuyamaca.

Hash-ah-mahsk´, near Pine Valley.

Mat-nook´, at Masons, about four miles west of Vallecito.

Hah-we´, at Vallecito.

Hik-koo-o´, at Palm Spring between Vallecito and Carriso Spring.

Hah-pow´-o, at Carriso Spring (easternmost village and may not have been permanent).

Tatch´-e-kwish, at We-ah-pi´-pah (Cuyapipa) or Long Canyon.

Es-na´-ah-kah-ton, at Manzanita Reservation.

Mah-to´, at La Posta.

Kwin-yes-yuk´-kah, at Indian School about eight miles from Campo.

Nash-kah´-hah, about four miles from Campo.

Kwah´-he-ar-re, on the flat of Morena Valley.

Shu-wen´-yu-wah, at or near present Morena Dam.

A few of the many rancherias farther west are:

Wah-ti´, at or near Descanso.

Mes-kwan-an´.

Santa Isabel rancheria.

Sak-kwahn´, at or near Sequan.

Hah-pe-was, at or near Dulzura.

Tis-se-pah or Too^{ch}-e-pah.

Tis´-se-pah or Too^{ch}-e-pah

Immediately north of the Kam´-me-i in the mountains, which may be considered a northward continuation of the Cuyamaca, is a closely related tribe called by the Kam´-me-i, Too^{ch}-e-pah, and by themselves, Tis´-se-pah. Included in their territory were the rancherias of Julian, Volcan, Santa Ysabel, Mesa Grande, and the so-called Diegeno of Warner Valley. Their territory adjoined that of the Luiseno on the west, the Koo-pah on the north, the We-is´-tem (apparently a division of the Kaweah) on the northeast, and the Kam´-me-i on the south. Their southeastern boundary remains undetermined.

A-wah^{ch}´-han-yo or A-whah´-ko-wahk´

South of the boundary between California and Lower California is another tribe, speaking a related dialect. This tribe the Kam´-me-i call A-whah´-ko-wahk´, but their name for themselves is Wah^{ch}-han´-yo. The intertribal boundary between the Kam´-me-i and the Wah^{ch}-han´-yo coincides approximately with the international boundary, but a loop extends northward crossing the international boundary to include Jacumba Valley where the Wah^{ch}-hah´-yo entered the state of California and extended northeasterly as far as Mountain Spring, where there was no permanent village.

Ethnozoology

The jaguar is called the "big spotted lion" (hut´-te-kul^{ch}). It was a rare animal but was seen from time to time. [Cf. W. D. Strong, Indian Records of California Carnivores. Journ. of Mammalogy, 7:59-60, 1926. Ed.]

The golden eagle (e^{ch}-pah) and flicker (kuk´-ho) were sacred birds. The red shafts of the wing and tail feathers of the flicker were used for ceremonial headbands, and flicker feathers were attached to the base of arrows.

Poorwill, which they call tow-lowk´, is a bird to be looked out for. If it follows a person it is a bad omen.

Kingbird, which they call che^{ch}-en´, is to the Indian what the rooster is to the white man, as it wakes the people in the morning when it is time to get up.

Canyon wren, called hah´-moo-koop, is related to the mocking bird.

Ethnobotany

Yucca whipplei (ah-koo´^{chl}), the stem is good to eat when roasted green.

Y. mohavensis (shah´-ah´), the bark is used for soap.

Hosackia glabra (hi´-waht´), used for thatching houses.

Ramona polystachya (bil^{c}-ti´-e), used for seasoning roasted seeds of sunflower, grain, and so on.

Salix and Sambucus. Elder and willow bark were used by the women for skirts.

Information received from old Chief Bartolo Prieto of Manzanita Reservation, San Diego County, October, 1918.