THE NORTHFORK MONO

BY

E. W. GIFFORD

UNIVERSITY OF CALIFORNIA PUBLICATIONS IN AMERICAN ARCHAEOLOGY AND ETHNOLOGY

Volume 31, No. 2, pp. 15-65, plates 1-16, 3 figures in text, 1 map

UNIVERSITY OF CALIFORNIA PRESS

BERKELEY, CALIFORNIA

1932

ABBREVIATIONS USED

A	Anthropos.
l'A	L'Anthropologie.
AA	American Anthropologist.
AAA-M	American Anthropological Association, Memoirs.
ArA	Archiv für Anthropologie.
AES-P	American Ethnological Society, Publications.
AGW-M	Anthropologische Gesellschaft in Wien, Mitteilungen.
AJPA	American Journal of Physical Anthropology.
AMNH	American Museum of Natural History—
-AP	Anthropological Papers.
-B	Bulletin.
-M	Memoirs.
-MA	Memoirs, Anthropological Series.
-MJ	Memoirs, Jesup Expedition.
BAE	Bureau of American Ethnology—
-B	Bulletins.
-R	(Annual) Reports.
CNAE	Contributions to North American Ethnology.
CU-CA	Columbia University, Contributions to Anthropology.
FL	Folk-Lore.
FMNH	Field Museum of Natural History—
-M	Memoirs.
-PAS	Publications, Anthropological Series.
IAE	Internationales Archiv für Ethnographie.
ICA	International Congress of Americanists (Comptes Rendus, Proceedings).
IJAL	International Journal of American Linguistics.
JAFL	Journal of American Folk-Lore.
JRAI	Journal of the Royal Anthropological Institute.
MAIHF	Museum of the American Indian, Heye Foundation—
-C	Contributions.
-IN	Indian Notes.
-INM	Indian Notes and Monographs.
PM	Peabody Museum (of Harvard University)—
-M	Memoirs.
-P	Papers.
-R	Reports.
PMM-B	Public Museum (of the City) of Milwaukee, Bulletin.
SAP-J	Société des Américanistes de Paris, Journal.
SI	Smithsonian Institution—
-AR	Annual Reports.
-CK	Contributions to Knowledge.
-MC	Miscellaneous Collections.
UC-PAAE	University of California, Publications in American Archaeology and Ethnology.
UPM-AP	University of Pennsylvania (University) Museum, Anthropological Publications.
USNM	United States National Museum—
-R	Reports.
-P	Proceedings.
UW-PA	University of Washington, Publications in Anthropology.
ZE	Zeitschrift für Ethnologie.

THE NORTHFORK MONO

BY

E. W. GIFFORD

UNIVERSITY OF CALIFORNIA PUBLICATIONS IN AMERICAN ARCHAEOLOGY AND ETHNOLOGY
Volume 31, No. 2, pp. 15–65, plates 1–16, 3 figures in text, 1 map
Issued April 2, 1932

UNIVERSITY OF CALIFORNIA PRESS
BERKELEY, CALIFORNIA

CAMBRIDGE UNIVERSITY PRESS
LONDON, ENGLAND

CONTENTS

	PAGE
Introductory	15
Hamlets and camps	17
Travel	19
Structures	20
Food	21
Tobacco	23
Mortars and metates	24
Blades and points	24
Wooden bowls	25
Steatite	25
Basketry	26
Awls	27
Cordage and nets	28
Brushes	29
Dress	29
Games and toys	29
Dogs	30
Calendar and directions	31
Marriage and kinship taboos	31
Constitution of the family	32
Moieties	34
Totems, pets, and guardians	38
Bird cult ceremonies	39
Chiefs	41
Titles	43
Funerary observances	43
Dances	46
Personal names	46
Shamanism and dreams	49
Witchcraft and superstitions	52
Ghost and spirits	53
Postures, greetings, etc	54
Conclusion	55
Appendix A. Inhabited hamlets	57
Appendix B. Examples of moving	62
Bibliography	63
Explanation of plates	64

MAP

PAGE

Sixty-seven Northfork Mono hamlets 18

LIST OF PLATES

(Following page 65)

1. Views at hamlet sites
2. Huts, during construction and finished
3. Hut, shelter over bedrock mortars
4. Acorn granary and manzanita pulverizing
5. Preparing manzanita meal
6. Combing and rolling milkweed fiber
7. Twisting string, using carrying net
8. Cradles
9. Burden baskets
10. Winnowers and seed beater
11. Diagonally twined cooking baskets
12. Coiled baskets
13. String, fibers, brushes
14. Water bottle, dishes
15. Dishes, pipes, arrow straightener, awls, etc.
16. Basket making

FIGURES IN TEXT

1. Map of Northfork Mono and neighbors 15
2. Design elements on coiled baskets 27
3. Woman's chin tattoo design 29

THE NORTHFORK MONO

BY

E. W. GIFFORD

INTRODUCTORY

This paper concerns the Western Mono or Monachi of the vicinity of Northfork, a northern affluent of the San Joaquin river. They occupied the most northerly portion of Western Mono territory. North and west of them were the Southern Miwok; also west were the Chukchansi and related Yokuts groups; east, but separated by the high Sierra Nevada, were the "Eastern Mono" of Mono and Owens

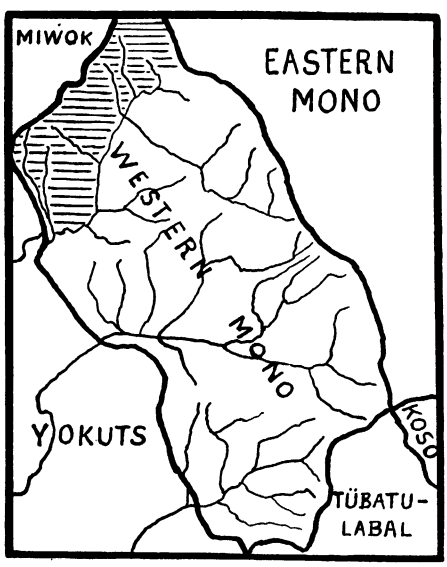


Fig. 1. Northfork Mono (shaded) and neighboring areas.

valleys; and to the south, other divisions of Western Mono,[1] those of the south drainage of the San Joaquin river, of the Kings, and of the Kaweah river drainages. All of these Western Mono groups were in their cultural outlook definitely of the San Joaquin Valley drainage rather than of the Great Basin. Their general mode of life was more like that of the foothill Yokuts and the Miwok than that of the Eastern Mono. The geographic environments of these various Sierra groups

[1] Merriam, 1930, 497; also Kroeber, Handbook, 585. The bibliography gives full titles.

were similar, as were their economic adjustments, which in the case of the latecomers, presumably the Western Mono, were probably a patterning after already established neighbors. Similarities in social organization and religion strengthen this view.[1a]

The Northfork Mono called themselves Nüm (person), but called their congeners the Eastern Mono Siwitüm. The Chukchansi Yokuts they called Woa, the Southern Miwok of Mariposa county Usomü.

One informant said his grandfather had told him the first Northfork Mono came from the Bishop region east of the Sierra Nevada. However, I could obtain no story of a migration from across the Sierra, whence the Western Mono may be inferred from their Shoshonean speech to have come. According to their myths,[2] also, the Western Mono of Northfork always lived where they are now. This is no doubt an acculturation to central Californian mythology.

Original data upon which statistics in this paper are based are on file in the University of California Department of Anthropology. These include rather detailed census, genealogical, and ethnogeographical materials, presented here only in abstract or in part.

Mr. Audie K. Wofford of the United States Forest Service kindly aided me in locating many of the hamlet and camp sites.

Plant identifications by Miss Alice Eastwood of the California Academy of Sciences are gratefully acknowledged; also Dr. E. C. Van Dyke's aid on an entomological point.

Certain Northfork Mono informants are pictured in my Californian Anthropometry.[3]

The orthography of Northfork Mono words is here presented as written in the field. No attempt has been made to rewrite words to conform to the spelling employed in Kroeber's Shoshonean Dialects of California. Some examples follow:

Gifford		*Kroeber*
gatü	sit	gati-wai
pahabich	bear	bahavits
tasineu	star	datsinup
nobi	house	nobi
nüwe	snow	nivapi
pakas	arrow	baga
isha	coyote	idza
kwina	eagle	kwina
muchip	flea	mutsipi
dowapi	hill	dodapi

[1a] Gayton, Yokuts-Mono Chiefs and Shamans.

[2] Gifford, 1923.

[3] Plates 46, 47 (upper).

Material culture and religion are somewhat slighted in this paper, as the prime purpose of field work was a study of social organization. The myths and kinship system have been published separately.[4]

HAMLETS AND CAMPS

Sixty-seven sites were inhabited in late pre-American and early American times. These are listed in appendix A, and located in the map accompanying it. Plate 1 shows views at certain sites.

Although the names of 500 individuals of various generations were recorded from informants, it is likely that the population at any one time did not exceed 300.

Living sites were at springs and small streams on the sunny slopes, and not in precipitous canyons such as that of the San Joaquin. Each spring was named and its name applied to the camp hard by. A hamlet or camp was called ana nobi nu', houses all together. Individual houses were not named. A distinctive feature of most sites was an outcrop of granite with bedrock mortars (pls. 1*a*, 3*b*).

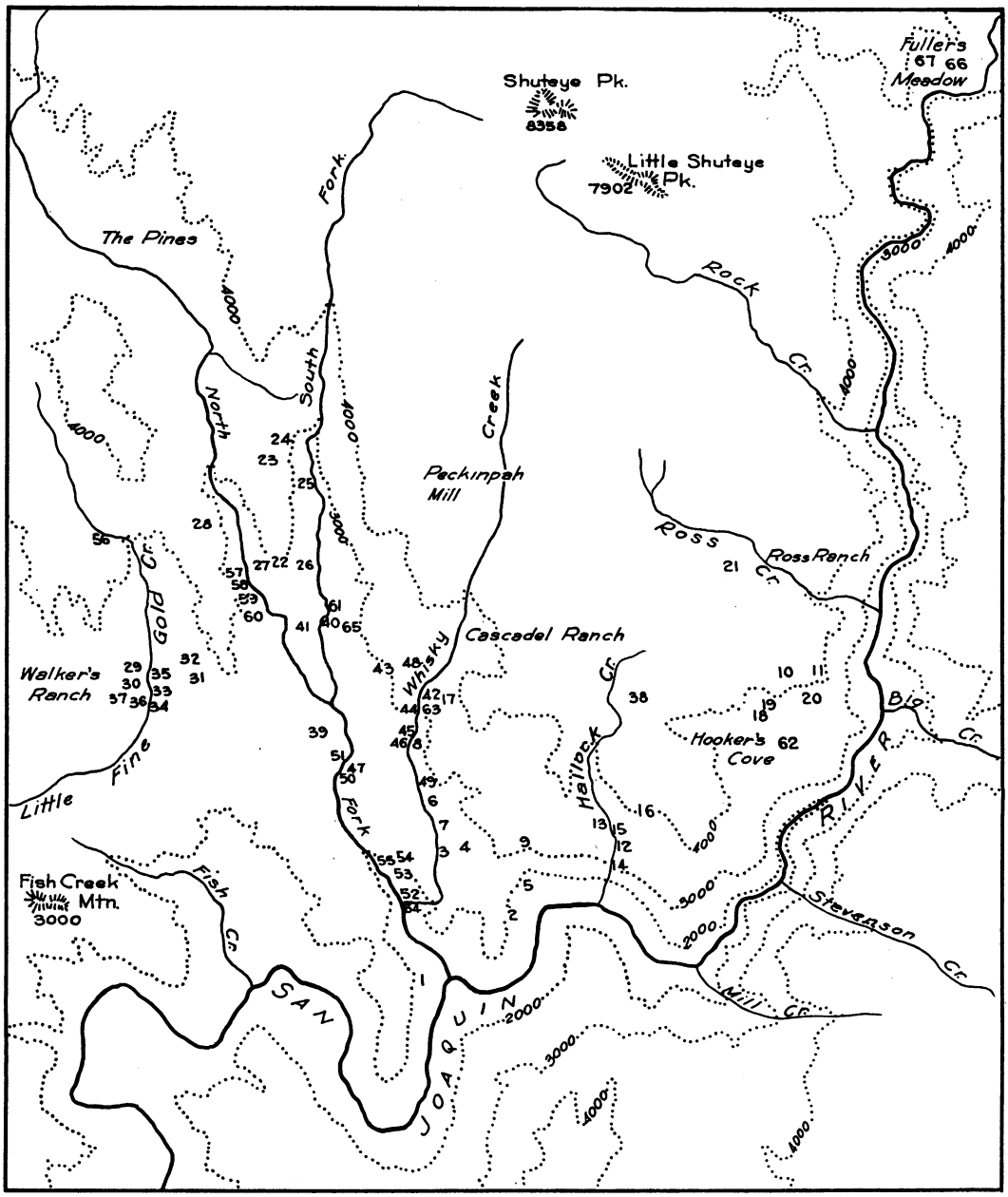
At the bottom of the deep San Joaquin canyon there were only camps for fishing. Moreover, the white oaks and post oaks growing there furnished inferior acorns; while black oak acorns were the Mono favorites. Thus there was no incentive to permanent settlement along the river.

Within the Northfork Mono area the population did considerable shifting. (1) Annually from lower winter to higher summer residences which had too much snow in winter, and vice versa. This gave variety in foods. (2) At irregular intervals following deaths. (3) Irregularly, merely for the sake of a change. The result of these moves was a considerable change of personnel in settlements. Such new associations of families were facilitated by the absence of ideas of private or family ownership of acorn places, fishing places, and other food gathering places. All Northfork Mono had equal rights to wild food products.

Tallying with the above facts was the absence of hamlet or camp chiefs. Chiefs (bohenabi) and assistant chiefs (nitdenabi) had purely ceremonial moiety functions.

Hamlets and camps were not limited to one moiety or moiety division, except by chance. In describing the personnel of each hamlet or camp the informants thought in terms of household families, usually naming each by its male head, the father or grandfather.

[4] Gifford, 1923; 1922, 51.



Map 1. Approximate location of sixty-seven Northfork Mono hamlets. Contour lines give elevations in feet.

The hamlets and camps ranged from 1 to 8 huts (average 3) and the number of inhabitants from 1 to 39 (average 13).

Each individual, in the course of a normal lifetime, lived in many hamlets and camps. (See Appendix B.) The Northfork Mono lacked definite large central villages such as the Pomo possessed.[5] Even the largest hamlet was ephemeral, and in a few seasons the households comprising it were living elsewhere, often in association with new neighbors. The units which moved about were families rather than individuals.

Related families sometimes lived together in a hamlet, though the fragmentariness of the recorded genealogies and the continual shifting do not allow the extent to be determined. Of 67 hamlets, the following give clear cases:

Saksakadiu: 3 households connected by 2 brothers and 1 sister
Napasiat: 2 households connected by 2 sisters
Takapiwe: 2 households connected by 2 sisters
Takapiwe: 2 households connected by 2 brothers
Wadakhanau: 2 households connected by 2 sisters
Sihüguwe: 2 households connected by 2 brothers
Po'nowe'e: 2 households connected by a man and his mother
Sigineu: 2 households connected by a man and his son
Saganiu: 2 households connected by a man and his son
Wegigoyo: 2 households connected by a man and his son.

TRAVEL

Some Northfork Mono crossed the Sierra Nevada into Eastern Mono territory to gather pinenuts, sometimes remaining a year or two. People from a number of villages traveled together in the trip to Owens valley, always in summer, on account of the deep winter snows. They carried acorns which the women pounded at the stopping places. The men hunted game for the meat supply.

Ôwü, probably Rock creek, was the stopping place for the first night.

Second night: Yauyau, a spring and creek.

Third night: Paorhoma, where a creek flows east.

Fourth night: Tünanihoma, on the upper San Joaquin, which here flows between two high mountains.

Fifth night: Ha'kôowê, a meadow with water.

Sixth night: Dakwanukwe, a level place west of Mammoth mountain, with a creek.

Seventh night: Anakwumakwê, a spring, apparently on the slope of Mammoth peak. This was the last ascent.

Eighth night: Ebiskonoowê, a creek near Eastern Mono country.

Ninth night: Saibatkiwe, in Eastern Mono country. The travelers remained here until the pinenuts ripened on the neighboring mountains. Pazikama, an Eastern Mono settlement, was north of Saibatkiwe.

[5] Kroeber, Handbook, 228.

STRUCTURES

Plates 2 and 3*a* show the type of hut occupied by the Northfork Mono. The poles, erected over a shallow excavation, were held in place with encircling grapevine withes (pl. 2*a*). The wall was of brush, cedar bark, and grass, with pieces of board added in American times. Around the base, earth was placed to make the walls firmer. The front-back outside diameter of the house in plate 3*a* was 17 feet; the inside cross diameter, 10. This was a small house. Eighteen inches behind the house, which was on a slight slope, a drainage ditch 2 or 3 inches deep and wide conducted off rain water. Inside, four horizontal encircling withes were tied to the 27 two-inch poles forming the cone of the house, with stout bark from the wasip or leather or ironwood tree (*Cercocarpus betulifolius*). The smokehole, 7 feet high, was formed by a heavy grapevine withe bent to a rough oval and lashed to the poles, which rose above it. The entrance projecting out from the walls was formed by 6 short 6-inch logs on each side, leaning back toward the house wall, with the roof of boards and shakes instead of cedar bark.

When a family moved, the hut was usually left standing, unless after a death, in which case it was burned. Sometimes the hut might be torn down and set up at the new location if this was near.

The huts of a camp often were arranged to form a fenceless camp circle (nigenobi), usually over 150 feet in diameter. Within, a central area about 50 feet in diameter with a surrounding ring of earth, and called ana siguraia inu, might be brushed clean and used for dances. Spectators sat outside it but within the camp circle. If a camp was under trees bordering a meadow, the dance place was in the meadow (e.g., Soyakanim).

Other structures were the bedrock mortar shade (pl. 3*b*), the sweat-house, the acorn granary (pl. 4*a*), and the earth-covered dog house.

The sweat-house (mus) was what the name implies and also a gathering place for old men.[5a] It was like the dwelling, but covered completely with earth. A fire was built within.

The acorn granary (ansonan) (pl. 4*a*) differed from that of the Miwok.[6] It was conical and on a rectangular platform four to six feet high. The cone, 4 to 6 feet high, was made of a stick mat (bakazip)

[5a] There were sweat-houses at Po'nowe• and Sipineu at least.

[6] Kroeber, Handbook, pl. 38.

covered with grass thatch. (The cone in pl. 4*a* is 51 inches high.) The platform was floored with brush and grass and built against an oak or pine.

The stick mat cone was bound by twined *Cercocarpus betulifolius* bark. When laid flat its bottom and top, although parallel, were respectively convex and concave. When set up the base of the cone was kept from spreading by a grapevine withe ring. One base ring measured 48 inches in diameter; one for a few inches above the base 45 inches. The grass thatch was in the form of a skirt, bundles of grass an inch in diameter being fastened side by side with bark twining near the top. Two "skirts" sufficed for one granary, the upper overlapping the lower (pl. 4*a*).

The acorn granary was sewed up the side as fast as it was filled. To remove acorns an opening was made in the side. Green acorns were put in this granary to dry.

FOOD

The usual plant and animal foods of Sierra Nevada tribes were eaten. Acorns were the staple vegetable food, venison the staple meat. Steel-head trout (*Salmo rivularis*), rainbow trout, and the Sacramento salmon (*Oncorhynchus tchawytscha*) were eaten with acorn mush. A large variety of seeds, bulbs and corms, and greens were eaten. Nuts of the digger pine (tuna'), the sugar pine, and the piñon were relished. The latter were obtained by expeditions to the east slope of the Sierra Nevada and also by trading acorns to the Eastern Mono. The ground cherry (wokoin) and wheat are two introduced plants now used.

When a hunter brought venison to his hamlet it was divided with all the inhabitants, not that they had an inherent right in his kill, but because it was the custom to be generous.

Strips of venison cooked on coals were eaten with cold congealed acorn mush. The latter, in a large cooking basket, was scooped out with the fingers by the family seated around the basket. The fingers were inserted in the mouth palms down, the lower incisors serving as scrapers to remove the mush as the fingers were withdrawn.

The following observations on acorn hulling may be of interest:

When I arrived at 7 a.m. Wiunu[7] was sitting on slightly sloping ground in the sunshine cracking white oak acorns. A gunny sack half full of acorns was in front of her on a low granite boulder. A small, twined, red and white

[7] UC-PAAE 22, pl. 46 (lower).

winnowing basket held perhaps a hundred acorns. Upon taking these from the sack, she threw them into the air a few inches several times with the winnower, deep side toward her. As she held the winnower with both hands, she blew the small sticks and pine needles off the shallow end of the winnower. The acorns were over 50 per cent wormy. She cracked them with a granite pebble about the size of a duck's egg on a small block of granite placed on a sack. She sat with knees drawn up and apart, part of the time resting her chin on her left knee. She picked up a handful of acorns with her left hand, holding them one at a time with her left thumb and index finger, half the time point down, half the time point up. She did not separate hull and meat unless it was readily done, nor did she throw out the wormy meats. She sat with her left knee between her arms, then later with both knees between, with right knee between, and with right knee up, left leg folded on ground. Once in a while she searched the discarded hulls for an acorn she had dropped. Large and small alike were cracked; nothing was wasted.

In cracking acorns a handful was frequently held in the left hand with three fingers, while the index finger and thumb were busy holding each acorn to be hammered. As fast as they were split and opened they were tossed into a winnowing basket. Sometimes instead of picking up a handful, the acorns were taken singly with the left hand; as cracked they were stored in the palm of the left hand until it was full.

The leaching basin for acorn meal was called bakap. One seen was on slightly sloping ground at a spring. It was made of black soil containing decomposed granite. The diameters of the basin rim were 5 feet and 4 feet. The height of the rim was 6 inches at the uphill edge, 10 inches at the downhill edge. At one side was a bundle of cedar leaves, through which the water was allowed to trickle in applying it to acorn meal placed in the basin. Leached meal was cooked in either twined or coiled baskets (pls. 11, 12).

In transferring cooking stones from the fire to the cooking basket two sticks tapering to points at both ends were used. (Specimens U.C.M.A. 1–19740 and 1–19741 were 28 and 29 inches long and about 1 inch in greatest diameter.) For stirring boiling food and removing stones from the cooking basket looped stirrers about a yard long were employed. They resembled the Yokuts example pictured by Kroeber.[8]

Manzanita berries were pulverized (pls. 4*b*, 5) and a cider made by allowing water to percolate through the mass. The manzanita bush was called opusuwaba, the berries aposo, pulverized berries ebina, pulverized berries after soaking for cider padomadisha, and the cider anabadun.

In gathering manzanita berries the ground beneath the bushes was cleaned with a flat stick (sigo) and a brush (dipohina amo) of straight twigs. The berries were beaten off the bushes with a long stick (dora aup), swept together with the brush, winnowed, and placed in burden

[8] Handbook, fig. 38.

baskets. Dorsey[9] pictures a Northfork woman harvesting manzanita berries at Hooker's cove, Madera county.

In pulverizing manzanita berries the fine meal was winnowed from the coarse, allowed to fall on the rock, swept into the mortar hole with the soaproot brush, and deftly removed with the fingers.

In making manzanita cider the meal was moistened thoroughly in a large deep coiled basket, then piled high in a small openwork winnowing basket (pl. 10*e*), which was set on two sticks over a watertight basket. The meal was carefully patted and shaped into a smooth, high, rounded cone. The water to percolate through the meal was poured slowly from a small basket into the hand and allowed to trickle from the little finger onto the pile of meal. The cider collected in the basket below was drunk fresh.

As with the Miwok and Yokuts, various seeds entered into the dietary. Xon, the seed of a species of *Madia,* was parched in a closely woven winnowing basket. Chats or chia seed (*Salvia columbariae*) was gathered with a seed beater and a seed burden basket, and parched before pulverizing in a bedrock mortar. It was eaten as a thick, cold soup, usually with pinches of dry meal of some other sort. Nowadays pinches of pulverized home grown wheat are eaten with chats. Other seeds mentioned were onu and kasi.

The chrysalids[9a] (piagi) of the pandora moth (*Coloradia pandora*), found about yellow pines, were eaten after parching with coals in a winnowing basket. In this condition they could be stored for long periods. The Eastern Mono are reported to eat the caterpillars, while the Klamath Lake Indians like the Western Mono eat the chrysalids.[9b]

Salt was obtained from a spring called Omabaya, about one mile downstream from the Big creek powerhouse on the south side of the San Joaquin river. The Northfork Mono crossed the river to obtain it, at low water on a foot bridge of live oak limbs tied together, at high water by means of a grapevine cable stretched across the river. It was said that a person hung on this with his hands and was aided by a rope fastened to his body and tugged on by people on the opposite shore, while his feet dangled in the water.

TOBACCO

Tobacco (pamu) was smoked in tubular pipes (tuish) of mountain mahogany (pl. 15*c, e*) or of clay. It was not determined if the clay pipes were fired before using.

[9] P. 215.

[9a] Patterson, 1.

[9b] Spier, 160.

MORTARS AND METATES

Both the mortar hole and the pestle were called ba'. The act of pounding with the pestle was porats. At Tasineu there was a U-shaped brush shelter built over one end of the huge granite outcrop with mortar holes. See plate 3*b*.

A mortar hole three inches or less in depth was employed for acorns. If deeper, the meal was likely to become "grease," that is, to pack solidly in the bottom. Deep mortar holes were used for various sorts of seeds.

I observed the pounding of wheat in a mortar hole six or seven inches deep. This was filled nearly to the brim with slightly parched wheat. At first the miller struck it gently with the 10-pound pestle, which, grasped with both hands, she raised only 2 or 3 inches above the wheat; then as the grain was gradually broken, she raised the pestle higher and higher, striking harder and harder. When it was half pulverized she raised the pestle up to her forehead, pointing it somewhat obliquely downward and outward. As she swung it downward it assumed the vertical position. The pestle used was a cobblestone, triangular in outline, much thicker one way than the other, and about a foot in length. The miller sat with her left foot under her right buttocks, her right foot folded at her side; at times she also sat crosslegged. Most heavy strokes were followed by a light one with a slight rotating motion to get the pulverized grain into place for the next heavy blow. For the light stroke, the pestle was raised only 2 or 3 inches. Sometimes a slight twisting of the pestle before lifting it out of the grain took the place of this stroke. The soaproot brush (pl. 13*c*) was used to brush scattered meal back into the mortar hole.

Portable mortars were regarded as made by the supernatural being Coyote pounding acorns in them. This story was connected with the pakwihu or vulture moiety.

The metate was called mat, the muller tasiwanu. They were used for seeds only. The motion was rotary with intermittent pounding or tapping. The metate was virtually a shallow dish of stone.[10]

BLADES AND POINTS

For cutting implements and arrowpoints the Northfork Mono employed obsidian, which was obtained from the high Sierra Nevada. Plate 15*i* shows the fragment of a long narrow blade.

[10] Cf. Kroeber, Handbook, pl. 66, middle figure.

WOODEN BOWLS

Bowls cut from oak boles were called wubiko° regardless of their shape. Plates 14*b*, 15*f* show two examples.

This artifact, rare among the Miwok, was perhaps related to the Yokuts wooden mortar.

In the Field Museum of Natural History are a score or more of oaken dishes from the Northfork Mono at Hooker's cove. These vary in size from cups to containers holding several quarts. One had been patched with "bitumen" (*fide* catalogue). An oaken tray and spoons are also included in the series.[11] Specimen 71530 is catalogued as a "wooden mortar or bowl," from Beso Flats, Madera county. If a mortar, it is of a new type for the Northfork Mono. The Field Museum collection contains also a few wooden bowls from the Western Mono of Fresno county, indicating that their manufacture probably occurred south of the San Joaquin river as well.

STEATITE

Two steatite quarries were worked for cooking stones and material for dishes. One, on Table mountain,[12] was called Momitsenauka. The second, called Tüpogiwe, was along a small creek near Fish Creek mountain, between the stage road and the San Joaquin river, to the right of the road to Auberry. [It is probably on property owned by Mr. Kennedy.] Surface pieces were used, also pieces split off of outcrops by striking with another stone.

A lump selected for a dish was smoothed with a stone, the outline of the rim of the vessel marked with charcoal, and hollowed by pecking with a piece of flint (?) or white quartz (didusiaup). After a dish was made it was cooked overnight in a fire to harden it.

Steatite was called bakoya, the dishes (pls. 14*c*, 15*b*) made therefrom, witu. Steatite (talc) was used in making acorn calyx dice.

Pottery, made by the more southerly Mono, was not in evidence among those of Northfork. Probably steatite served the purpose. However, the Field Museum of Natural History possesses a "clay pot[13] for red paint grinding and mixing," collected by Dr. J. W. Hudson from Northfork Mono at Hooker's cove, Madera county, in 1901. It may have been made south of the San Joaquin river.

[11] Catalogue numbers of series: 71383–71403, 71429–71431, 71530. I am indebted to Dr. Berthold Laufer for a copy of the catalogue entries.

[12] According to Kroeber (in a letter), the Chukchansi Yokuts also got steatite at Table mountain.

[13] Catalogue number 71459.

BASKETRY

Western Mono basketry suggests Yokuts basketry in that it excels Miwok basketry in fineness of weave. Miwok basketry appears somewhat slovenly in comparison. According to the Northfork Mono, Eagle gave each group its types of baskets.

Western Mono basketry, judged by the specimens in the University of California Museum of Anthropology, is distinctive in two respects:

1. Single rod coiling, characteristic of the Miwok, is absent.

2. Diagonally twined cooking baskets, rare among Miwok and Yokuts, are common. Diagonal twining is abundant in the Great Basin.[14]

Twining was employed in the manufacture of some cooking baskets, winnowers, parchers, fish scoops, seed beaters, burden baskets, and cradles.

Diagonally twined cooking baskets (po'nowe'e) were started with three weft elements and continued with two. Willow was used frequently for both warp and weft—whole stems for the warp, split stems for the weft. Sometimes both warp and weft were of redbud. The pattern was invariably in redbud. Plate 11 shows examples.

Winnowing baskets (pls. 5, 10) were made with green materials, drawn together to the proper concavity, tied and dried. For closely woven winnowers (düw) sourberry (wananop) stems were used. For openwork winnowers (baso') chaparral (humunavu) and redbud were employed, the warp elements being used singly. In a winnower of intermediate texture, two chaparral stems were used side by side for the warp element. In several of the winnowers pictured, Miss Merrill has identified the materials as redbud.[15]

The burden basket for acorns and manzanita berries was called wonu (pl. 9*a*), that for seeds kübiwonu (pl. 9*b*). The latter was tightly woven and larger than the former.

Basket water bottles (osa), waterproofed with pitch, were obtained from the Eastern Mono. They were plugged at the orifice with a milkweed fiber stopper. The bottles with pointed bottom (pl. 14*a*) were the best for transport, as they fitted the back comfortably, remained erect, and did not roll around.

[14] Lowie, fig. 13*b*; Barrett, pl. 7, fig. 2.

[15] Merrill, MS.

Northfork Mono cradles (pl. 8) were ornamented to indicate the sex of the child, as among Great Basin tribes.[16]

Coiled baskets were made principally for cooking baskets, cups, and containers for small articles.

Epicampes rigens grass (monop) was used as the multiple-rod foundation for many coiled baskets. Sometimes three willow rods were employed for foundation (plate 12*a*). For sewing material the split root of a plant (tüdiyap) "almost like grass" was used.

The coiled basket for acorn mush cooking was called po'no. It was made watertight by coating the interior with acorn mush. Coiled flaring baskets were called a'po, converging topped baskets poya.

The following are some of the design elements used on coiled baskets:

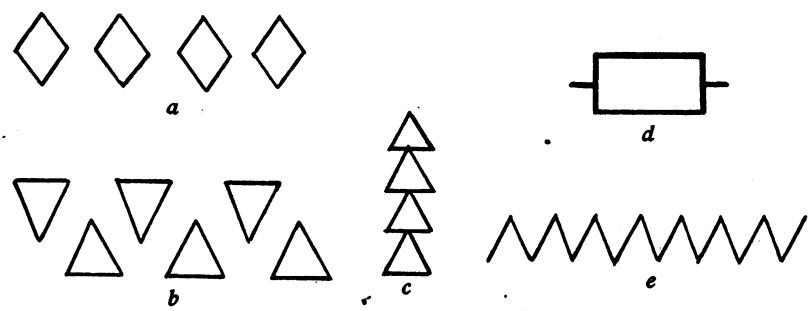


Fig. 2. Some designs used on coiled baskets. *a*, takanawi; *b*, anatoka kwadun ("snake-like"); *c*, anabi katakün ("piled on top one another"); *d*, anaga'a wedutun; *e*, anadini tügin.

A coiled, circular, basket plaque of *Epicampes* foundation in the University's collection (1–19724), obtained at Northfork, is very likely of Miwok origin rather than Northfork Mono. Apparently, the Northfork people did not make this type of tray, twined winnowers serving the purpose. Another, used as a dice plaque, is mentioned under Games and Toys.

For basketry designs the bark of the redbud (takaka aup) was used, as was also brake fern root (nümoin).

AWLS

The deerbone awl (witüp, plur. witivi) was ground to a point on a stone with water; also scraped with a knife. Its chief use was in the manufacture of coiled baskets. Examples are shown in plate 15*g, h, k, l, m.*

[16] Lowie, 254.

CORDAGE AND NETS

Milkweed fiber for string (wishi) was gathered by both men and women. Very fine string (kübitutsi wishi) was made by women, coarse string or rope (babap wishi) by men and women. All was apparently 2-ply. See plate 13*a, e, f*. Some rope was braided. To twist 2-ply cordage was called dituna', to braid rope anavabono.

Milkweed fibers were prepared for spinning by first rolling the dry stem of the plant back and forth on the right thigh, while holding one end with the left hand. After this preliminary softening it was wound around the left hand and combed with a short stick, being passed between the right thumb and the stick (see pl. 6*a*). Then the fibers were rolled between the fingers to loosen particles of skin still adhering (pl. 6*b*).

Plate 7*a* shows the spinning of the milkweed fiber 2-ply string. A single mass was separated into two lots. Each was twisted by rolling simultaneously down the right leg with the right hand. The twisted portion was then held with the left hand, and the twisting continued. The two strands thus made separately were then twisted together by rolling them up the leg.

Carrying net (wa'lak) was made by men. When loaded the edges of the net were laced together. It was carried suspended on the back (pl. 7*b*) or the chest.

Woven pack straps (pavu) of milkweed string, or of braided inner bark (sätip) of *Cercocarpus betulifolius,* were attached to both burden baskets and carrying nets. When the bark was used it was not shredded before braiding.

For carrying wood a special braided pack strap (1–21675) called holopap was used. This was made of *Cercocarpus betulifolius* bark.

Dr. Lila M. O'Neale kindly examined for me the tump line attached to a milkweed-fiber carrying net (1–21674). Her description of its weave follows:

> Warps of 2-ply strands. Weft of 2-ply strands, slightly smaller than warps. One end of the band is a loop through which the end of the net was apparently held during the making. Start made in middle of 4 warp lengths. Each pair of ply (1 warp) turned about each other 3 times, then separated to allow passage of weft element. Distance between crossings ⅝ inch to ¾ inch. Upon completion of 6½ inches the band is folded to allow the 4 active warps to interdigitate with the 4 passive warps. From now on the weft passes across the 8 warps for 4 inches. Then one is knotted and discontinued. The remainder of the tump line is 7 warps wide with 3 or 4 twines between weft passings. Tump line 66 inches long with net attached.

BRUSHES

Soaproot (solsivu) fibers were used to make brushes (wenasu, wonadzu) for mealing and hair brushing. See plate 13*b, c, d.*

A brush of straight twigs was used to sweep up fallen manzanita berries.

DRESS

Two-piece dresses of buckskin were worn by women. No basket caps were worn. The tattooed chins of women gave no indication of moiety. On the chin of one old woman was noted the meaningless design shown in figure 3.

Fig. 3. Woman's chin tattoo pattern.

GAMES AND TOYS

Cat's cradle was unknown. The only string game was one of throwing a long string with a stick. Possibly this is related to the bean shooter, a wooden splint 10 inches long, used as a toy for flipping mud balls and stones, pictured by Culin[17] and reported from Hooker's cove.

A bone whirligig or buzz, made of a metatarsal bone of a deer, with string attachment with loops at each end, is pictured by Culin. It is from Hooker's cove.[18]

Six acorn calyx dice and a basket dice plaque (apparently in coiled technique) are illustrated by Culin.[19] They are from Hooker's cove. I have earlier expressed doubt whether such coiled plaques are of Northfork Mono manufacture. Culin describes the dice as "made of acorn calyxes, filled with talc."

Four lances and a peg are pictured by Culin[20] for the lance-and-peg game as played by the Northfork Mono at Hooker's cove.

[17] P. 760.
[18] P. 756.
[19] P. 166.
[20] P. 498.

The hand game with marked and unmarked bones was called taiakwit. Two songs for this game were recorded on U.C.M.A. phonograph cylinder 2166.

Culin[21] pictures 4 sticks (2 marked) from Hooker's cove, used in the grass game called hana.

A game played on a board with pegs inserted at intersections of lines was an American introduction obtained by Dr. Hudson at Hooker's cove.[22]

Culin[23] pictures two buckskin-covered balls from Hooker's cove, used for a ball race. They were sometimes kicked as far as 15 miles.

A shinny game, called onowidi, was one in which a ball (sonoi'i) of mountain mahogany (pl. 15*j*) was struck with a stick. Culin[24] uses the name onowi for a stuffed buckskin ball, used in two types of football game at Hooker's cove. However, he describes[25] the Northfork Mono shinny game as employing a ball as in plate 15*j*. Quoting Dr. Hudson, he tells of a game played between the Mono of Hooker's cove and Whiskey creek, in which the game started at the former place and ended at the latter, a distance of 7.5 miles.

Hot ball is also described as a Northfork Mono game by Culin[26] on the authority of Dr. J. W. Hudson, who states that the game was probably played by the Chukchansi also.

Foot races were run. The hamlet Noboihawe was named for the presence of a race track there.

DOGS

Western Mono dogs were gray, had small prick ears, and were both short- and long-haired. They were housed in small earth-covered huts.

Dogs were given names referring to the divisions and totems (see beyond) of their owners. Thus, a dog with a puzaots owner might be called hohoyamus. Dakats and kunugechi owners named their dogs after the birds uhuina (roadrunner) and wiwison ("eagle"). Another dog name of unknown association was tulowi (wildcat).

---

[21] P. 310.
[22] Culin, 796; fig. 1096.
[23] P. 679.
[24] P. 704.
[25] P. 635.
[26] P. 714.

CALENDAR AND DIRECTIONS

The Northfork Mono employed twelve month names. The year began with the month of the winter solstice. It was not determined, however, that the solstice actually began the year.

1. Tübichüwü, "big month" when the sun turns to come back. December. Cf. Wind River Shoshoni tü've mö'ə, when ice begins to appear (Lowie, 311).

2. Kowawü, when the sun shines on the "long side" of the hill. January.

3. Posiakwa, when the sun shines, yet it snows and rains. February. Cf. Wind River Shoshoni Pō'sitc, ice thawing, but snowing (Lowie, 311).

4. Ishaduwa, when the coyote has pups. March. Cf. Wind River Shoshoni i'carū'ə mö'ə, wolves having pups (Lowie, 311).

9. Wayawü, when the seven stars (Pleiades, probably) come into sight in the east. August.

11. Shiunimü, leaves falling. October.

12. Nawü, bucks getting strong, rutting time. November.

The five remaining month names could not be certainly allocated, but fall between months 4 and 9 and (or) months 9 and 11.

Müzawü. Cf. Wind River Shoshoni mö'dzaru'ə, mountain sheep having young (Lowie, 311) which follows i'carū'ə. Perhaps therefore Müzawü is the fifth month of the Northfork Mono calendar.

Pedisiwü, when "onions" become green.

Pesiwü.

Wiamü, when acorns ripen.

Tübawü, when piñon nuts ripen.

The directional terms were north kwiwi, south pita, east sibi, west tübü (pami), zenith tugupa, nadir taduwe.

MARRIAGE AND KINSHIP TABOOS

If a woman had been around a good deal by herself (not necessarily had sexual intercourse), nothing was paid for her at marriage. If she had always remained at home with her parents, she was paid for.

A wife was bought from her father, or, if he was dead, from her mother.[27] In case of marrying a dead wife's sister a second payment was required; the same in case the first wife ran away. The wife's brother's daughter was eligible for such a second marriage.

Polygyny was practiced, though its exact extent is not revealed by my data, which do not always discriminate between polygyny and second or subsequent marriage. There was no polygynous marriage to a woman and her daughter.

[27] The informant Wiunu's parents being dead, her husband paid her maternal half-sister a string of beads for her. These were red, blue, and white, and were obtained through the Kings River people.

The levirate and sororate occurred. One example of the former and eleven of the latter were recorded. The sororate occurred in two forms: (*a*) following the death of the wife; (*b*) in polygynous marriages.

An approach to the levirate is one case in which a man married his paternal half brother's wife after her divorce.

Cross-cousin marriage was not practiced formerly. A single modern example was recorded: a man married his mother's brother's daughter. Tradition avers that long ago this was occasionally done when the girl's cousin was rich; her father would give her to her cousin so as to get property. Sometimes, the father's sister's daughter was married.

The parent-in-law taboo applied as to approach and speech. Plural address was employed by a man and his mother-in-law, when address was absolutely necessary. He must not go near her, however. As the years passed, the speech taboo became less strict. For a woman and her father-in-law the restrictions were not so stringent. A woman might call her son-in-law or her father-in-law to meals, but little more. There was no taboo between a man and his mother's brother's wife, as there was among the Miwok who practiced cross-cousin marriage.

The presence of brother-sister taboo was both affirmed and denied to me.

A man might joke with his sister-in-law and call her "wife."

CONSTITUTION OF THE FAMILY

The data I obtained on the family often present the same family at different localities and with very slight variation in its personnel. Perhaps a son has been born or has married, or the father has died, or the mother's sister has come to live with the family. In consequence of these difficulties, the following remarks are based on partially selected data. There were virtually no unmarried adult males in Northfork Mono society. Therefore, the following tabulation is from the standpoint of the man of the family. Each family occupied a single hut and was in general analogous to our modern American family, even in the frequency of the presence of the man's mother-in-law. A woman with 2 or more married daughters might live for a while with one, then with another. "Most men lived with their wives' folks all the time. That was the rule." Such was the native formulation in regard to postnuptial residence.

Households examined	78
Families examined	81
Families with man at head	81
Cases in which	
Two men married to two sisters lived in house	3
Man was widowed	1
Man had two wives	6
Dual wives were sisters	5
Man's mother lived in house	4
Man's mother-in-law lived in house	27
Man's father lived in house	0
Man's father-in-law lived in house	2
Man's daughter-in-law[28] lived in house	1
Man's son-in-law lived in house[29]	12
Man's stepson lived in house	3
Man's stepdaughter lived in house	4
Man's wife's unmarried sister lived in house	9
Man's wife's brother lived in house	2
Man's sister lived in house	2
Man's daughter's children lived in house (in each case the son-in-law also)	6
Man's wife's sister's children lived in house	1
Man's granddaughter's husband lived in house	1
Man's mother-in-law's sister lived in house	1

In spite of the patrilineal transmission of moiety division membership and of the titles of bohenap and nitdenap, the Northfork Mono family was strongly maternal, for in addition to husband, wife, and children the wife's relatives rather than the husband's often formed the balance of the household. The mother of a girl frequently dwelt with the girl after her marriage—27 cases in 78 households. Furthermore, there are 12 cases of the son-in-law dwelling in a man's house, but only one case of a daughter-in-law and at that a stepson's wife. In 9 households the man's wife's unmarried sister dwelt, in 2 the man's wife's brother, in 2 the man's father-in-law, but in none the man's father.

[28] A stepson's wife.

[29] In the case of Hanaanasa and his wife Sihayuni, they lived first with Sihayuni's mother and stepfather at Apasoraropa. When children came they went to live with Hanaanasa's parents at Soyakanim. There they soon built a house of their own.

MOIETIES

The Northfork Mono were divided into moieties: pakwihu or turkey vulture and yayanchi or golden eagle. The first comprised the divisions puzaots (puzaochi) and tübahinagatu, the second the divisions dakats (dakachi) and kunugechi. Descent was patrilineal.[30] The latter moiety was equated to the nutuwuts moiety of the Yokuts.[31] One informant declared the moiety name yayanchi to be a Yokuts word.

Three instances were recorded of women joining their husbands' moieties. One woman was a Mono from south of the San Joaquin river, one was a Chukchansi, and one had a Chukchansi father and a Mono mother.

To inquire one's moiety the question was asked: "Hi pue puk?" (What is your pet?)[32] The person might reply: "Wihu" (turkey vulture) or "Kwina" (eagle), meaning respectively pakwihu moiety or yayanchi moiety.

Suggested etymologies of moiety and division names were as follows:

yayanchi (yayu, a hawk; chi, belonging to)
dakachi (takapi, obsidian, or dakap, fragment; chi, belonging to)
kunugechi (kunugiba, elderberry; chi, belonging to)
pakwihu (pakwi, a trout; hu, creek)
puzaochi (puzo, spring of water; chi, belonging to; also "spring eagle," i.e., "water eagle"). Cf. pa'ndzõaBite, a Wind River Shoshoni water ogre (Lowie, 261).
tübahinagatü, sitting in the middle (tübahina, middle; gatüdu, sitting). Long ago the yayanchi moiety took certain people from the puzaots division of the pakwihu moiety. Their descendants are referred to as "in the middle," i.e., "between the moieties."

For the yayanchi moiety 270 individuals were recorded, 129 in the kunugechi division, 141 in the dakats division. For the pakwihu moiety 221 individuals were recorded, 156 in the puzaots division, 65 in the tübahinagatü division.

The Northfork Mono state that their moieties and moiety divisions do not regulate marriage and that as long as a man and woman are unrelated they may marry. Marriage statistics bear out these statements.

---

[30] In instances in which women married foreigners other than Chukchansi (who have moieties) the offspring were reckoned in the mother's moiety and moiety division.

[31] Gifford, 1916, 293. One Northfork Mono informant said she would not apply the term nutuwuts to herself, but to her dog.

[32] Puk means literally "dog."

One hundred and ninety-nine marriages were recorded: 103 between members of the same moiety, 87 between members of opposite moieties, and 9 with Indians of other tribes.

Endogamous Marriages

Pakwihu Moiety

Puzaots-Puzaots	27
Tübahinagatü-Tübahinagatü	6
Puzaots-Tübahinagatü	21
Total	54

Yayanchi Moiety

Dakats-Dakats	16
Kunugechi-Kunugechi	10
Dakats-Kunugechi	23
Total	49
Grand total of endogamous marriages	103
Endogamous marriages within divisions	59

Exogamous Marriages

Pakwihu moiety	*Yayanchi moiety*	*Marriages*
Puzaots	Dakats	23
Puzaots	Kunugechi	37
Tübahinagatü	Dakats	7
Tübahinagatü	Kunugechi	20
Grand total of exogamous marriages		87

Of the 9 marriages to foreigners 2 were to Eastern Mono, 4 to Western Mono south of the San Joaquin river, and 3 to Chukchansi.

Each moiety had its own chief (bohenap, plur. bohenabi). Assistant chiefs (nitdenabi, sing. nitdenap) were always of the yayanchi moiety. Therefore when the pakwihu chief needed the services of one he had to hire him for the occasion.

The moieties seem to have been equal and there was no inherent superiority of one moiety chief over the other, except in so far as the eagle chief had slightly greater prestige because of his linkage with the chief deity Eagle. In 1918 the vulture chief by force of personality was the real leader of the tribe. The dakats division had no line of chiefs (bohenabi), whereas the other 3 divisions had. Neither moieties nor divisions were localized.

The moieties functioned in feasts, ceremonies, and games, there being reciprocity and rivalry. There were no painted designs for the moieties or their divisions.

At a ceremony or feast the members of each moiety prepared the food for the opposite moiety. The moieties ate separately. Rarely a woman might eat with her husband's moiety, if she belonged to the opposite moiety. Children ate with their father. After the feast the nitdenap returned the children to their mother, if they had been separated from her.

One moiety prepared and burned the dead of the other moiety and was paid for doing it by the bereaved moiety.

At a mourning ceremony two years after a death one moiety sang for and washed the mourners of the other moiety, fed them, and paid them (nowadays about 25 cents each). After the ceremony the mourning moiety reciprocated with payment and a feast for the moiety which had attended to these details.

In olden times the four divisions (tünübiket) are reputed to have acted separately. In funerary matters the reciprocity was between divisions rather than moieties; thus, kunugechi and puzaots formed one pair of reciprocal groups, while tübahinagatu and dakats formed a second pair. From the standpoint of this reciprocity each reciprocating pair formed a moiety which bisected the moieties pakwihu and yayanchi. The people of each division did not touch their own dead. Each division had its peculiar funeral songs.

The origin of the four divisions was attributed to Golden Eagle (kwina), the creator, who was regarded as the chief's "pet" or totem, particularly the kunugechi chief's. The golden eagle was called the "chief of birds."

It seems possible to me that the four divisions may represent four original bands that settled in the Northfork region. In contact with the moiety-organized Miwok and Yokuts, these bands grouped in pairs for ceremonial purposes, although presumably marriage customs remained unaffected. The localization of the former bands in their Great Basin (?) habitat was lost in the restricted Northfork region. Further study may show that each of the Western Mono groups[33] south of the San Joaquin constituted a group similar to one of the four Northfork divisions.

The totemic animals connected with the moieties did not represent divisions. A person might consider all totems of his moiety as his. The golden eagle was regarded as the creator as well as the chief of birds, hence was equally reverenced by both moieties, though a totem of only the yayanchi moiety.

[33] Merriam, 1930, 497.

Yayanchi Moiety

kwina, golden eagle
puna', red-tailed hawk
uhuina, roadrunner
kaka, crow
hohuyumus, California gull
olid, a bird
ohimus, an animal

Pakwihu Moiety

wihu, turkey vulture
yayu, a hawk
isha, coyote
pasia, bald eagle
wihesit, mountain lion
tunow, wildcat
wokaya, "chicken hawk"
ozaots, magpie

Hummingbird, though not a totem, belonged with the golden eagle, because in mythical times he talked to the people for eagle. The mourning dove, not a totem, belonged with the golden eagle. The nuthatch (kabikabina, an onomatopoetic name) and a brown-tailed, long-billed wren (padasigni) were not totems.

If a man wished to kill one of his moiety totems for the sake of its feathers, he addressed it as follows: "I do not kill you just from badness. I kill you because I need your feathers for dance ornaments. You will not die; you will be alive, because I shall take care of your feathers."

A person did not object to others killing his totemic bird, but he would be angry, of course, if one which he had in captivity were killed. A person would not wantonly kill a totem of his moiety. When an eagle was killed by people of the vulture moiety, the feathers were brought to the "eagle chief," the owner of the eagles, and head of the eagle moiety. He paid for them.

Each moiety had shamans who could call the totemic animals. If a shaman tried and failed, he sickened and died. His failure was attributed to rival shamans who called his "pets" away. His rivals would be of the opposite moiety.

Sometimes a vulture moiety shaman might try to bewitch an eagle moiety person. If the wizard did not confess and promise to save the person, the eagle chief went after the wizard and killed him. On certain occasions, if a vulture wizard wanted to kill someone on the eagle side, he might pay the eagle chief for the privilege. In such a case, the wizard would be immune from punishment.

TOTEMS, PETS, AND GUARDIANS

Besides totems, tame or captive birds were regarded as pets (puk). Captive pets were sometimes sold. Often these were from among the totems of one's moiety. Thus Chipo[34] of the yayanchi moiety had two pet birds. One was a crow which followed him up from the foothills and remained near his home for some time. The other, a roadrunner, inherited from his mother's brother, lived near his house and hunted grasshoppers. A jealous man of the puzaots division broke its leg with a stone.

Such tame birds, either at liberty or confined, were regarded as having something of the supernatural about them. The belief, therefore, that there was an intimate connection between each individual and some species of animal is not surprising. Such an animal was called one's "life," (tuk), and appears to have been more of a guardian spirit than a totem, although it might be also a moiety totem. A person, however, might not be aware of what creature was his "life" until a shaman informed him, even though the creature had been his "life" since his birth. Moreover, a person might have more than one "life." An evilly disposed shaman could cause a person's illness and death by taking away the victim's "life."* Some examples of the "life" follow:

Hanaanasa brought down two young hawks (yayu), tied in a cradle, from the mountain behind Soyakanim. After bringing them in he untied them. Seated there was Etak, a chief (bohenap). He told Etak to hold the hawks on his arms. Then the people threw seeds (onu, chats, kasi) over them. Around Etak's neck they put blue beads. For four days the women and men danced around them and cried.

A week later one Yudjiba became ill. They sent for an Auberry shaman, who told him that the yayu was his "life" and that he had once killed a young yayu back in the mountains. Yudjiba admitted this, but said that at the time he did not know it was his "life." Yudjiba shot the yayu, when it flew around him, glad to see him. The shaman said, "You should have thrown it some seed instead of killing it. That was your 'life'." Yudjiba died shortly.

Hanaanasa made a platform in an oak tree for the two yayu. Then he caught snakes, lizards, and squirrels, and held them on a stick. The yayu swooped down, took them, and went back to the platform. Joe Kinsman, returning from the west and not knowing what was going on, shot one of the yayu. They painted the dead bird, put beads on it, wrapped it in a Navaho blanket from across the mountains, and buried it after two days. The mate disappeared. There was great mourning for a year.

Sem's "life" was the deer. He was born that way and so never killed that animal. When his father killed one Sem got sick and turned black around the

[34] Shinn, 1912; also Gifford, 1926*b*, pl. 46.

nose like a deer. If his father had killed many it would have been the end of things for Sem. Sem's brother could kill deer for they were not his "life." Sem ate only two or three mouthfuls of venison at a meal. If he ate more he got sick.

On one occasion Sem came across two balls of snakes. He threw stones at them. They untangled and went under some rocks. Shortly he became very ill and had to be helped home. Singing Jack was consulted and said that snakes were Sem's "life" and that he should have picked up the balls and they would have turned to hair rope.

The mountain lion was Tugayau's "life." He was strong, could lift anything, and fight a bear, too.

It is obvious that the ordinary person's guardian or "life" did not confer shamanistic power. The shamans' guardian spirits or familiars were evidently more powerful than the ordinary person's guardian spirit.

BIRD CULT CEREMONIES

The Western Mono treatment of captive eagles and vultures suggests the Yokuts treatment, also the Miwok treatment of the prairie falcon.[35] Thus, tribes of three linguistic stocks, Miwok, Yokuts, and Shoshonean, shared a bird cult, connected with social organization on the one hand and with mythology on the other hand. With the Northfork Mono the bird cult had a personal tinge, because of the belief that birds often constituted one's "life."

There was no coyote ceremony, but there were vulture and eagle ceremonies. The eagle ceremony was called kwina pukuget. When a man of either moiety caught a golden eagle he might exhibit it and the people paid him, a procedure similar to the Chukchansi redemption of a totem. Whoever caught it owned and raised it.

Usually three or four men of the eagle moiety, one a nitdenap, went after the eagle. He who took it from the nest told the mother eagle that he was going to treat it well. If there were two eaglets, both might be taken. When the eaglet was brought home, a seed offering (tarweed, sage) was scattered over it, food presented to it by the vulture people, and a dance held. The food was later divided among the eagle moiety members. A nest and a cage were made for it on a stump or log. When it got larger it walked around its cage with wings slightly elevated, an act interpreted as "dancing." Venison and squirrels were fed it. When adult in about two years, it served as the motive for a dance ceremony.

Messengers notified various hamlets, on behalf of the eagle moiety chief, that the eagle people were going to dance for the young eagle. When the people danced they formed a long single file outdoors. The eagle was held between the hands of the second man. The leader tooted a large bone whistle, in time to the slow movements of the dancers (men and women). The man

[35] Gifford, 1926*a*, 397.

with the eagle, and those behind him in imitation, moved their hands first downward to the left, then to the right, then skyward. With each movement an exclamation was uttered. The eagle carrier exclaimed, "We!" with a rattle in his throat, with each movement of his hands to left and to right; when pointing upward he exclaimed, "Mwau!" The leader tooted his whistle in time to this, while the dancers behind the eagle-carrier exclaimed, "Hu! hu!" in unison. The dancers had eagle feathers on their arms and a band of them across their foreheads and down their backs.

This dance, held both morning and afternoon, was a sort of serpentine. The chief might carry the eagle, or he might have a nitdenap carry it. The spectators all put money in a pile said to be the property of the eagle, which was divided by the chief among the dancers. If a chief (say of the Chukchansi) wanted the bird, he paid three dollars to the nitdenap who had led the party to capture the bird. After the dance the eagle people retired to a distance and watched the other people pass by the eagle and the nitdenap. The eagle stood on top of a rock and the nitdenap alongside. The people passed twice in front of it, each time making a payment. The Chukchansi purchaser did the same, stopping to talk to the nitdenap each time. Further payments were made when the eagle was taken to the Chukchansi village.

If not bought by the Chukchansi, the eagle was usually taken to another Western Mono tribe in Fresno county (at Cold Spring or at Burrell). The Northfork people went to see the ceremony there. Afterwards the eagle was sent southward to still another group.

In transporting the eagle from place to place it was carried in a basket cradle on the back. The eagle was never killed in a ceremony.[36] People never kept it very long; it was sold from place to place.

When there was an eagle to dispose of, the nitdenap went to the south of the San Joaquin river if he heard of a proposed fiesta there. He told the southern people that so and so was bringing them an eagle at the fiesta. They prepared for its reception. As many people as liked accompanied the eagle from the Northfork region. The people who received the eagle at Auberry or elsewhere paid seed and money to the owner, the Mono at other Fresno county points also contributing. The Northfork people did not buy eagles as did these people to the south. They caught their own.

Sometimes the people from Northfork took an eagle to the Chukchansi at Coarse Gold or Fresno Flats, to whom they sold the bird for three dollars. Many people of the eagle (yayanchi) moiety acted as escort.[37]

Eagle feathers were plucked from captive eagles. An eagle totemite, however, explained that he would not do this, because it was like killing himself. Feathers were also obtained from dead eagles, perhaps killed by people of the opposite moiety. An eagle moiety man would never kill an eagle. If a captive eagle were killed, its owner would have a wizard kill the offender. The captive eagle was never killed by its owner.

---

[36] Powers, 398, says: "The black eagle is sacred to them, and they never kill one, but they pluck out the feathers of those that die, and wear them on their heads as one of their most valuable ornaments. When they succeed in capturing a young one, after two weeks they have a great dance and jubilation around it, then sell it to another village, that they may do likewise."

[37] In the Chukchansi eagle dance the dancer alternately raised each foot high, exclaiming, "Hīhü, hīhü" each time. The dancer said he was an eagle. The Chukchansi were reputed to cry when they saw a dead eagle.

For a vulture the vulture moiety had a ceremony similar to that for an eagle. The functionary who went for a vulture was called atumu.

There was no dance for the crow. It was just a "pet." One informant told of its feathers being used for a headdress and a cape by a man who said that the crow was "his bird and his name."

Powers[38] has the following to say about Mono beliefs concerning the owl and its connection with the big tree (*Sequoia gigantea*):

> The California big tree is also in a manner sacred to them, and they call it *woh-woh'-nau*, a word formed in imitation of the hoot of the owl, which is the guardian spirit and deity of this great monarch of the forest. It is productive of bad luck to fell this tree, or to mock or shoot the owl, or even to shoot in his presence. Bethel states . . . . that when they [the Mono] see a teamster going along the road with a wagonload of lumber made from these trees, they will cry out after him, and tell him the owl will visit him with evil luck.

CHIEFS

Each moiety, but not each division, had a chief (bohenap, plur. bohenabi). He might belong to either division of the pakwihu moiety, or to the kunugechi division of the yayanchi moiety. There were no chiefs in the dakats division of the yayanchi moiety.

Chiefs were not hamlet chiefs, but moiety chiefs, two being contemporaneous. They functioned over the whole Northfork Mono population. Their functions were primarily ceremonial, rather than civil or military; those of the bird cult, moiety feasts, and funerary and memorial rites. There were no special names or titles for the chiefs of the two moieties. Chiefs ranked shamans, who were apparently sometimes in opposition to a chief.

The chief wore eagle tail and wing feathers on his chest, pendent from a string around his neck. He could cure sick people when so dressed.

The chief might order the death of a malevolent shaman, if a bewitched person complained to him. The chief sent people after the "witch." Upon the pretense that there was to be a fiesta, they brought him to the chief who asked him to take off the spell. If he did not, he was murdered in secret. Perhaps the chief would say he was to be killed when the leaves came out on a certain tree. The messengers who brought in the culprit carried eagle feathers as symbols of authority.

In 1918, Frank Schulte was the hereditary pakwihu (vulture) moiety chief, Frank Jim (Crazy Frank) the hereditary yayanchi (eagle) moiety chief. By force of personality Schulte seemed to function as virtual chief of all of the North-

[38] P. 398.

fork Mono. His activities were characterized by one informant as follows: "'Frank Schulte's job is like that of 'superintendent.' He works around among the Indians and tells them what to do and this and that. He bosses both eagle people and vulture people."

Chieftainship was inherited from the father. All the children inherited the title of bohenap, but not the office. As a chief got old, he usually instructed his oldest son to act just as he did. If the line died out, a new chief was selected at a general gathering and feast. Women had a voice in the choice. Sometimes a shaman became jealous and killed the new chief.

The assistant chief or ceremonial assistant (nitdenap), unlike the bohenap who headed each moiety, was limited to the yayanchi or eagle moiety. His office seems comparable to that of paha among the southern Californian Shoshoneans. His duty was to prepare for ceremonies as instructed by the bohenap. The pakwihu moiety hired a nitdenap from the yayanchi moiety and after a ceremony paid him with bead money, everyone contributing. The principal nitdenap in 1918 was Dick Pimona, whose chief was Frank Jim. Another was Tom Charlie who was sometimes hired by the pakwihu moiety.

Bohenabi (chiefs) were identified with the golden eagle, the great chief in mythical times. Meadowlark (chinsha) was the eagle's nitdenap, who informed the people of the eagle's wishes.[39]

The nitdenap was likened by informants to the Southern Miwok kotewe and the Chukchansi winado. He was messenger and master of ceremonies. He told the people where to camp and what seats to take. When sent to deliver a message or invitation, he took no kipu or beaded feather. He merely delivered a verbal message. His duty was that of steward. The moiety that gave the ceremony furnished the food, which the nitdenap assembled and distributed. When one moiety gave the ceremony, the other came and ate without paying.

At a gathering a chief might address the people or he might have the nitdenap or someone else address them for him. Such a man, if not the nitdenap, was called "talker" (yadohati; yado, to talk). His was not an hereditary position. The yadohati also directed people to their moiety sitting places at a gathering.

The children of a male nitdenap bore their father's title, and from them a successor to the father was selected. From the young unofficial nitdenabi the vulture (pakwihu) moiety hired a nitdenap for funeral,

[39] The Gashowu Yokuts were said to hold the same belief. Among more southerly Yokuts the assistant chief is identified with the mourning dove (Gayton, 412).

mourning, and festive occasions. A woman might sometimes hold the office, but seldom performed the full duties of a male nitdenap. Sometimes titular female nitdenabi were hired by an officiating male nitdenap as assistants.

TITLES

The titles of bohenap (chief) and nitdenap (assistant chief) were hereditary in the male line, and all sons and daughters bore the titles, but daughters did not transmit. Actually only a single individual, and he a man, functioned for each moiety. As the following table shows, the dakats division was without a bohenap, and the puzaots and tübahinagatü without a nitdenap.

Of the total population of 491, 25 per cent were titled, 75 per cent untitled. The moieties considered separately approximate this distribution. In the yayanchi moiety 26 per cent were titled, 74 per cent untitled; in the pakwihu moiety 24 per cent titled, 76 per cent untitled. The table shows the percentages for the separate divisions to vary widely, kunugechi having the highest percentage (44) of titled person, dakats having the lowest (8.5).

	Yayanchi Moiety		Pakwihu Moiety	
	Kunugechi	Dakats	Puzaots	Tübahinagatü
Bohenabi (men)	16	0	19	12
Bohenabi (women)	15	0	9	13
Nitdenabi (men)	14	5	0	0
Nitdenabi (women)	12	7	0	0
Untitled men	35	46	39	16
Untitled women	37	83	89	24
Total titled individuals	57	12	28	25
Total untitled individuals	72	129	128	40
Percentage titled individuals	44	8.5	18	38
Percentage untitled individuals	56	91.5	82	62

FUNERARY OBSERVANCES

The dead were cremated in pre-Caucasian days. The chief (bohenap) of the opposite moiety to the deceased attended to the funeral arrangements and instructed people to get their offerings ready. All relatives and friends, regardless of moiety, cried and wailed for the departed. There was a dance called ahani performed around the corpse. There were ten songs for this dance. Two were recorded on U.C.M.A. phonograph cylinder 2165. A description of the ahani dance follows:

On the night of December 22, 1915, Mrs. Gifford and I attended the funeral ceremony for Chiwa, a kunugechi woman, at her dwelling. When we arrived there were a dozen or more men assembled around a fire on the open knoll on which the house stood. With the men were numerous dogs. The women were within the dwelling house, singing, stamping, and wailing; the door was closed most of the time. A ceremonial speech was given within by the leader of the singers, a woman with a very loud masculine voice.[39a] The speech was made above the din of wailing. There was no foot stamping, however, while it was being made. The words were spoken one or two at a time and in staccato fashion.

After a while, the women came out of the house and encircled the coffin wailing. After two or three rounds they rested for a minute or two before resuming. They proceeded both clockwise and contraclockwise. Many of the women hopped with both feet together. Two or three men joined the women in this encircling of the coffin. The men up to this time had sat impassively around the fire, conversing only in low tones, if at all. Aside from an occasional kick landed on a dog, all was quiet; even the boys restraining themselves, although later, when the fire dance started, several climbed an old tree stump to watch.

Jane Vischer, who brought us to the affair, asked one of the women if they were to have the fire dance. She was told that they did not have money enough to pay the singers; but if we would contribute, they could do it. When it was settled, a man took a shovelful of coals from the fire about which the men were collected and started a new fire with it on a more level spot a few feet away. (Frank Schulte, bohenap, was among the men at the fire.) Sticks were added and a good blaze started. The singers stood in an arc on the north side of the fire, at the west end the woman leader with the stentorian voice. The chorus consisted of twelve or fifteen voices, both male and female. The song could be heard for quite a distance in the surrounding forest and the rhythm was such as to encourage the dancers' efforts. The dancers, fifteen or twenty in number and mostly women, proceeded contraclockwise. Frank Schulte was the leader or the tail of the procession; it was hard to tell which, as they formed a nearly continuous circle around the fire. The women danced by hopping or jumping with both feet together. The arms were alternately shot obliquely downward and the body rocked from side to side at the same time. This violent rocking and arm movement were accompanied by an expulsion of the breath which sounded like escaping steam. The arms were held perfectly straight throughout, not flexed. The dancers followed one behind the other.

Schulte's dancing was very different. He danced with his left forearm raised to the level of his eyes, as though weeping or shielding his eyes from the fire. The arm was not held against the face, but about six inches from it. The right arm was carried at the side. His dance consisted of short steps forward, backward, and sideways. He was the last to end and the first to begin each time. The singing leader did not allow a rest of over a minute before she resumed. She laughed and joked and did not seem to be mourning. The fire dance was repeated eight or ten times while we watched, and may have been long continued after we left. The minute intervals were marked by wailing. Each spell of dancing lasted three or four minutes.

[39a] Possibly a berdache, as among some Yokuts tribes. Cf. Kroeber, Handbook, 497.

The similarity of this dance to the Chukchansi dance witnessed by Stephen Powers[40] is further evidence of unity of culture of the Northfork Mono and their Yokuts neighbors.

An amusing tale was told of a chief with several wives. On three occasions he revived when placed on the funeral pyre. On the third occasion one of the wives clubbed him, so that the trouble of preparing funeral pyres for him would be ended.

After the death of a husband or near relative a woman's hair was cut short. She might not laugh or take part in amusements for one year. She mourned for the departed throughout the year. At the end of the year her face was washed by people of the opposite moiety, a ceremony called yakat. The name of the dead and his deeds were not mentioned for two years after his death, when the mourning ceremony (dukwait) or "cry" was held in a brush enclosure. This concluded mourning observances and thereafter the name of the deceased could be utilized for a baby, and the widow might remarry.

The mourning ceremony lasted from two to five nights. People of all four divisions cried, regardless of the division of the deceased. A cry was not held for a "witch."

The bohenap and nitdenap of the bereaved moiety set the exact date for the "cry." The nitdenap and perhaps his sons supplied the money for the food. This was turned over to the bohenap to do the purchasing. The opposite moiety attended to the distribution at the time of the "cry."

The vulture people, headed by their bohenap, sang for the eagle people to dance when they were crying. The vulture people heated water and washed the eagle people, whom they called by name. Sometimes the washers took away the hat or necktie of a mourner. Money for the mourners had been collected by the vulture chief and each person was paid a little as he was washed. This was because the vulture moiety felt sorry for him.

In case the vulture (pakwihu) moiety was bereaved, the rôles of the two moieties were reversed. The nitdenap of the eagle (yayanchi) moiety and his helpers bathed the bereaved pakwihu people.

Wormwood (husidap) was used in the water to wash the faces of mourners after the mourning ceremony.

U.C.M.A. phonograph cylinder 2164 records in its second half the song for the festive dance which follows a mourning ceremony, when the washing of the mourners has been completed.

[40] Pp. 384–390.

DANCES

Dances had no names other than the names of their songs, singing being the primary act in the native viewpoint. The creator Eagle gave different tribes their songs ("17 songs altogether") and games.

The totzaho dance was by men only, regardless of moiety. The nigaba[41] dance was a "round" dance, held on five consecutive nights, in which 40 or 50 participants sang while dancing to the right around a fire. Men and women were mixed regardless of moiety and each dancer held his neighbor's hand. This was an annual dance held in various places. Everyone furnished food for the occasion. Eastern Mono chiefs from Inyo county crossed the mountains to attend. U.C.M.A. phonograph cylinder 2164 (first half) records the song for this dance.

Horizontal stripes painted on the bodies of dancers were not indicative of moiety.

Northfork Mono dance places were at the hamlets Soyakanim, Basiaana, and Yauwatinyu.

Powers says of the Western Mono:[42] "They are not such a joyous race as the Californians, and have no annual merrymakings, though they sometimes celebrate a good harvest of acorns; and they think that a certain great being in the east, who is nameless to them, must be propitiated at times with a grand hunt and a feast following it, else there will be disease and bad luck in their camps."

PERSONAL NAMES

People were not named after the moiety totems or "pets," and in general names were meaningless, or their meanings were not thought of any more than in English personal names. Personal names were handed down, children being named after the father's relatives, never after the mother's. In this respect the Northfork Mono resemble the Pyramid Lake Paviotso, among whom boys receive the names of the father's male relatives, especially his paternal uncles, and the girls those of the father's female relatives.[43]

Children were named after either living or dead relatives, though the latter must be dead two years before their names could be utilized.

[41] Cf. Paviotso dances of similar name (Lowie, 306, 307).

[42] Tribes of California, 397.

[43] Curtis, 15:78.

Although so distinctly patrilineal in naming their children, the Northfork Mono were not patronymic. There were no juniors as in our own society: no son was ever named for his father. The father's father was the most frequent namesake for a boy; the father's sister for a girl, with the father's mother second in importance. Sixty namesakes recorded were distributed as follows:

Namesakes

Father's sister	21
Father's mother	14
Father's father's sister	2
Father's mother's sister	2
Father's female cousin	1
Mother's father's brother's son's wife's sister	1
Father's mother's brother's daughter	1
Father's father	11
Father's brother	2
Father's father's brother	3
Father's mother's brother	2
	60

The tendency was for personal names to be limited to one moiety division, on account of the mode of transmission. However, a child was sometimes named for a person outside of the father's division (for instance, the father's mother or the father's mother's brother). It is such cases as these that may account for the personal names used in more than one division.

An example of how personal names were transmitted is the case of Toyadi (Susie Charlie) who was named after her bawha (father's sister), who in turn was named after her bawha, who in turn was named after her hutsi (father's mother).

A half-breed was usually named after one of the relatives of his Indian stepfather.

Following the death of an older or younger namesake a person's name was sometimes changed. Seven instances for women and one for men were recorded.

Only three cases of nicknames for men and one for women were recorded. Some nicknames were uncomplimentary: (1) Wahagwuzi, two tails, applied to a girl by her rival for a man's affections. (2) Choape, ghost, applied to a man by his mother-in-law who did not like him. She said she did not want her daughter to marry a man who looked like a ghost. The name stuck.

The father was the most frequent namegiver both for sons and daughters; the father's mother was next in importance as a namegiver. The father usually named his daughter after his mother or his sister. No daughter was ever named for her own mother. When the father's sister bestowed the name on a girl it was usually her own which she gave.

Namegivers

	To girls	To boys
Father	13	11
Father's mother	5	7
Father's sister	6	0
Father's brother	0	1
Father's father	0	1
Father's mother's sister	0	1
Father's mother's brother's daughter	1	0
Mother's father's brother's son's wife	1	0

Namegiver: Father

Daughters named for father's mother	5
Daughters named for father's sister	4
Daughters named for father's father's sister	1
Daughters named for father's mother's sister	1
Daughters named for ——— ———	2
Sons named for father's father	3
Sons named for father's brother	1
Sons named for father's father's brother	2
Sons named for ——— ———	5

Namegiver: Father's Mother

Girls named for self	2
Girls named for father's mother's sister	1
Girls named for father's sister	2
Boys named for father's father	3
Boys named for father's mother's brother	1
Boys named for father's father's brother	1
Boys named for ———	2

Namegiver: Father's Sister

Girls named for self	5
Girls named for ———	1

Alleged Meanings of Some Personal Names

Abosoa, manzanita

Ahach, a gray bird, slightly larger than a jay, found in Inyo county, probably Clark's nutcracker

Chanapa, looped mush stirrer

Chati, from chats, sage seed

Chinsha, meadowlark

Chipo, snow bird

Chunui, mushrooms

Dokoi, shallow bedrock mortar holes

Hübiakü, blossoms

Kaka, crow
Kasina, an edible black seed
Katsiwa, fox-tail grass
Kewiya, ocean mussels
Kosoga, quail's topknot
Mütüku, an inedible plant that grows at Cascadel
Muuyanu, parching basket
Nakaba, ears
Nauwakü, blue beads
Nerimahana, asking for something and not receiving it
Noho, grizzly bear
Nübagü, from nüba (snow)
Onowi, mountain mahogany balls for a game
Pagatu, making arrows
Popi, crossing
Poyohadi, running
Puhuyun, green plants
Sayuma, to pull something over one
Siwatü, barley
Sonauwo, dry grass
Sonoi'i, mountain mahogany ball used in shinny game
Sowa', good
Sowabi, ants
Tanani, jimsonweed
Tanoti, carrying with a tump line
Tihukua, bushes
Tokü, small bumblebee
Tonani, nuts of the blue pine
Toyadi, mountains
Tugayau, laughing at night
Tuhube, wild peach
Wawa, black mineral face paint
Wayadika, eating dry grass
Wichaba, calf of leg
Wige', rabbitskin blankets
Woaka, tree bark
Wo'ko, yellow pines
Wokodoheti, under the yellow pines
Wokonomi, large black ant

SHAMANISM AND DREAMS

The generic term for shaman was puhake (plur. puguhanewa).[44] The term puhanagate was said to mean "the summoning of birds by a shaman." A shaman's dance for either curing or killing people was called puhanagawe. A puhake was characterized as one who received a visitation from an animal spirit (either mammal or bird) during a dream or when he went into the forest to sing and dance. He might be a "witch" as well as a shaman.

[44] Cf. Wind River Shoshoni púhagant and cognate Great Basin Shoshonean terms, Lowie, 291–296.

A shaman who cured by sucking was called nupuhawich; one who could summon deer was called tasuwadi; a malevolent shaman or "witch" or wizard or "poisoner" was called kapuhat. There were also weather shamans who by singing could raise a rain and windstorm.

As was general in central California, the principal implement of the shaman was the cocoon rattle (sanadj). Jimsonweed (tanalim) was not employed except on rare occasions.

Informants discriminated between the inherited totem and the guardian spirit which a shaman acquired in a dream. A bear shaman obtained his power through a supernatural experience, such as being kept as the husband of a she bear in a den through a winter. The bear was not a totem of either moiety. Sometimes a visitation from a human spirit conferred shamanistic power. The following is an instance:

A man had a bad dream which made him "crazy." He saw his dead sister in a red dress walking to the spring where they used to cook acorns. She was calling him. He learned some songs which he heard in this dream. He escaped death by not responding to his sister's calls. While suffering from the effects of this dream he was sung over by several persons (one, at least, a woman, who shook a cocoon rattle). He was thus brought back to health and thereafter became a puhake.

The puhake called the birds that he dreamed about. If a father was a shaman, the son was likely to become one also. He began dreaming. The function was not inherited, but the "spirit" had a liking for the family and made the son a puhake as he had the father.

There were performances by shamans (puhake) in which their abilities were displayed. These performances were independent of the moiety dances and had nothing to do with them. At the dance place at Soyakanim a shaman caused a coyote to come down from the sky during a dance. He also caused it to disappear again into the sky.

Kohomot, a deer shaman, could entice the fawns to him. He had three places to which he sent people to kill deer. He foretold how many they would kill at each place.

One shaman administered pulverized jimsonweed root with fatal effect to dogs, but apparently harmless effects to himself. In his demonstrations he usually danced about a fire for some time. On the occasion of his death he made a mistake, and instead of giving himself alum and the dogs jimsonweed, he reversed the proceeding.

Bear shamans were common. One of great repute was Old Hooker (Sigurup), for whom Hooker's cove is named. He was finally killed by Eastern Mono in the Bishop region, where he was displaying his

powers. Along the road in Hooker's cove there are several places where he appeared as a bear. There is a large flat-topped rock where he danced, and a short distance away is another higher rock where he appeared as a bear after dancing. Another rock around which he danced bears a figure resembling a sheep, formed by moss or by some discoloration of the rock. It is said to have been "put there by Old Hooker" and to be ineffaceable. At one place he, as a bear with his wife, came out of a grove of trees and frightened people. The abundance of bears about Hooker's cove was believed to be due to his presence.

Coupled with their ideas about bear shamans was the lively interest of the Northfork Mono in bears, and much conversation revolved around them. Powers[45] relates their ideas about bear councils. The informant Tugayau (Old Joaquin) gave the following advice about escaping a bear:

> Do not run from it at first, but throw dirt in its eyes as it approaches. Then while it rubs its eyes, get away as fast as possible or take to a tree. Do not take to a large one which the bear can climb, nor to a small one which it can bend over. Take to a stiff small one with many branches, which the bear can neither climb nor bend over.

Bears were believed to carry away people and marry them. Bear shamans were responsible for the carrying away of women by bears. Children of such unions were half bear, half human.

Not included in the generic term puhake was the singing doctor or "talker" (soahubiere). His specific function was to drive away by singing any ghost or spirit that had appeared in a dream and made the dreamer ill. The method of removing the bad effects of a dream was to sing before the patient and shake the cocoon rattle, go out to consult the spirits, return and put ashes on the head of the patient, blow them from him, and announce a cure.

Sometimes people dreamed they were sick. Certain songs were sung by the soahubiere or talker to cure illness thus caused. Tugayau, who was such a shaman, possessed many songs for curing. The afflicted person informed the shaman of his dreams. The shaman talked to the guilty spirit at night outdoors, asking the spirit to cease making the person sick. Sometimes this effected a cure. In one instance the practitioner acquired his knowledge from an older soahubiere, who was not his father. The practice had nothing to do with totemism.

[45] P. 398.

The Northfork Mono were firm believers in the significance of dreams. A pictograph in a cave four miles east of Fuller's meadow, Madera county, was said to depict a man's dream. Dreams did not always make one a shaman, however, as the following instance indicates:

An informant dreamed about a coyote. A few days later the exact events of the dream were enacted. As she was walking along a road, a large coyote suddenly sprang out and rolled on his back in the dust before her, his tongue out. Then he got up and trotted ahead of her for a distance, continually looking back. Suddenly he disappeared. The woman consulted the soahubiere shaman Singing Jack, who told her she should not have thought about the dream, for by so doing she made it come true.

Taboos sometimes arose from dreams. One girl could not eat rabbits because of a taboo that came to her in a dream. If she ate rabbits her children would kick like rabbits. Because of a dream it was taboo for a certain man to eat beans.

People who were constant wanderers, and who believed certain animal spirits were calling them away from home continually, were buried alive to put an end to their making nuisances of themselves. These people would often remain home only a few minutes at a time, suddenly exclaiming that some animal was calling them and they must be off.

WITCHCRAFT AND SUPERSTITIONS

In addition to the malevolent practices of shamans in causing illness, witchcraft based on sympathetic magic was practiced. That this was by persons other than shamans, however, was not ascertained.

Spittle of the victim was put in an elderberry tube and placed over a fire, being brought closer and closer to it. This caused consumption and other afflictions. Also the same result was attained by grinding sputum of the intended victim with wild parsnip and putting it in a hollow tree. If a coyote ate it the victim died.

Coyotes were sent out by wizards to annoy people. One might enter a person's house and look around. Then that person would become ill.

A red-faced, red-tailed, but otherwise greenish lizard was called panomawi. If one touched it, his fingers came off.

To point intentionally at a rainbow caused one's finger to come off.[46] If one pointed inadvertently, the finger could be saved by sticking it in the fire.

[46] The Ute have the same notion (Lowie, 293).

Myths were told in winter only, lest the story-teller get old prematurely. If birds or ghosts heard songs they would come to the singer's house. If one had rattles from a rattlesnake in his house or sang a snake song, snakes would come.

GHOSTS AND SPIRITS

Nowadays people only faint when they see ghosts, because the hero Yayu killed the great malevolent ghost in mythical times. A flycatcher (*Empidonax*) was called choap (ghost). As in the Great basin, the belief prevailed that a whirlwind embodied a ghost.[47] It caused headache, or sometimes made a person crazy if it struck him.

Another Great basin belief[48] among the Northfork Mono was that in "water babies" (pauha), naked female sprites with long flowing tresses. They were more frequently seen alongside springs than in the water. To harm one brought an immediate flood[48a] or other misfortune. One informant's son shot at a "water baby" with a small bow. As a "result" he became so crippled he could hardly walk for a year.

The well known central Californian being Kuksu was regarded as a wood spirit. He wore a milkweed fiber headband with eagle feathers erect, so as to form a crown and depending so as to hide his face. Wing feathers of the vulture were fastened to his arms and folded across his breast, so that he "looks as though he were flying." There was also a kuksu dancer, according to one informant, who perhaps had a Miwok rather than a Mono performer in mind.

A large rock at the head of the San Joaquin river was believed to be the place from which rainbow trout issued. Caves in the mountain passes were the homes of the winds.

Condor (nüniyot) was reputed to carry away people when they were asleep, taking them up into the blue sky and turning them loose in skyland. Once at Table mountain, near Oneals, in Chukchansi territory, a man and his family were gathering sage seed. The man got tired and lay down to sleep a bit. A nüniyot put him on his back and carried him to the sky. He was never seen again.

---

[47] Lowie, 297.

[48] Lowie, 297.

[48a] Gifford, 1923, 326.

POSTURES, GREETINGS, ETC.

The old women often sat with knees drawn up in front of them, arms crossed on knees, and hands resting on upper arms. Another posture was with legs flexed to the right, flat on the ground. They sometimes sat with legs straight in front of them, crossed at the ankles (pl. 7). Sometimes they sat cross-legged, tailor fashion, when wielding a pestle (pl. 4*b*), or legs apart when working on a basket (pl. 16).

Men sometimes squatted when eating or conversing.

Often, when talking, old women indicated directions by slightly raising the head, pursing the lips, and pointing therewith in the direction indicated.

"Yes"(ühü) and "no" (kado) were indicated by nodding and shaking the head as among Americans.

In obtaining data about houses from one aged informant, she stated "many houses" when the number exceeded four.

In protest against the undesirable actions of children, old women made a peculiar suction sound resembling that which we make in urging on a horse.

Old women walked with a long staff. When seated it proved useful for driving away dogs.

Illustrative of the relations of young and aged was the conduct of a young woman who came to her half-sister's house. Dwelling there was her father's mother (hutsi), the informant Wiunu. When J. arrived neither she nor her grandmother appeared to greet the other, although J. engaged in lively conversation with her half sister M. and with her niece. Old Wiunu beamed upon her the whole time, however. Later J. went into the house after saying goodbye to me, but not a word to the old lady. The old lady did not go into the house, but worked on acorns. J. finally left, apparently without uttering a word to Wiunu.

Strangers might inquire one another's names: "Te' neriedi'?" (What is your name?), or moiety affiliation: "Hi pue puk?" (What is your totem?)

The second toe markedly longer than the great toe was noted by Lowie for several individuals among the Moapa and Shivwits.[49] My informant Wiunu displayed this physical characteristic.

[49] Lowie, 312.

CONCLUSION

To one familiar with Californian ethnology, there is much about the preceding account of the Northfork Mono that suggests the close affinity of their culture to that of other tribes on the western slope of the Sierra Nevada. The favorable environment permitted a much more settled existence than was possible for their Shoshonean relatives of the Great Basin.

Suggesting the mode of life of Sierra Nevada neighbors to the north and south are the following traits: location of hamlets, dwelling house, sweat-house, economic life, trade with trans-Sierra tribes, bedrock mortars, metate with rotary grinding, steatite dishes and arrow straighteners, coiled basketry other than single rod, burden basket, seed beater, winnower, parcher, carrying net, use of milkweed fiber for cordage, soaproot brush, absence of basket cap, descriptive 12-month calendar, mother-in-law taboo, patrilineal totemic moieties, bird cult, inheritance of titles, chief and assistant chief, cremation, mourning ceremony, type of shamanism. The presence of dual chiefs, one for each moiety, has its parallel in the San Joaquin valley[50] among the Tachi and neighboring Yokuts tribes.

Suggesting Great Basin culture are the following: diagonally twined baskets, type of kinship system, absence of cross-cousin marriage, absence of god-impersonating cult, transmission of personal names, absence of totemic personal names, water sprites, ghost in whirlwind, loss of finger from pointing at rainbow, and many traits common to the Great Basin and central California.

Distinctive or peculiar traits in Western Mono culture would seem to be the following: acorn granary, wooden dishes, absence of single-rod coiled basketry, absence of circular coiled basketry plaques, absence of cat's cradle, non-exogamous moieties, personal guardian for each individual called his "life." These supposedly peculiar traits may in time be found elsewhere, so that in ultimate analysis the distinctive thing about Northfork Mono culture may prove to be the particular combination of traits found therein, rather than the possession of a series of peculiar traits.

Linguistically, the Western Mono are only dialectically different from the Eastern Mono. No such degree of differentiation has developed as in the case of the Tübatulabal or Kern River Sho-

[50] Gifford, 1916, 294.

shoneans.[51] This fact cannot be used as a solid argument for recent intrusion, but it is nevertheless suggestive of but a relatively brief lapse of time for the Western Mono in their present habitat.

The Western Mono physical type differs from that of Miwok and Yokuts neighbors,[52] suggesting also that perhaps the period of settlement on the western slope of the Sierra Nevada is not so very remote, in spite of the high degree of acculturation. This acculturation, moreover, was probably hastened by the similar environment in which the newcomers found themselves. Adopting their neighbors' adjustments to that environment was the simplest solution of their problem.

[51] Kroeber, 1907, 98.

[52] Gifford, 1926*b*, 224.

APPENDIX A. INHABITED HAMLETS[53]

Inhabited hamlets and population figures given below are for late pre-American and early American times, all from the memory of informants, who named the inhabitants of each hamlet. Northfork creek, frequently referred to, is the North Fork of the San Joaquin river. Section, township, and range are from the Mount Diablo Base and Meridian. Two or more sets of data concerning inhabitants of a hamlet are for different periods. Property owners mentioned are those of the year 1918 and are both Indian and white. Where the number of huts exceeds the number inhabited, old huts and housepits were counted by the informant.

Examples of the shifting of families from hamlet to hamlet are given in Appendix B. Many more instances were recorded.

Meanings of names are as given by informants. The names have not been critically analyzed.

Eighty-three more campsites and fishing places were recorded, but are not presented here. These sites were uninhabited in immediate pre- and early American times. Some were occupied, however, in 1918.

In the following paragraphs, each dealing with one hamlet, certain abbreviations are used: Section, township, and range are followed by H (huts), m (males), f (females), k (kunugechi), d (dakats), p (puzaots), t (tübahinagatü), b (bohenabi), n (nitdenabi).

1. Tasineu (stars). Spring and hamlet, on the property of the Charlie family; also huts on the flat about 100 yards down the hillside. A good site for manzanita berries. Bedrock mortars and house pits have been there from early times. See plates 3*b*, 4*b*, 5. Sec. 16, T 9 S, R 23 E. H 5, m 15, f 13, p 5, k 8, d 15. Three families were from Sikinobi. Two of these later moved to Nosidop, then to Sanita; one of these then moved to Dipichugu. The two other families of Tasineu moved to Poniaminau.

2. Musawati (mus, sweat-house; awa, on). Spring and hamlet, about 1 mile over the hill from Tasineu. Mary Brown lived there. NW quarter Sec. 11, T 9 S, R 23 E. H 3, m 5, f 9, p 7, d 7, b 3 m and 2 f p. The inhabitants comprised the population of Oyonagatü who moved here, then later to Homohominеu.

3. Yatsayau. Spring and hamlet, at Johnson's ranch. See plates 3*a*, 4*a*. S half of NE quarter, Sec. 4, T 9 S, R 23 E. H 4, m 10, f 8, p 7, t 2, k 4, d 5.

4. Pimishineu. Spring and hamlet, on the Morrow ranch. S half of NE quarter, Sec. 4, T 9 S, R 23 E. H 6, m 10, f 12, p 2, t 1, k 6, d 13, n 3 m and 1 f d.

5. Dipichugu (rock). Hamlet of 4 huts formerly at Mrs. Lackie's place. H 1, m 3, f 2, d 5. This family lived first at Sikinobi, then at Tasineu, then Nosidop, then Sanita, then Dipichugu.

6. Sanita (not good). Two springs and hamlet at home site of Howison Lavell. Sec. 33, T 8 S, R 23 E. H 2, m 5, f 4, k 1, d 8. These two families lived first at Sikinobi, then at Tasineu, then at Nosidop, then at Sanita. One family later moved to Dipichugu.

7. Sikinobi (siki, one-sided; nobi, house). Spring and hamlet on road one quarter mile above Johnson's place, which is in S half of NE quarter of Sec. 4, T 9 S, R 23 E. H 5, m 16, f 16, p 9, k 7, d 16. Three families moved from here

[53] As shown on map.

to Tasineu; two of these families moved to Nosidop, then to Sanita; then one family moved to Dipichugu.

8. Nosidop (wormwood, *Artemisia dracunculoides*). Hamlet and bedrock granite mortars on south side of Whiskey creek at bridge, on road to Johnson's ranch, which is in S half of NE quarter Sec. 4, T 9 S, R 23 E. H 2, m 5, f 4, k 1, d 8. These two families lived first at Sikinobi, then at Tasineu, then at Nosidop. Later they moved to Sanita. One family moved thereafter to Dipichugu.

9. Poniaminau (ponia, wild "lettuce"). Spring and hamlet, property of Frank Lewis, situated on the trail between Howison Lavell's property and Sigineu. Lavell's property is in Sec. 33, T 8 S, R 23 E; Sigineu is in SW part of NW quarter Sec. 21, T 8 S, R 24 E. H 2, m 5, f 4, k 7, d 2. These two families came from Tasineu.

10. Sigineu. Spring and hamlet of at least 4 huts formerly, above Poniaminau. On property of Mr. Ross (white). SW part of NW quarter Sec. 21, T 8 S, R 24 E. H 3, m 4, f 6, p 2, k 6, d 2.

11. Saganiu. Spring and hamlet of at least 5 huts formerly, above Sigineu, belonging to Old Maggie (Indian). H 3, m 6, f 15, p 9, d 12, b 3 m and 2 f p.

12. Wegigoyo (trail winding along side hill). Spring and hamlet of 3 huts formerly, property of Charlie Martin. Sec. 1, T 9 S, R 23 E. H 2, m 3, f 7, p 6, k 2, d 2.

13. Po'nowe (twined cooking basket). Spring and hamlet of 5 huts formerly. H 2, m 4, f 8, p 2, d 10.

14. Nakamayuwe (nakumai, to clear off brush). Spring and hamlet of 4 huts. San Joaquin river visible from neighboring hill; Mike Reilly (Indian), brother of Harmie Reilly, lived there. S half of SE quarter Sec. 1, T 9 S, R 23 E. H 2, m 3, f 2, p 1, k 1, d 3. Two more huts were used by visiting manzanita gatherers.

15. Dipichyu (dipich, rock). Spring and hamlet of 3 huts formerly. Higher than, but close to, Kokoneu. H 1, m 2, f 2, p 1, t 1, k 2.

16. Bakononohoi. Spring and hamlet of 2 huts formerly, higher up mountain than Bakwahudobo. H 1, m 2, f 4, p 3, t 2, d 1.

17. Sihüguwe (sihüg, willows). Spring and hamlet of 4 huts formerly, on Mike Johnson's property; between Po'nowe and Soyakanim. SE part of SW quarter Sec. 21, T 8 S, R 23 E. H 3, m 6, f 10, k 8, d 7, b 3 m and 1 f k.

18. Soyakanim (ants' place). Spring and hamlet of about 6 huts formerly; on property of Mrs. Kinsman (Indian). See plate 1*b*. E half of NE quarter Sec. 29, T 8 S, R 24 E. H 2, m 8, f 10, p 15, k 2, d 1, b 1 m k. H 3, m 12, f 11, p 20, k 2, d 1, b 1 m k.

19. Apasoraropa (apaso, manzanita; raropa, on a knoll). Spring and hamlet. H 2, m 9, f 8, p 7, k 7, d 3. H 3, m 10, f 9, p 7, k 8, d 4. These families lived here in the winter, but at Pakasanina in the summer.

20. Waapüwe (waapü, cedars). Spring and hamlet, on Jack Norris' ranch. SE part of SW quarter Sec. 21, T 8 S, R 24 E. H 2, m 7, f 4, p 8, k 2, d 1, b 4 m and 2 f p. H 5, m 17, f 22, p 17, k 2, d 20, b 1 m k. H 1, m 3, f 2, p 2, d 3.

21. Pakasanina (pakas, arrow). Spring and hamlet of 3 huts at higher elevation (ca. 5000 feet) than any of the preceding, but below the Sam Hogue ranch, which is in N half of SE quarter Sec. 8, T 8 S, R 24 E. H 3, m 10, f 9, p 7, k 8, d 4. These three families lived here only in the summer, returning to Apasoraropa in the winter.

22. Pasawapü' (pasawa, boiling water). Spring and hamlet where Old Chipo was living. It was a favorite acorn place. SW part of SW quarter Sec. 7, T 8 S, R 23 E. H 1, m 2, f 2, p 1, k 3. H 2, m 1, f 5, p 4, d 2. H 3, m 12, f 11, p 20, k 2, d 1, b 1 m k.

23. Noboihawe (course for foot races; noboihadü, running). Spring and hamlet at Frank Schulte's place. Sometimes Chukchansi camped there. E half of E half Sec. 1, T 8 S, R 22 E. H 1, m 3, f 5, p 5, t 2, k 1, b 2 m t. H 7, m 13, f 23, p 9, t 5, k 10, d 11; b 3 m and 1 f t, 1 f p, 2 m k, n 2 m and 1 f k. Six families were from Takapiwe.

24. Takapiwe (takapi, obsidian). A hamlet on property of Willie Chipo. Chukchansi sometimes camped there. Sec. 31, T 7 S, R 23 E. H 1, m 2, f 2, p 1, k 3. H 6, m 11, f 21, p 9, t 4, k 8, d 11; b 3 m and 1 f t, 1 f p; n 2 m and 1 f k. These six families later lived at Saiipü, Noboihawe, and Wadakhanau.

25. Kunugipü (kunugi, elder trees). Spring and hamlet of 5 or 6 huts formerly. Property of Frank Dick. SE part of NW quarter Sec. 6, T 8 S, R 23 E. H 3, m 7, f 7, p 4, k 5, d 5, n 1 m k.

26. Pasiaputka' (bubbling spring churning up sand; pasiwap, sand; putugigi, bubbling up). Spring and hamlet of three huts formerly; on Mary Paiute's property. H 2, m 8, f 11, p 12, k 7, b 2 m and 4 f p.

27. Tüpipasagüwe (tüp, rock; pasag, bridge). Spring and hamlet. On property of Mr. C. H. Shinn. SE quarter Sec. 12, T 8 S, R 22 E. H 1, m 1, f 3, p 3, d 1. H 4, m 6, f 12, p 6, t 7, k 4, d 1; b 1 m and 1 f k, 1 m p.

28. Homenadobema (homenap, chaparral; adobema, on top of a hill). Spring and hamlet. On property of Tom Harris. NE quarter Sec. 11, T 8 S, R 22 E. H 4, m 6, f 12, p 6, t 7, k 4, d 1; b 1 m and 1 f k, 1 m p.

29. O'hinobi (o'hi, cough; nobi, house). Spring and hamlet of 3 huts formerly; on the property of Jack Morton (white). H 2, m 9, f 5, p 2, t 8, d 3, b 6 m and 2 f t.

30. Papavagohira (big belly). Spring and hamlet of 4 huts formerly; on property of Mem Morton (white). H 3, m 11, f 8, p 2, t 9, k 4, d 3, b 6 m and 2 f t, n 1 m and 1 f k.

31. Moyopaso. Spring and hamlet of 4 huts formerly; on property of Mrs. Ramsey. Sec. 23, T 8 S, R 22 E. H 1, m 3, f 8, t 1, k 10, n 3 m and 4 f k.

32. Poniwinyu. Spring and hamlet of 5 huts formerly; on Mrs. Ramsey's property. Sec. 23, T 8 S, R 22 E. H 3, m 6, f 6, p 4, t 1, k 2, d 4, b 2 m k. H 3, m 6, f 4, p 3, t 1, k 2, d 4, b 2 m k.

33. Tumuyuyu (name of an edible plant). Spring and hamlet. At water trough on right side of county road (going down), below W. A. Ellis' ranch, which is in SE quarter Sec. 23, T 8 S, R 22 E. H 2, m 3, f 4, t 1, k 4, d 2, n 2 m and 1 f k. H 4, m 13, f 10, p 3, t 9, k 7, d 3, b 6 m and 2 f t, n 1 m and 1 f k.

34. Saksakadiu. Spring and hamlet, near Tumuyuyu. Probably on W. A. Ellis' property. SE quarter Sec. 23, T 8 S, R 22 E. H 8, m 14, f 21, p 16, t 2, k 11, d 6, b 1 m and 2 f p, n 3 m and 2 f k.

35. Kodiva (an edible "weed"). Spring and hamlet, on property of W. A. Ellis. SE quarter Sec. 23, T 8 S, R 22 E. H 4, m 13, f 10, p 3, t 9, k 7, d 3, b 6 m and 2 f t, n 1 m and 1 f k.

36. Howaka (a plant used for arrows, presumably cane). Spring and 1 hut. On left side of county road (going down), below W. A. Ellis' property, which is in SE quarter Sec. 23, T 8 S, R 22 E. H 1, m 4, f 3, p 1, t 5, k 1. H 1, m 2, f 3, t 1, k 4; b 1 m t, 3 f and 1 m k.

37. Wokosolna. Spring and hamlet of 3 huts formerly, to left of county road (going down). H 1, m 4, f 3, p 1, t 5, k 1.

38. Tübipakwina. Spring and hamlet; on property of Bob Ellis. SE quarter Sec. 24, T 8 S, R 23 E. H 4, m 7, f 8, p 2, t 1, k 7, d 5, n 2 m and 2 f k.

39. Asiahanyu. Spring and hamlet of 5 huts formerly; on road above power house number 2. SE quarter Sec. 30, T 8 S, R 23 E. H 2, m 5, f 3, p 1, k 2, d 5. H 3, m 7, f 6, p 1, t 1, k 6, d 5; b 1 m t, 3 f and 1 m k.

40. Konahinau. Spring (from which hotel at Southfork gets water) and hamlet. The latter was on the creek a short distance upstream from the hotel site. Sec. 18, T 8 S, R 23 E. H 3, m 7, f 7, p 4, t 1, k 4, d 5, b 1 f p, n 2 m and 1 f k.

41. Muchupiwe (muchip, fleas). Spring and hamlet between Southfork and Northfork creeks, but near the former and above the church. Sec. 18, T 8 S, R 23 E. H 4, m 6, f 11, p 8, t 1, k 6, d 2; n 1 m and 1 f d, 1 m and 1 f k. H 3, m 5, f 7, p 4, t 1, k 7, b 1 f p, n 2 m and 1 f k.

42. Pekeneu. Spring and hamlet of 3 huts formerly; between Mike Johnson's place and Whiskey creek. Mike Johnson's place is in SE part of SW quarter Sec. 21, T 8 S, R 23 E. H 2, m 3, f 5, p 2, k 3, d 3, b 1 m k, n 2 m d. H 1, m 2, f 2, k 1, d 3.

43. Monolu (*Epicampes* grass). Spring and hamlet on mountain side of road south from Southfork, about one mile south of mission, on Dick Merriman's property. SE part of NW quarter Sec. 20, T 8 S, R 23 E. H 3, m 6, f 9, p 2, k 7, d 6, b 1 m k, n 2 m and 1 f d.

44. Napasiat. Spring and hamlet, on north side of Whiskey creek, east of the road. Sec. 28, T 8 S, R 23 E. H 4, m 9, f 13, p 12, t 3, k 2, d 5, b 1 f k. H 5, m 10, f 13, p 11, t 3, k 4, d 5, b 1 f k. H 2, m 3, f 6, k 1, d 8, n 1 f k.

45. Wiakwü (wiap, black oak). Spring and hamlet, south of Napasiat but north of Whiskey creek and east of the road. H 3, m 3, f 9, p 9, t 1, d 2.

46. Siügatü (sihüg, willows; gatü, sitting). Spring and hamlet of 2 huts formerly, on property of Bill Sherman. H 1, m 2, f 1, t 1, k 1, d 1; b 1 m k, 1 f t.

47. Sipineu. Spring and hamlet, in Northfork creek drainage, below Pekeneu. H 2, m 6, f 5, p 3, k 1, d 7, b 1 m k. H 1, m 2, f 2, k 1, d 3.

48. Wokoiinaha (wokop, yellow pine; inaha, going around). Spring and hamlet where Dick Gibbons (Indian) lived. Sec. 21, T 8 S, R 23 E. H 2, m 5, f 6, k 5, d 6, n 2 m and 1 f d.

49. Takatiu. Spring and hamlet, below Wokoiinaha, east of road, and on property owned by Howison Lavell. Sec. 33, T 8 S, R 23 E. H 2, m 5, f 6, k 5, d 6, n 2 m and 1 f d.

50. Yauwatinyu. Spring and hamlet, on southeast side of Northfork creek, close to the creek. Property owned by Joe Good. Sec. 31, T 8 S, R 23 E. H 3, m 6, f 8, k 10, d 4, n 2 m and 2 f d. H 2, m 4, f 5, p 3, k 1, d 5 b 1 m k.

51. Sukuunu. Spring and hamlet of 2 huts formerly; on northwest side of Northfork creek, upstream from Wagasawe. H 1, m 2, f 2, t 1, k 2, b 2 m k.

52. Kotuunu (kotu, stick). Spring and hamlet of 5 huts formerly. SW from Johnson's ranch. Owned by Mary Smith (Indian). Johnson's ranch is in S half of NE quarter of Sec. 4, T 9 S, R 23 E. H 1, m 2, f 2, t 1, k 3, b 1 f k, n 1 m k.

53. Oyonagatü. Spring and hamlet, which was Mary Brown's old residence. H 3, m 5, f 9, p 7, d 7, b 3 m and 2 f p. The inhabitants later moved to Musawati, then to Homohomineu.

54. Homohomineu (homenap, chaparral, reduplicated). Spring, hamlet, and manzanita place near Oyonogatü. H 3, m 5, f 9, p 7, d 7, b 3 m and 2 f p. The inhabitants of Oyonogatü moved to Musawati, then to this place.

55. Tükweninewe (tük or tüp, rocks). Spring and hamlet west (?) of Oyonagatü. Mrs. Molly Pimona, an informant, was born there. A good place for manzanita. H 3, m 12, f 11, p 20, k 2, d 1, b 1 m k.

56. Ebehiwe (ebehi, white clay). Spring and hamlet of 3 huts formerly. On property of Mr. Teaford. Reputed to have been a Chukchansi site. SW quarter Sec. 33, T 7 S, R 22 E. H 2, m 4, f 4, p 3, t 1, d 3, b 1 m p and 1 f t.

57. Pahabitima (pahabich, bear). Spring, hamlet, and acorn place, on property of Bill Turner (white). NE part of NW quarter Sec. 13, T 8 S, R 22 E. H 6, m 11, f 21, p 9, t 4, k 8, d 11; b 3 m and 1 f t, 1 f p; n 2 m and 1 f k.

58. Pausoleu. A hamlet of 3 huts formerly, downstream from Pahabitima; on power company's property. It was near a creek which had no native name. H 1, m 1, f 1, t 2.

59. Payauta'. Spring and hamlet of 2 huts formerly; below Pausoleu. H 1, m 2, f 3, p 2, d 3.

60. O'oneu. Spring and hamlet of 4 huts formerly; below Payauta'. On property of Mr. Pestle (?), white. H 2, m 9, f 5, p 2, t 8, d 3, b 6 m and 2 f t.

61. Saiipü' (saiip, "tulip"). Spring and hamlet at Michigan Dick's place. The funeral dance for Chiwa was held here. H 1, m 3, f 5, p 5, t 2, k 1, b 2 m t. H 6, m 11, f 21, p 9, t 4, k 8, d 11; b 3 m and 1 f t, 1 f p; n 2 m and 1 f k. These six families were from Takapiwe. Later they lived at Noboihawe and Wadakhanau.

62. Wadakhanau (wadak, frogs). Spring and hamlet on Jim Baker's property. W half of NW quarter Sec. 28, T 8 S, R 24 E. H 6, m 11, f 21, p 9, t 4, k 8, d 11; b 3 m and 1 f t, 1 f p; n 2 m and 1 f k. These six families had previously lived at Takapiwe, Saiipü, and Noboihawe. H 4, m 6, f 12, p 6, t 7, k 4, d 1; b 1 m and 1 f k, 1 m p.

63. Apayiwe (apain, to drink). Spring and hamlet. Below Mike Johnson's new place, just south of the Mission branch road. Mike Johnson's place is in the SE part of the SW quarter Sec. 21, T 8 S, R 23 E. H 1, m 1, f 2, p 2, k 1, n 1 m k.

64. Supanaminau. Spring and hamlet at confluence of Whiskey and Northfork creeks. Occupied by Sam Pokinghoe (half breed). SW quarter Sec. 33, T 8 S, R 23 E. H 2, m 4, f 4, k 5, d 3.

65. Tiwokiiwe. Spring and hamlet of 5 huts formerly, at the Mission. H 1, m 2, f 2, p 1, k 3.

66. Yauyau. A summer camp 18 miles NE of Ponowe, at Fuller's meadow. Five huts at times. Owned by Wagner. H 1, m 1, f 2, p 3, b 1 f p.

67. Topochinatü (topochini, short). Spring and summer camp of 4 huts at times, west of Yauyau. Formerly owned by Frank Fuller; probably on Wagner's property like Yauyau. Sec. 35, T 6 S, R 24 E. H 3, m 12, f 11, p 20, k 2, d 1, b 1 m k.

APPENDIX B. EXAMPLES OF MOVING

The aged informant Wiunu and her family afford an example of the shifting of residence common to the Northfork Mono.

Born in the Northfork region and living at Napasiat, her father died while she was a baby. She was taken at the age of 7 or 8 years by her mother to Pazikama, in Eastern Mono territory, where she lived through one winter, her mother dying there. Her older maternal half-sister brought her back to Napasiat. There her half-sister married. This was before the whites came.

They later moved to Kunugipü, where Wiunu married, her husband coming to live in their house. After some years they moved to Saksakadiu. They lived one summer at Konahinau, where Wiunu's son was born. Then they moved to Pôniwinyu.

Tübipakwina was their next residence. There Wiunu's husband was killed. There were no whites yet. They then moved back to Pôniwinyu, where Wiunu's half-sister died. A few whites had appeared.

Wiunu and her half-sister moved to Kunugipü because they did not like to live at Napasiat where their mother had lived. They moved to Saksakadiu and to Pôniwinyu "just to be moving." Wiunu next moved to Tübipakwina, because she did not like to remain where her half-sister died. Then she moved to Sipineu, then back to Napasiat, just to be moving. Her husband's folks were living at Yauwatinyu, where she now joined them.

She then moved to Wiakwü, to Siügatü, to Asiahanyu, to Nakamayuwe, to Pokosolna, to Asiahanyu, "just to be moving." Everywhere she went she took her son. She was forced out of Asiahanyu by the whites and then moved to Mohuyagau. While residing there, her son, who had married, was killed at Apasoraropa. She moved to Sodagatu because of her son's death. Then she came to Yatsayau, where she was in 1918.

Another example of movements were those of Kewiya' and his wife Toyadi. As old people they lived at the following places in the order named: Nakamayuwe, Sipineu, Napasiat, Hoyoikwe, Asiahanyu, Yatsayau, Yauwatinyu, Pokosolna, Siügatu. They had earlier lived at Saksakadiu and Kotuunu. Kewiya' died at Siügatu before Caucasians came.

BIBLIOGRAPHY

BARRETT, S. A.
1917. The Washo Indians. PMM-B, 2:1–52.

CULIN, STEWART
1907. Games of the North American Indians. BAE-R, 24:1–809.

CURTIS, EDWARD S.
1926. The North American Indian, v. 15.

DORSEY, GEORGE A.
1903. Indians of the Southwest. Passenger Department, Atchison, Topeka, and Santa Fe Railway System.

GAYTON, A. H.
1930. Yokuts-Mono Chiefs and Shamans. UC-PAAE, 24:361–420.

GIFFORD, EDWARD WINSLOW
1916. Dichotomous Social Organization in South Central California. UC-PAAE, 11:291–296.
1922. Californian Kinship Terminologies. UC-PAAE, 18:1–285.
1923. Western Mono Myths. JAFL, 36:301–367.
1926*a*. Miwok Cults. UC-PAAE, 18:391–408.
1926*b*. Californian Anthropometry. UC-PAAE, 22:217–390.
1926*c*. Miwok Lineages and the Political Unit in Aboriginal California. AA, 28:389–401.

KROEBER, A. L.
1907. The Shoshonean Dialects of California. UC-PAAE, 4:65–165.
1925. Handbook of the Indians of California. BAE-B, 78.

LOWIE, ROBERT H.
1924. Notes on Shoshonean Ethnography. AMNH-AP, 20:185–314.

MERRIAM, C. HART
1914. Distribution of Indian Tribes in the Southern Sierra and Adjacent Parts of the San Joaquin Valley, California. Science, n.s., 19:912–917.
1930. The Em'-tim'-bitch, a Shoshonean Tribe. AA, 32:496–499, 1930.

MERRILL, RUTH EARL
1923. Plants used in Basketry by the California Indians. UC-PAAE, 20: 213–242. Miss Merrill's original MS of findings for individual baskets was also consulted.

PATTERSON, J. E.
1929. The Pandora Moth, a Periodic Pest of Western Pine Forests. U. S. Dept. Agr., Technical Bulletin 137.

POWERS, STEPHEN
1877. Tribes of California. CNAE, 3.

SHINN, CHARLES H.
1912. Old Man Chepo. The Craftsman, 622–630. (March.)

SPIER, LESLIE
1930. Klamath Ethnography. UC-PAAE, 30.

EXPLANATION OF PLATES

Plate 1. *a*, hamlet site Dedabikanu. In center of picture is granite outcrop with bedrock mortars. Site located just north of school house on property of Lavell and Fraries, section 33, township 8 south, range 23 east. *b*, view from site of hamlet Soyakanim, Hooker's cove, looking to mountains south of the San Joaquin river. *c*, view down San Joaquin river from site of hamlet Peakiyutü, on property of Jim Moore, in west half of southwest quarter of section 10, township 9 south, range 23 east.

Plate 2. *a*, framework of hut, showing manner of fastening poles in place. *b*, hut. Hamlet Peakiyutü.

Plate 3. *a*, hut at hamlet Yatsayau. *b*, bedrock mortars with brush shelter at hamlet Tasineu.

Plate 4. *a*, acorn granary with grass thatch, Yatsayau. *b*, pulverizing manzanita berries, Tasineu.

Plate 5. *a*, winnowing manzanita meal. *b*, whole and pulverized manzanita berries. Hamlet Tasineu.

Plate 6. *a*, combing milkweed fiber with a stick. *b*, rolling and separating milkweed fibers with fingers after combing. Hamlet Tasineu.

Plate 7. *a*, twisting two-ply milkweed fiber string. *b*, carrying net in use. Hamlet Tasineu.

Plate 8. *a*, baby boy's cradle with V-design on hood indicating sex, 1–21717. *b*, baby girl's cradle with zigzag design on hood indicating sex, 1–21716. Length of *b*, 28.5 inches; *a* to same scale.

Plate 9. *a*, burden basket for acorns, warp and woof of maple, 1–10493. *b*, burden basket for seeds; pattern in redbud, 1–19720. Diameter of *b* at top, 22 inches. *a* to scale.

Plate 10. Winnowers, seedbeater, and scoop. *a*, 1–19735, seed beater, also used for parching seeds; warp and weft of willow. *b*, 1–19731, winnower, warp and weft of redbud, some warps peeled. *c*, 1–19732, winnower, warp and weft of redbud, some warps peeled. *d*, 1–19734, winnower, warp and weft of redbud. *e*, 1–10486, tray for leaching manzanita meal and for scooping up small fishes; warp and weft of redbud. *f*, 1–21703, winnower. Length of *d*, 13.5 inches; others to scale.

Plate 11. Diagonally twined cooking baskets, designs in redbud. *a*, 1–10491. *b*, 1–10487. *c*, 1–21696. *d*, 1–10483. *e*, 1–19721, warp and weft of redbud. *f*, 1–19722. Diameter of *c* at top, 12.12 inches; others to scale.

Plate 12. Coiled baskets. *a*, 1–10494, foundation 3 willow rods, sewing material redbud, black design in brake fern. *b*, 1–21695. *c*, 1–21693, design black. *d*, 1–21694, design black. *e*, 1–19723, cooking basket. Diameter across top of *e*, 18.5 inches; others to scale.

Plate 13. String, fibers, and brushes. *a*, 1–21676, milkweed fiber string. *b*, 1–21713, soaproot fibers. *c*, 1–21711, soaproot fiber brush. *d*, 1–21710, soaproot fiber brush. *e*, 1–21679, milkweed fiber. *f*, 1–21677, milkweed fiber cord. Length of *c*, 7 inches; others to scale.

Plate 14. Basketry bottle, oaken and steatite dishes. *a*, 1–21719, twined basketry bottle covered with pitch, 15 inches high. *b*, 1–21721, oaken bowl, height about 3.5 inches, diameters 8.5 and 12.5 inches. *c*, 1–21720, steatite bowl, height 4 inches, diameter 8 inches.

Plate 15. Stone, bone, and wooden objects. *a*, 1–19743, stone muller and pestle combined. *b*, 1–21670, steatite dish. *c*, 1–19744, wooden tobacco pipe. *d*, 1–19742, steatite arrow straightener. *e*, 1–19745, wooden tobacco pipe. *f*, 1–21722, oaken bowl, originally had a small handle near rim. *g*, 1–21714, deer bone awl. *h*, 1–21715, deer bone awl. *i*, 1–19746, fragment of obsidian blade. *j*, 1–21723, mountain mahogany ball used in game. *k*, 1–21673, deer bone awl. *l*, 1–21672, deer bone awl. *m*, 1–21671, deer bone awl. Dimensions: *b*, height 2.25 inches, diameters 4.5 and 3.25 inches; *e*, length 3.25 inches; *f*, height 1.5, diameter 3.5 inches; *g*, length 7.75 inches. Others to scale.

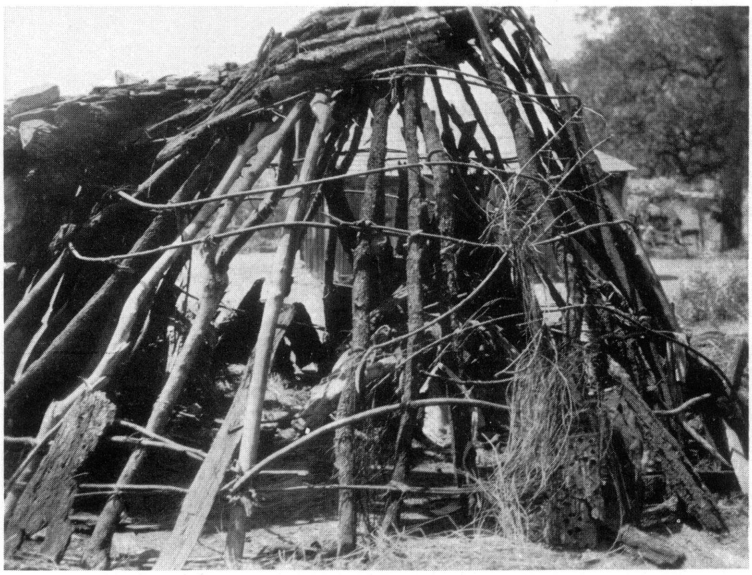
Plate 16. Making a coiled basket. Dishpan contains water for moistening materials. Photos by T. T. Waterman.

a

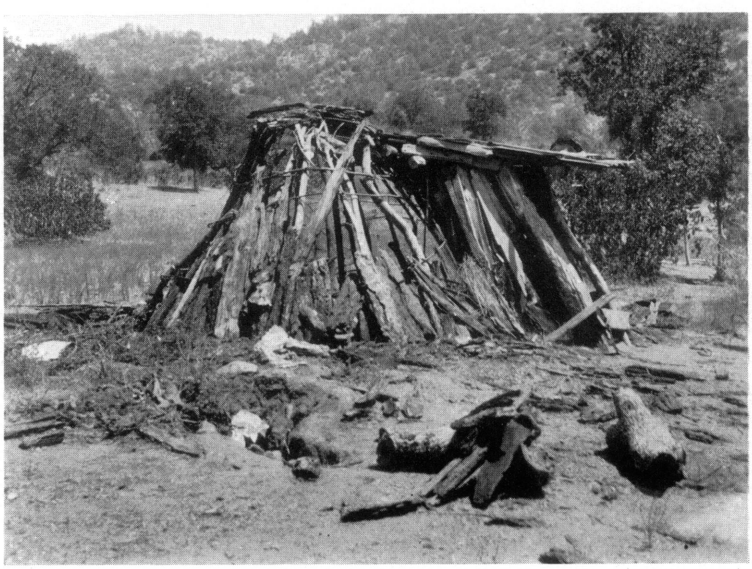
b

c

HAMLET SITES, NORTHFORK MONO



a



b

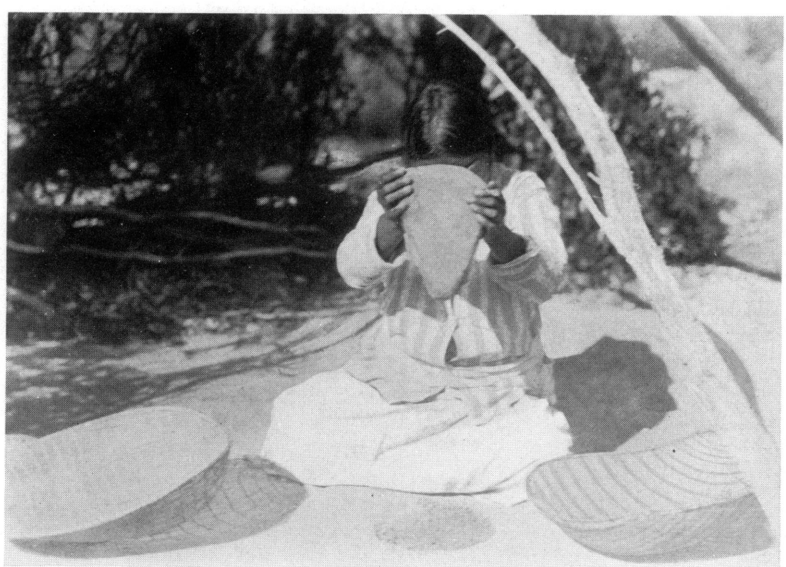
FRAMEWORK AND COMPLETED HUT

a

b

HUT AND BRUSH SHELTER

a



b

ACORN GRANARY AND MANZANITA PULVERIZING

a

b

MANZANITA MEAL TREATMENT

a

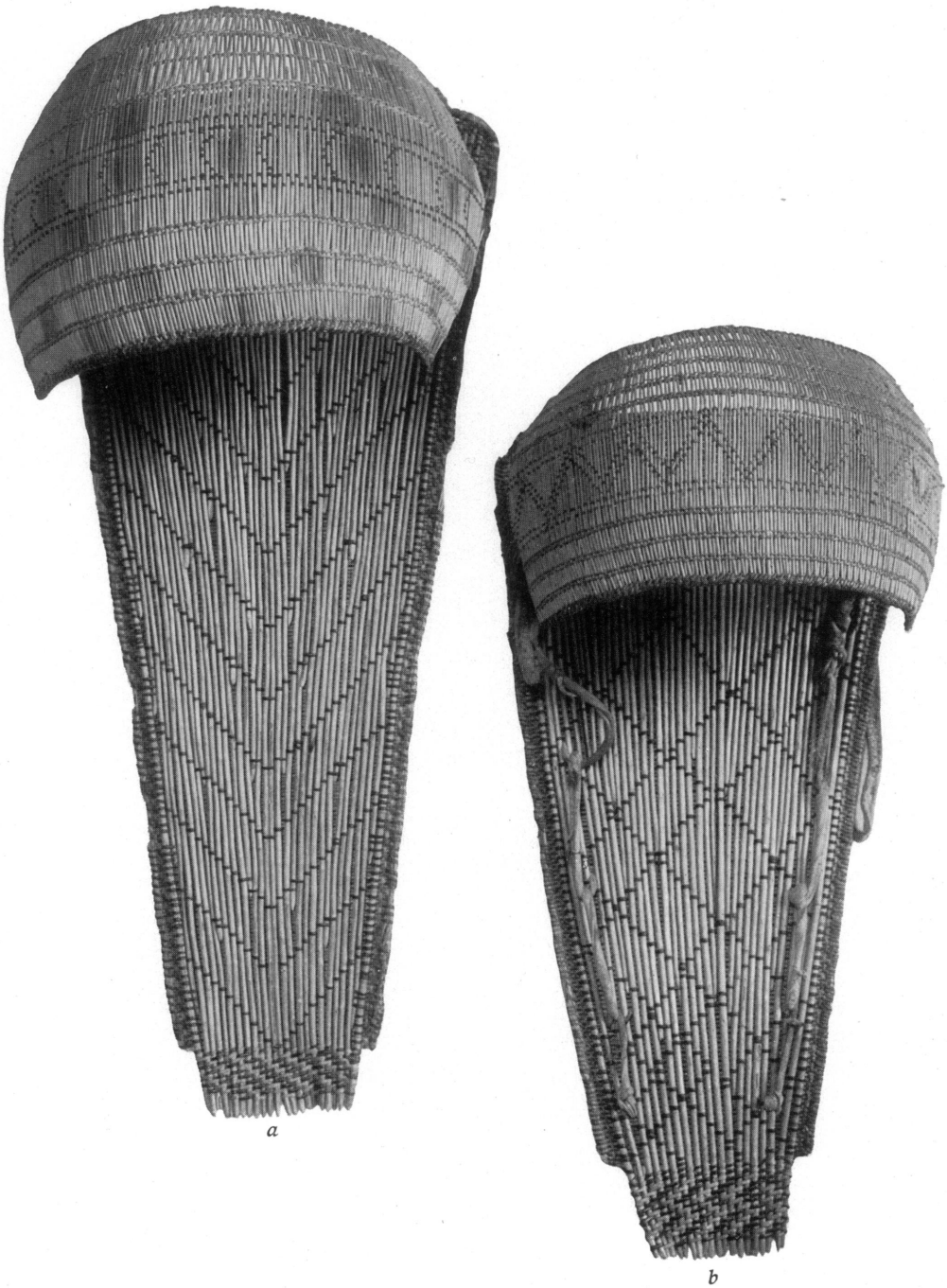
b

COMBING AND ROLLING MILKWEED FIBER

a

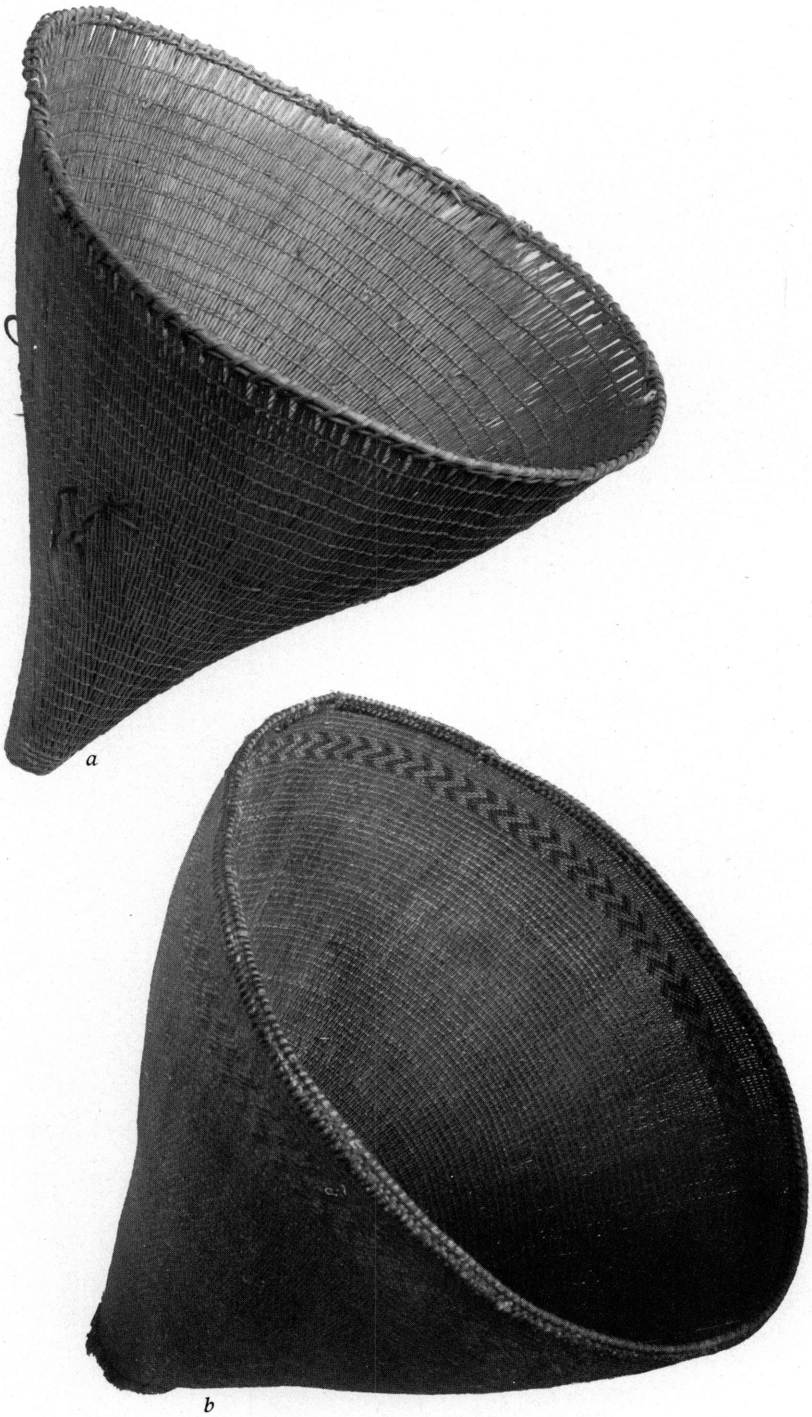
b

STRING TWISTING. CARRYING NET USE.



a *b*

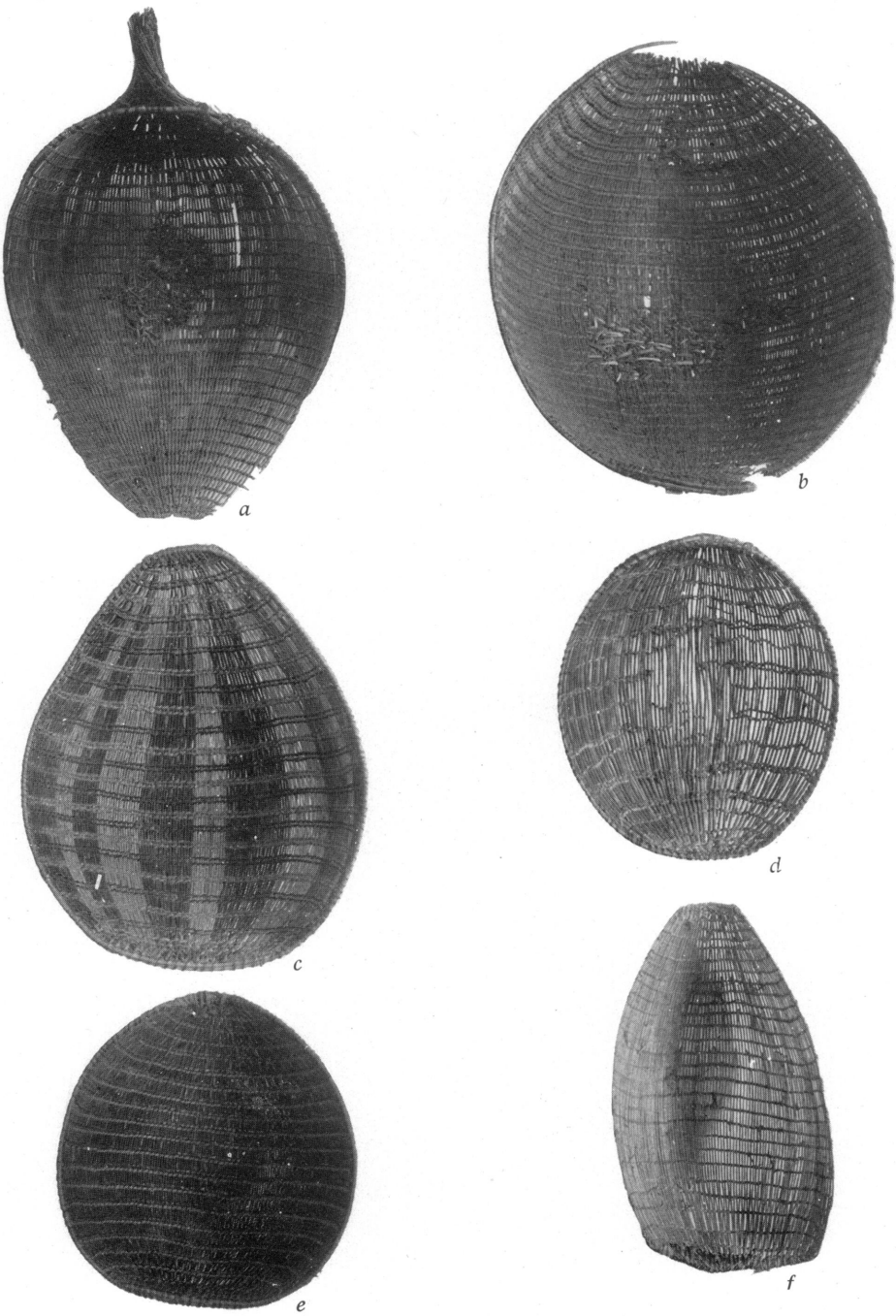
BOY'S AND GIRL'S CRADLES



a

b

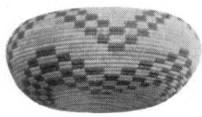
BURDEN BASKETS FOR ACORNS AND SEEDS



WINNOWERS, SEEDBEATER, AND SCOOP

TWINED COOKING BASKETS

a



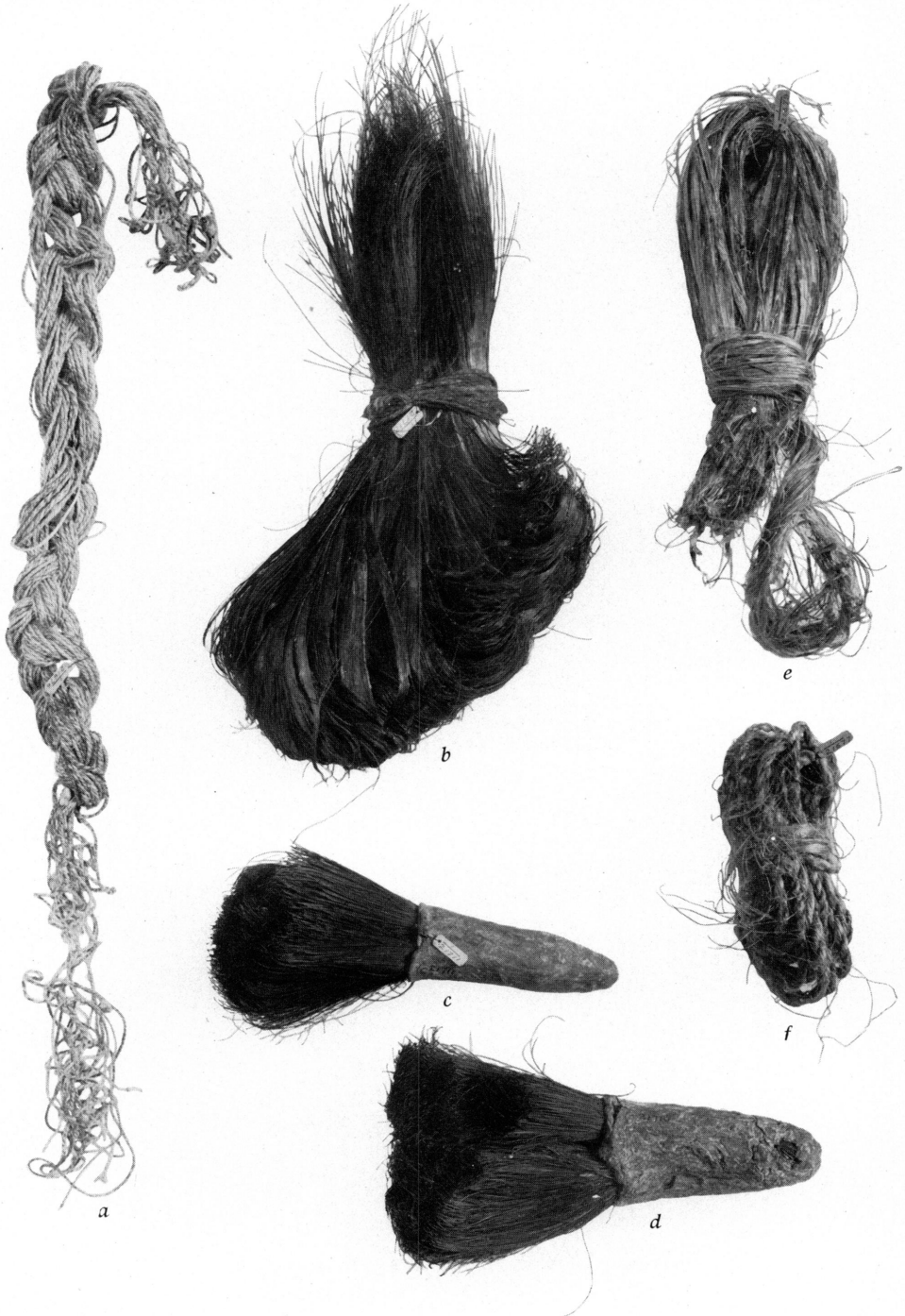
b

c

d

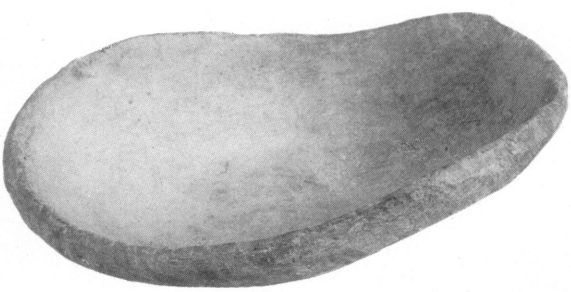
e

COILED BASKETS



STRING, FIBERS, AND BRUSHES

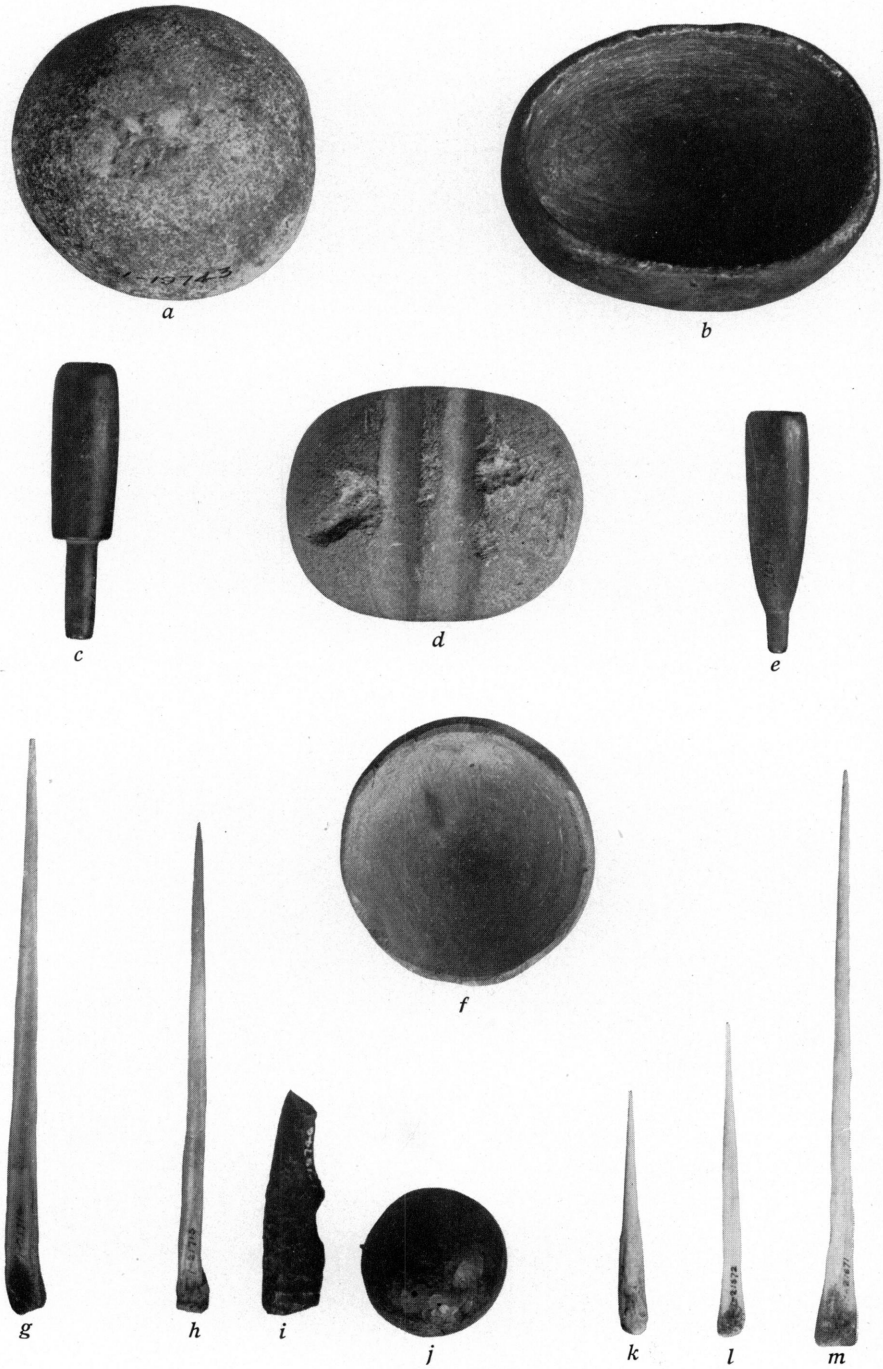
a



b

c

BASKETRY BOTTLE, OAKEN AND STEATITE DISHES



STONE, BONE, AND WOODEN OBJECTS

a

b

MAKING A COILED BASKET

UNIVERSITY OF CALIFORNIA PUBLICATIONS

DEPARTMENT OF ANTHROPOLOGY

The publications dealing with archaeological and ethnological subjects issued under the direction of the Department of Anthropology are sent in exchange for the publications of anthropological departments and museums, and for journals devoted to general anthropology or to archaeology and ethnology. They are for sale at the prices stated in the Catalogue of the Publications of the University of California Press, copies of which will be sent free upon request. Exchanges should be directed to THE EXCHANGE DEPARTMENT, UNIVERSITY LIBRARY, BERKELEY, CALIFORNIA, U.S.A. Orders and remittances should be addressed to the UNIVERSITY OF CALIFORNIA PRESS.

Publications of the University of California Press may be obtained from THE CAMBRIDGE UNIVERSITY PRESS, FETTER LANE, LONDON, E.C. 4, ENGLAND, to which orders originating in Great Britain and Ireland should be sent.

AMERICAN ARCHAEOLOGY AND ETHNOLOGY.—A. L. Kroeber and Robert H. Lowie, Editors. Prices, Volume 1, $4.25; Volumes 2 to 11, inclusive, $3.50 each; from volumes 12–25, $5.00 each; volume 26, $4.50, supplement, 25 cents; volume 27, $2.50; volumes 28, 29, 31, and 32 in progress; volume 30, $4.00. Beginning with volume 20, the titles and prices of separate numbers are given below.

Vol. 20. The Phoebe Apperson Hearst Memorial Volume. xvi + 389 pp, 2 plates, 22 figures in text. December, 1923 ..... 5.00

Vol. 21. 1. The Uhle Collections from Chincha, by A. L. Kroeber and William Duncan Strong. Pp. 1–54, plates 1–24, 27 figures in text.

2. Explorations at Chincha, by Max Uhle. Pp. 55–94, 1 figure in text. Nos. 1 and 2 in one cover. September, 1924 ..... 1.60

3. The Uhle Pottery Collections from Ica, by A. L. Kroeber and William Duncan Strong; with Three Appendices by Max Uhle. Pp. 95–133, plates 25–40, 17 figures in text. December, 1924 ..... .85

4. The Uhle Pottery Collections from Ancon, by William Duncan Strong. Pp. 135–190, plates 41–49, 11 figures in text. September, 1925 ..... .90

5. The Uhle Pottery Collections from Moche, by A. L. Kroeber. Pp. 191–234, plates 50–69, 5 figures in text.

6. The Uhle Pottery Collections from Supe, by A. L. Kroeber. Pp. 235–264, plates 70–79. Nos 5 and 6 in one cover. December, 1925 ..... 1.25

7. The Uhle Pottery Collections from Chancay, by A. L. Kroeber. Pp. 265–304, plates 80–90, 26 figures in text. May, 1926 ..... .60

8. The Uhle Pottery Collections from Nieveria, by A. H. Gayton. Pp. 305–329, pls. 91–97, 11 figs. in text. February, 1927 ..... .35

Index, pp. 331–332.

Vol. 22. 1. Wiyot Grammar and Texts, by Gladys A. Reichard. Pp. 1–215, plate 1. June, 1925 ..... 2.75

2. Californian Anthropometry, by Edward Winslow Gifford. Pp. 217–390, plates 2–53, 3 maps. March, 1926 ..... 2.25

3. Washo Texts, by Grace Dangberg. Pp. 391–443. February, 1927 ..... .65

Index, pp. 445–446.

Vol. 23. 1. Archaeology of the Southern San Joaquin Valley, California, by E. W. Gifford and W. Egbert Schenck. Pp. 1–122, plates 1–34, 1 map. May, 1926 ..... 1.50

2. Historic Aboriginal Groups of the California Delta Region, by W. Egbert Schenck. Pp. 123–146, 2 figures in text. November, 1926 ..... .30

3. The Emeryville Shellmound (Final Report), by W. Egbert Schenck. Pp. 147–282, plates 35–54, 8 figures in text, 1 map. November, 1926 ..... 1.75

4. Arrow Release Distributions, by A. L. Kroeber. Pp. 283–296, 1 map. April, 1927 ..... .25

5. Achomawi Geography, by Fred B. Kniffen. Pp. 297–332, plates, 55–59, 1 figure in text, 2 maps. January, 1928 ..... .45

6. Pitch Accent in Hupa, by Pliny Earle Goddard. Pp. 333–338. January, 1928 ..... .25

7. Notes on the Akwa'ala Indians of Lower California, by E. W. Gifford and R. H. Lowie. Pp. 339–352. April, 1928 ..... .25

8. Pottery-Making in the Southwest, by E. W. Gifford. Pp. 353–373, 1 figure in text, 1 map. May, 1928 ..... .25

9. Native Culture in the Southwest, by A. L. Kroeber. Pp. 375–398. July, 1928 ..... .30

10. Dental Pathology of Aboriginal California, by R. W. Leigh. Pp. 399–440, plates 60–67. December, 1928 ..... .50

Index, pp. 441–443.

Vol. 24. 1. The Uhle Pottery Collections from Nazca, by A. H. Gayton and A. L. Kroeber. Pp. 1–46, plates 1–21, 12 figures in text. February, 1927 ..... .60
2. Petroglyphs of California and Adjoining States, by Julian H. Steward. Pp. 47–238, frontispiece (in color) and plates 22–94, 92 figures in text, 49 maps. September 1929 ..... 2.50
3. Yokuts and Western Mono Pottery-Making, by A. H. Gayton. Pp. 239–251, plates 95–102, 2 figures in text, 1 map. September, 1929 ..... .40
4. The Valley Nisenan, by A. L. Kroeber. Pp. 253–290. December, 1929 ..... .50
5. The Bear River Dialect of Athapascan, by Pliny Earle Goddard. Pp. 291–324. December, 1929 ..... .40
6. Peruvian Cumbrous Bowls, by Isabel T. Kelly. Pp. 325–341, 1 figure in text. April 1930 ..... .25
7. The Carver's Art of the Indians of Northwestern California, by Isabel T. Kelly. Pp. 343–360, plates 103–119, 7 figures in text. August, 1930 ..... .40
8. Yokuts-Mono Chiefs and Shamans, by A. H. Gayton. Pp. 361–420. October 1930 ..... .80
9. Yuki Basketry, by Isabel T. Kelly. Pp. 421–444, plates 120–127, 5 figures in text. November 1930 ..... .40

Vol. 25. 1. Lovelock Cave, by Llewellyn L. Loud and M. R. Harrington. Pp. viii + 183, plates 1–68, 25 figures in text. February, 1929 ..... 2.50
2. Mentawei Religious Cult, by Edwin M. Loeb. Pp. 185–247, plates 69–73. February, 1929 ..... .80
3. Tribal Initiations and Secret Societies, by Edwin M. Loeb. Pp. 249–288, 1 map. February, 1929 ..... .50
4. Archaeology of the Northern San Joaquin Valley, by W. Egbert Schenck and Elmer J. Dawson. Pp. 289–413, plates 74–102. September, 1929 ..... 1.55

Vol. 26. Aboriginal Society in Southern California, by William Duncan Strong. x + 358 pp., 7 maps. May 1929 ..... 4.50
Supplement—Author and Title Index, University of California Publications in American Archaeology and Ethnology. Volumes 1–26, 1903–1929. 16 pp. June, 1929 ..... .25

Vol. 27. A Grammar of the Wappo Language, by Paul Radin. viii + 194 pp. November, 1929 ..... 2.50

Vol. 28. 1. Chumash Prehistory, by Ronald L. Olson. Pp. 1–21, 3 figures in text, 1 map. January 1930 ..... .30
2. Textile Periods in Ancient Peru, by Lila M. O'Neale and A. L. Kroeber. Pp. 23–56, plates 1–48, 13 figures in text. March, 1930 ..... .60
3. The Ghost Dance of 1870 in South-Central California, by A. H. Gayton. Pp. 57–82, 2 figures in text. March 1930 ..... .35
4. Ethnography of the Yuma Indians, by C. Daryll Forde. Pp. 83–278, plates 49–57, 17 figures in text, 2 maps. December 1931 ..... 2.25
5. Wintu Myths, by Cora Du Bois and Dorothy Demetracopoulou. Pp. 279–403. December 1931 ..... 1.25

Vol. 29. 1. Archaeology of the Dalles-Deschutes Region, by W. Duncan Strong, W. Egbert Schenck, and Julian H. Steward. Pp. viii + 1–154, plates 1–28, 22 figures in text, 1 map. November 1930 ..... 2.00
2. A Crow Text, with Grammatical Notes, by Robert H. Lowie. Pp. 155–175. December 1930 ..... .30
3. The Southeastern Yavapai, by E. W. Gifford. Pp. 177–252, plates 29–35, 1 figure in text, 1 map. February 1932 ..... 1.25
4. The Patwin and their Neighbors, by A. L. Kroeber. Pp. 253–423, 6 figures in text, 1 map. February 1932 ..... 1.60

Vol. 30. Klamath Ethnography, by Leslie Spier. Pp. x + 1–338, 22 figures in text. December, 1930 ..... 4.00

Vol. 31. 1. Mexican Kinship Terms, by Paul Radin. Pp. 1–14. August 1931 ..... .25
2. The Northfork Mono, by E. W. Gifford. Pp. 15–65, plates 1–6, 3 figures in text, 1 map. April 1932 ..... 1.25

Vol. 32. 1. Yurok-Karok Basket Weavers, by Lila M. O'Neale. Pp. 1–184, plates 1–58, 36 figures in text. February 1932 ..... 4.50
2. Primitive Concepts of Disease, by Forrest E. Clements. Pp. 185–252, 4 maps. February 1932 ..... .75

Vol. 33. 1. The Western Kuksu Cult, by E. M. Loeb. Pp. 1–137. March 1932 ..... 1.50