
Indian Tribes of Sequoia National Park Region

By Julian H. Steward



U. S. Department of the Interior
NATIONAL PARK SERVICE
FIELD DIVISION OF EDUCATION

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Introductory Note.

A statement of the ethnography of the tribes of Sequoia National Park has been requested as a working basis for a museum exhibit. There are four tribes whose customs and artifacts are of vital importance to the story. Many of the data on these tribes are unpublished and could be had only through personal contact with the investigators who are, at the present, living in the east. An urgent request for this story, however, has come, giving only a fraction of the time necessary to prepare a properly detailed account.

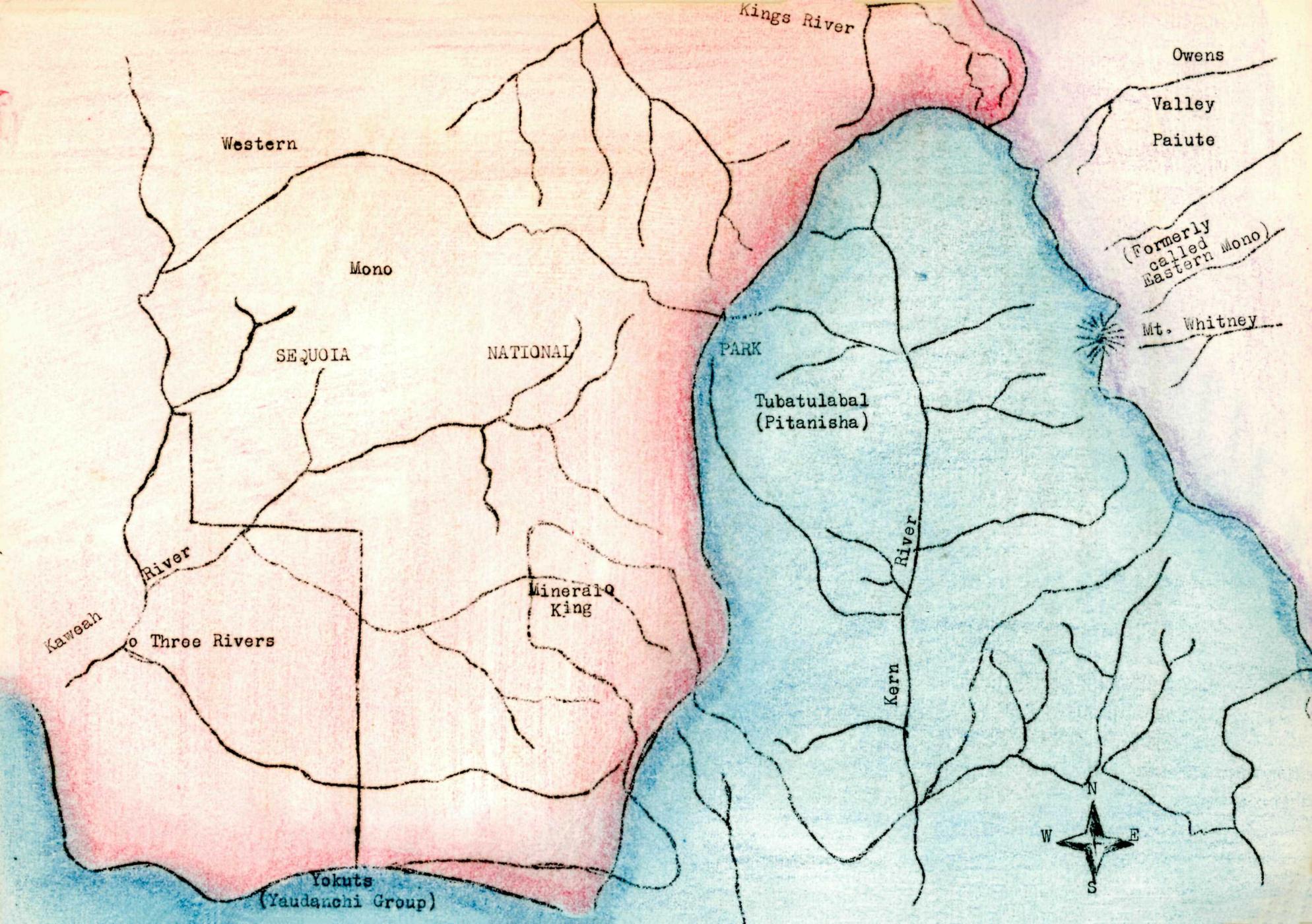
Further information of value can be secured from Dr. Hune Gayton (Mrs. Leslie Spier) and Dr. and Mrs. Carl Vogelin, to be reached through the graduate School, Yale University, New Haven, Conn., and Mr. Theodore Mc Cown and the author, to be reached through the Department of Anthropology, University of California, Berkeley, California.

The following paper embodies the outstanding facts now available about these tribes. It is necessarily incomplete and lacking in detail. Moreover, there has been time to offer only the barest hints concerning specific museum devices that could be employed in the interpretation of these stories to the public.

INDIAN TRIBES OF SEQUOIA NATIONAL PARK REGION

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Kings River

Owens Valley
Paiute

Western

Mono

(Formerly called Eastern Mono)

SEQUOIA NATIONAL

Mt. Whitney

PARK

Tubatulabal (Pitanisha)

River

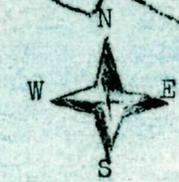
Kern River

Kaweah

Mineral King

Three Rivers

Yokuts (Yaudanchi Group)



THE INDIAN TRIBES OF THE SEQUOIA NATIONAL PARK REGION.

Tribal Distributions.

In native times, the region now included in Sequoia National Park was given over to two distinctive Indian groups, the Western Mono and the Tubatulabal. The Balwisha division of the Shoshonean-speaking Western Mono inhabited the upper Kaweah River drainage, including the part which lies in the western portion of the park. The Western Mono occurred also to the north of the park, occupying the western slope of the Sierra Nevada mountains between their summit and western foothills. In the foothills they abut the San Joaquin Valley and foothill Yokuts. The eastern portion of Sequoia park, that is, the Kern River drainage, falls in the territory of the Shoshonean-speaking Tubatulabal or Pitanisha, who are, like the Western Mono, a mountain people, and who occupied the southern Sierra Nevada Mountains west of their summit.

East of the water-shed of the Sierra is a third Shoshonean-speaking group, the Owens Valley Paiute (formerly called the Eastern Mono.). Their territory adjoins that of the Western Mono and Tubatulabal at the summit of the Sierra, that is, at the eastern boundary of Sequoia Park, but also includes a large portion of eastern California to the north. South and east of the Western Mono were the Yokuts, a large group of people distributed mainly in the flat San Joaquin Valley but locally running up slightly into the Sierra foothills, and speaking a language which bears no relation to Shoshonean, but which belongs to the great west coast stock, the Penutian.

Sequoia National Park, then, was permanently occupied in its western half by the Balwisha group of the Western Mono, while its eastern half was summer hunting territory of the Tubatulabal. Individuals from the Owens Valley Paiute to the east and the Yokuts to the west undoubtedly visited the country from time to time. Also, many specimens of Owens Valley or San Joaquin valley origin were traded through this region by the several Indian trails that crossed the Sierra in this latitude. But a collection of Yokuts specimens cannot be said to characterize the industry of these mountain people any more than would a collection of Paiute specimens.

Museum Exposition of California Indian Life.

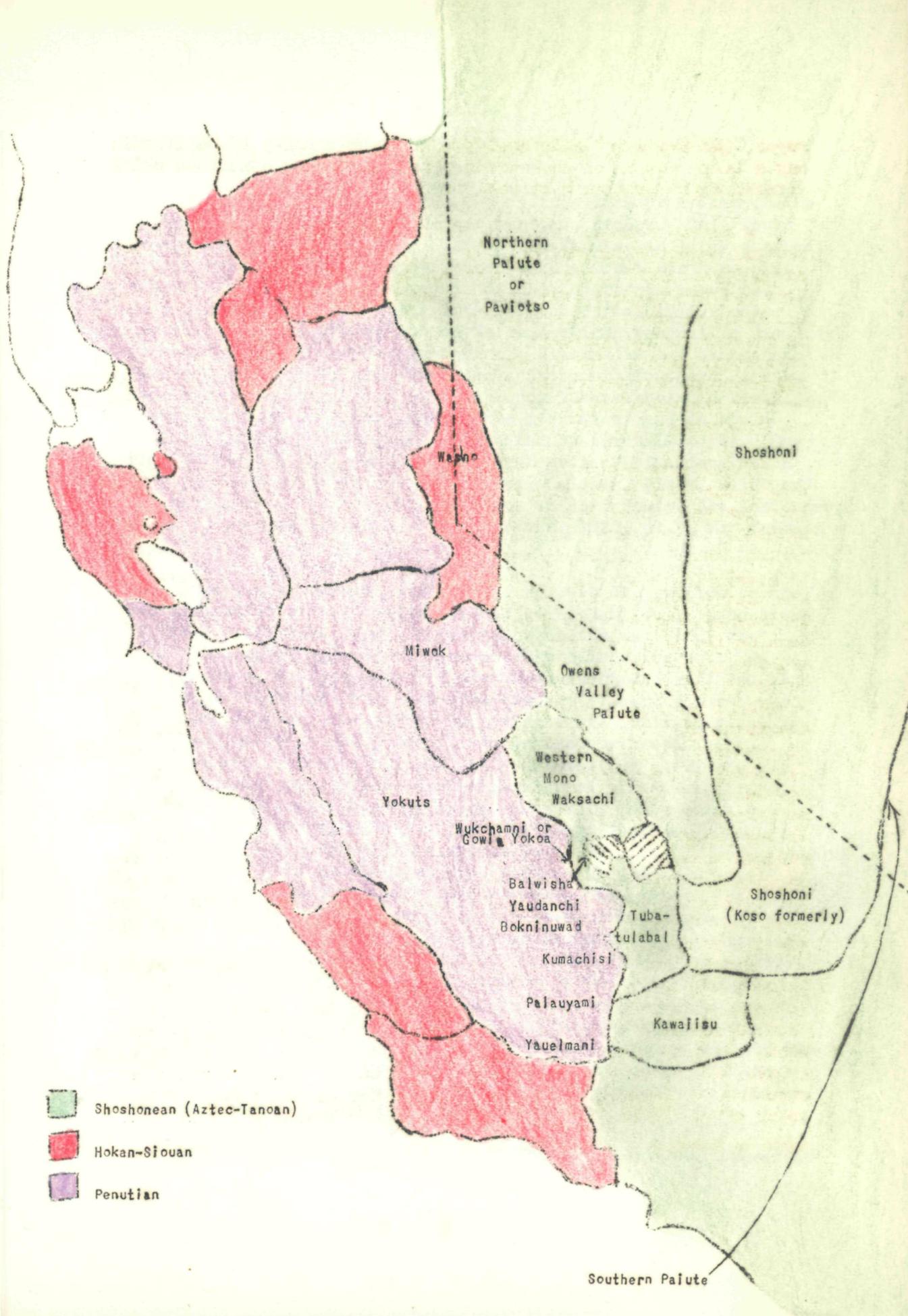
In addition to the references to illustrations given in this

paper, the Museum of Anthropology of the University of California has a large number of photographs from the tribes concerned which furnish ample data on most topics.

A museum representation of Indians at Sequoia park faces several complicating factors, but has, at the same time, the opportunity to tell a story of unusual interest. If only the Western Mono and Tubatulabal, who are natives to the park, were represented, we should be able to expound a more or less typical Californian but in general rather backward people and we should probably have to be content with a limited number and variety of museum specimens. If, however, the tribes to the east and west are given consideration, we have the opportunity to elucidate facts of the utmost importance and interest.

The Sierra Nevada range forms a sharp division between two native American cultural and geographical provinces. To the east lies the arid Great Basin, harboring the primitive Shoshonean-speaking tribes, who in their struggle, to live in an extremely inhospitable environment, were equipped with only the most primitive cultural devices, and who, by virtue of their backwardness, are closer than almost any other tribes in America to the first Indians of 20,000 or 25,000 years ago. Specific traits, of course, such as the bow, dog, metate, rabbit skin blanket, and basketry are advanced, but in general their culture is impoverished as compared with any other American Indians. To the west of the Sierra Nevada lies the California province, affording a greater natural abundance of food and supporting cultures which, though primitive as compared with the agricultural tribes of the Southwest, or salmon fishing peoples of the Northwest Coast, had achieved their own special solutions of the problem of living, and had built up something of a distinctive social and religious culture. The Owens Valley Paiute largely typify the Great Basin tribes; the Yokuts possess most of the distinctive traits of the California tribes. The Western Mono and Tubatulabal are in large measure intermediate in development, leaning somewhat toward California. A museum exposition of these cultural provinces, therefore, should bring out the following facts:

First, the Sierra Nevada mountains constitute a major barrier between the two geographical and cultural provinces. In order to indicate this forcibly, a map including the full extent of the Great Basin into Utah, and of the whole of California should be used. On this would be entered the major cultural and geographical areas. Attention should also be called to the relief model constructed for Sequoia Park, for it indicates the magnitude of the crest of the Sierra as a geographical and cultural barrier.



Northern
Paiute
or
Paviotso

Shoshoni

Wapoto

Miwok

Owens
Valley
Paiute

Western
Mono
Waksachi

Yokuts

Wukchamni or
Gowi & Yokoa

Balwisha
Yaudanchi
Bokninuwad

Tuba-
tulabal

Shoshoni
(Koso formerly)

Kumachisi

Palauyami

Kawajisu

Yauelmani

- Shoshonean (Aztec-Tanoan)
- Hoka-Siouan
- Penutian

Southern Paiute

Second, a map should show the distribution of tribes in the region, indicating also the major language groups. This would bring out the fact that the Sierras constitute, in large measure, a boundary between the Shoshonean-speaking Great Basin peoples and the varied linguistic groups of the California province. Such a map would be of local interest and certainly far more important than a general map of North American Linguistic families. It would show that to the east of the Sierra lie the Shoshonean speaking Northern Paiute (Paviotso), Shoshoni, Southern Paiute, and Chemehuevi, while the Western Mono, Tubatulabal and Kawaiisu, also Shoshonean-speaking, are in the mountains; and it would show that California proper is occupied by several stocks. One of the most important of these is the Penutian-Lutuamian, which includes the centrally located Yokuts, Salinan, Miwok, Maidu and Wintun. Another is the Hokan-Siouan, which includes the Costoan, Shastan, Chumash and Pomo. (See Kroeber, 1925, pl. 1 for further details.)

Third, the cultural differences between the peoples on the opposite sides of the Sierras should be brought out. Exposition of these differences would first emphasize the fact that the natural basis of life in the two provinces is different. In California wild foods were relatively abundant and sufficed to support a large population, in the absence of agriculture. No one food, however, formed the hub of economic activities as did the bison in the Plains, the salmon on the Northwest Coast, maize in the Southwest. Instead, everything was utilized, all kinds of game being taken in a variety of ways, and all edible seeds being gathered and roots dug. The relatively great reliance upon roots has merited the California Indians generally the popular but entirely meaningless name, "Diggers". If any one thing served as a specialized food and required specialized techniques, it was the acorn, which became the center of a very interesting complex. In contrast to the relative abundance of food in California, the Great Basin afforded so little that life was a continual struggle. As in California, everything possible was utilized, but the pine nut, growing on the desert ranges, supplanted the acorn as the staple food and required its own series of techniques for gathering, storing, and preparation. These and other differences between the two provinces will be explained below. In a museum exposition of these points, there should be, so far as possible, a comparative series of illustrations or actual objects of the two cultures.

In this connection, a map should show the cultural sub-areas

of California (see Kroeber, 1925, figs. 73 and 74, pp. 903, 916.), making it plain that the Yokuts-western Mono culture belongs with the south central area, which is set off from the Northwest salmon culture (which is allied with the Northwest Coast), and the southern California sub-area which is somewhat distinctive, somewhat allied with the Southwest. The museum should also explain the interesting fact that as California is extremely varied topographically and in natural resources, so its native inhabitants had more than ordinarily varied arts and industries, quite different modes of life being found within a relatively small region.

A fourth point that should be brought out is that native trade was carried on across the Sierra Nevada, definite trails being used and a considerable variety of objects being transported. Trails, campsites, etc., could be designated on maps. Such information as is available on this subject will be indicated below.

The Tubatulabal

The degree to which the Tubatulabal language diverges from its Shoshonean kin shows that these people have been more or less isolated in their mountain home for a considerable period. Nevertheless, they were on friendly terms with their various neighbors on the western slope of the Sierra whom they often visited, and even joined during certain seasons. The legend that they raided the peaceable valley Yokuts from time to time is therefore pure fancy, without foundation.

The home of the Tubatulabal lay on the main and South Branches of the Kern River, their territory thus extending up the former to its headwaters in Sequoia Park. This was, however, too high to be settled permanently and served as no more than summer hunting territory. It is likely that Western Mono and possibly some Yokuts also visited this section, so that its assignment to the Tubatulabal follows mainly from its greater accessibility to them.

Tubatulabal is a Shoshonean term meaning "pine nut eaters".

Their former population may have numbered 1,000. In 1925 there were 100 to 150.

There is nothing published on the culture of the Tubatulabal except a few paragraphs in Kroeber's "Handbook of the Indians of

California". A more complete ethnology will be available when Vogelín's data are published.

The Western Mono

The Western Mono territory comprises the western slope of the Sierra from the summit of the water shed to the lower country where they adjoined the foothill Yokuts, and between the Fresno and Tule Rivers. (For type, see Gayton, 1929-a, plates) The northern side of the Kaweah River was occupied by the waksachi band, the southern side, by the Balwisha (Patwisha) band. Most of the season was naturally spent in the lower hills, as the high Sierra are accessible only in the summer.

Linguistically, they are close to the Owens Valley Paiute, varying from them chiefly as a dialect. This implies an ultimate eastern origin, indicating that they, like the Tubatulabal, are simply a Shoshonean people who, at some time in the past, pushed across the crest of the Sierra.

The Western Mono formerly probably numbered about 2,000; today they have about half that number. Like other remotely located tribes in California, their population has suffered less from the inroads of civilization than that of the formerly far more numerous but accessible peoples, such as the Yokuts.

Very little information is available on the Western Mono near Sequoia Park, except that contained in Gayton, 1929, 1930-a and 1930-b. The Northfork Mono, farther to the north, have been rather completely described in Gifford, 1932. The remaining Western Mono will be fully described when Gayton's researches are published.

The Yokuts.^{1.}

The Yokuts occupy the greater part of the San Joaquin valley and the lower foothills of the Sierra to the east. (For type, see Kroeber, 1925, pl. 32 b,e.) They are subdivided into tribes, each numbering two to three hundred persons, and having a tribal name, dialect, and definite territory. The names are usually

1. (Yokuts is the singular form.)

meaningless and end either in amni or a derivative of this or in chi. Neither the Yokuts nor their neighbors should be called "Mariposans".

The foothill tribes usually occupy smaller areas than those of the valley and are more distinctive in dialects. The tribe nearest Sequoia Park is the Yaudanchi. Of them, Kroeber says, (1825:479-480):

"The Yaudanchi or Yaulanchi (plural Yauedchani or Yawil-chini), also called Nutaa (plural Nuchawayi), 'easterners, uplanders'-- whence Garces's generic designation of the Yokuts as Noche-- held Tule River in the foothills, especially the North and Middle Forks. One of their principal winter quarters was Shawahtau above Springville. Near by was Ukunui ('drink'); and house pits at Uchiyingetau ('markings') at the painted rocks, and at Tungoshud ('gate') near the agency, on Tule River Reservation, hark back either to Yaudanchi or Bokninuwad occupancy. In spring and early summer they gathered seeds in the vicinity of Lindsay; in late summer or fall they met with other tribes in Koyeti territory about Porterville for fishing and elk hunting. In dry and hungry seasons, the southern end of Tulare Lake would be frequented in search of tule roots. All the Yokuts tribes from the Kawaeh River south, except perhaps the Wowol and Chunut of Tulare Lake, and at least most of the adjacent Shoshoneans, were friendly and appear to have ranged over one another's territory amicably and almost at will ..."

To the west of Sequoia Park were the Wukchamni Yokuts of whom Kroeber (p.480) says:

"The Wukchamni, Wikchamni, or Wikchomni (plural Wukachmina or Wikatsmina), whose name was a byword for "glutton", and who may be the Buesanet of Graces, wintered on Kawaeh River near Lemon Cove and Iron Bridge and frequented the adjacent hills in summer."

The Yokuts have been relatively completely described by Kroeber in the "Handbook of the Indians of California". More material will be available when Gayton's researches are published.

The Owens Valley Paiute.

The Owens Valley Paiute belong to an extensive group known

generically as the Northern Paiute (in western Nevada as the Paviotso), which extends through eastern California and western Nevada into eastern Oregon. (For types, see Steward, 1933, plates, 1, 5, 8). The Northern Paiute are subdivided into local groups of several hundred individuals each. Each group or tribe owns and controls definitely demarked sections of territory and varies slightly in dialect from the others.

Within these tribal territories were a number of villages. In winter the people lived in Owens Valley or at the edge of the timber in the Inyo mountains where pinenuts were stored. Spring and summer brought considerable wandering within tribal territory in search of wild seeds and game. In the fall there was a communal hunt, dances, and pinenut harvest.

There was a good deal of intercourse with the tribes west of the Sierra during the summer, many trips being made for the purpose of trade. Inter-marriage with these tribes was not infrequent. Thus, there was an exchange of ideas which tended to level down the effect of environment. A general description of the Owens Valley Paiute will be found in Steward, 1933.

Subsistence.

In the matter of subsistence interesting and significant differences exist between the peoples of the western and eastern slopes of the Sierra. Those Yokuts who lived within the flats of the San Joaquin valley are of no great moment in this connection, for their subsistence exhibits many features which are not generally representative of California nor characteristic of those tribes which are of interest from the point of view of Sequoia National Park. Of far greater importance to museum exposition is the food getting activities of the foothill Yokuts, western Mono, and Tubatulabal who, living in a region which abounded in the acorn, made use of this food in a typically California manner, and the Owens Valley Paiute, who, living in the arid Great Basin, utilized the pine nut in characteristic Shoshonean manner. Therefore the concern of the museum should be to point out that the peoples on both sides of the Sierras were non-agricultural, seed gatherers who specialized in utilizing those native species which were most abundant. In each case a complex or set of practices developed around this species.

Among the Yokuts and no doubt also the Western Mono and Tubatulabal, the manner of gathering and preparing acorns was also extended to the buckeye (*Aesculus*) and probably to several other plants. They were collected in conical baskets, stored in large elevated basketry granaries (See Kroeber, 1925, pl. 36 for a similar Miwok granary and Gifford, 1932, p.20-1, and plate 4-a for a Northfork Mono Granary) and prepared by a method of leaching. The nuts were broken and soaked for a few days, then crushed with pestle. For this, the bedrock mortar and occasionally the wooden mortar with a counter-sunk pit was used (for photos of these see Kroeber, 1925, plate 45, and Gifford, plate 3-b, illustrating the sun shade) The poison or bitter was extracted by lining a crater of sand with evergreen boughs, filling it with the ground nuts, then pouring hot water through ten times. This process for the Northfork Mono is described by Gifford, 1932, pp. 21-2. It was then boiled into mush, being placed in a pottery or possibly steatite vessel, stirred with a looped stick (illustrations of looped stick, Kroeber, 1925, fig. 38) and heated with hot stones. Or it was made into a kind of loaf; or boiled with other ingredients, such as seeds or meats. (Kroeber, 1925:527-814-5).

The Owens Valley Paiute gathered pinenuts (*Pinus monophylla*) in conical carrying baskets after beating them off the trees with poles. These were stored in brush lined pits. Sometimes they were roasted in the cones or beaten out and ground on a flat slab (metate) with a rubbing stone (mano or muller). (The metate is typical of the Great Basin and Southwest, the mortar and pestle of California west of the Sierra. A few mortars may be found in Owens Valley and more in Death Valley.) The seeds were then winnowed with a flat winnowing basket. Sometimes they were parched by shaking in a winnowing basket with a few coals. They were generally cooked in a pot with other seeds and meats into soup or were ground after roasting and eaten as flour. The Owens Valley people had virtually no acorns except those secured through trade. The western Sierra tribes frequently received pinenuts in trade. Steward, 1933:241-2)

In addition to these, all peoples in the vicinity of Sequoia Park used every other edible plant. Seeds were gathered on both sides of the Sierras by beating with a seed beater into tightly woven conical carrying baskets, then ground, winnowed, and variously cooked. These included grasses, sages, compositae, berries, etc. For a list of these and their uses among the Owens Valley Paiute, see Steward, 1933:242-246. Roots were dug with the practically universal digging stick, which was made, among the Owens Valley Paiute, of mountain mahogany (*Cercocarpus*).

The usual treatment of these foods among both peoples involved leaching, parching and boiling. (See Kroeber, 1925: 527, 814-5). The metate was rarely used by the Yokuts. (See illustration, Kroeber, 1925, pl. 66, for Northfork Mono treatment of manzanita berries, see Gifford, 1932, pp 22-3 and plates 4, 5.)

The tribes in the vicinity of Sequoia Park were also practically omnivorous with respect to animal foods. The Yokuts ate all large mammals, excepting the dog, which was strictly tabu here, although generally eaten in northern California, the grizzly bear, and coyote. They even relished the skunk when properly killed. They also ate all small mammals, grasshoppers, ants, etc., but drew the line at reptiles, which weretabu. (Kroeber, 1925:526) The Western Mono and Tubatulabal probably shared these customs.

The Yokuts took deer by nooses set in trails over pits, or hunters stalked them in deer headdresses. Antelope, and frequently elk, were taken by surrounds of people on foot. Pigeons were snared with decoys and fish speared from booths which concealed the hunter. Eagles were attracted by decoys and captured with nooses. Fish were taken with basket scoops or were stupified with ground buckeye nuts or with crushed leaves of some species, and removed from the stream with a dip net. (Kroeber, 1925:528-530.)

The Owens Valley Paiute stalked deer in disguise, used a surround with people, trained dogs, and sometimes fired brush. Mountain sheep and antelope were taken by driving into corrals or between rows of rockpiles and hunters, or in narrow canyons. Bear were tabu, being said to resemble human beings. A very characteristic Great Basin hunt was the rabbit drive, in which all the men, women, and children at the large fall gatherings went out equipped with sticks, bows, and long nets about three feet high. They placed the nets in a huge semi-circle, end to end (each was 100 feet or more long), the horde of people driving the rabbits into it. Small mammals were taken with traps. Water fowl were shot from blinds. Fish were taken by diverting the stream; by stupifying, using crushed slim solomon (Smilacina sessilifolia Nutt), by shooting with arrows, by spearing, by means of bone hooks, by means of scoop baskets, or by nets, made of Indian hemp, Apocynum cannabinum L. A general tabu on dogs, coyotes, buzzards, eagles, and hawks prevailed. Other species eaten were the caterpillar of Coloradia pandora Blake,

the larvae of Ephydra hians Say., breeding in alkaline lakes, snakes, lizards, etc., and such insects as ants and grasshoppers. Even horses, when first introduced, were eaten. (For details see Steward, 1933:250-257.)

It is suggested that a museum exposition of subsistence bring out two facts. First, that peoples on both sides of the Sierra lacked any one food that was all-important, as was the bison to the Plains, the salmon to the Northwest coast, etc., and that they were therefore largely omniverous, eating all kind of foods secured by a great variety of means. Pictorial displays should thus represent such things as the very important digging stick in use, deer hunting by stalking, seed gathering by means of the seed beater and conical basket. For the Great Basin people a sketch could show the communal rabbit drive or possibly an antelope or mountain sheep drive. Second, it should be brought out that the acorn was most important to the western people, the pinenut to the eastern. The process involved in each case should be explained. The acorn complex would portray through artifacts, and sketches or photographs, the gathering, storing, grinding (in mortars), leaching, and cooking. The pinenut process would similarly show gathering, storing, grinding on a metate, roasting or parching in a basket, and cooking.

In connection with trans-Sierran trade, it could be brought out that salt was greatly coveted by the mountain people and therefore constituted an important article of trade from the Paiute and Shoshoni to the east.

Weapons.

The bow among the Yokuts took two forms, the self bow and the sinew-backed bow, both made of mountain cedar. Arrows were both with and without foreshafts, and were plain tipped or equipped with stone points according to uses. Arrow straighteners are bun-shaped blocks of soft stone, bearing transverse grooves. (Kroeber 1925,1530-1.) Owens Valley Paiute bows were very similar, being self or plain and made of juniper (Juniperus occidentalis ?) or birch (Betula fontinalis Sarg.) Arrows were almost always of cane equipped with a hardwood foreshaft and a variety of points according to the use. (See Steward, 1933, ;; 259-263 for description and fig. 3 and plate 3 for illustrations. For illustration of a Paiute chipping an arrow point, see Steward, plate 5-f.) The arrow straightener was like that of the Yokuts (Steward, 1925, plate 4, f, g). The quiver was a sack of tanned buckskin for hunting, of gray fox fur for war. (Steward, 1933:263.)

Spears were used by both people for fish. Slings were used incidentally, probably chiefly as toys.

Houses.

Apparently several types of houses were built by the hill Yokuts adjoining Sequoia Park. One was the conical shaped, sewed winter house. These were placed in rows. Another was a larger, ridged house with two fireplaces and a door at each end. A third was a conical, bark house. Smaller structures covered with brush or bark were built when travelling or when in the hills in summer. These are somewhat described in Kroeber, 1925:522, and Gayton, 1930-a:366-6. Gayton also gives village arrangement. The Owens Valley Paiute used several types of houses. When in the mountains the house was somewhat tent-shaped, had a ridge pole, and was covered with boughs. The regular winter house was semi-subterranean, conical, and covered with thatch of grass or mats of tules and sometimes with a layer of earth. These people as well as the Yokuts used summer sun shades consisting of four poles with a roof of boughs. In Owens Valley, a dome shaped hut of willows was also used in summer. (Steward, 1933:263-5 and plate 3.)

The houses of the Northfork Mono probably typify those of the tribes near Sequoia Park. These are described by Gifford, 1932, pp. 20-21 and excellently illustrated in plates 2 and 3.

The sweat house on both sides of the Sierra was semi-subterranean, earth covered, and served merely for sweating and as a men's dormitory. (For descriptions, illustrations and details, see Kroeber, 1925:522-23; Steward, 1933, 265-6, fig. 4 and plate 4; Gifford, 1932:20.)

Clothing.

Yokuts men wrapped a deer skin around their loins or went naked. Girls after puberty wore a two piece skirt of willow bark. Both sexes wore rabbit skin blankets for protection against cold and rain and as bed coverings. Moccasins of deer or elk skin of simple patterns were worn when there was need. Rude sandals of bear fur have been reported. Women wore their hair long; for men it was variable. Women pierced their nose septums for bone ornaments. Face tatboing (see illustrations, Kroeber 1925; figs

45-46) was practised more by women than by men. (Kroeber, 1925: 519-520.)

Owens Valley Paiute men wore buckskin shirts and pants (possibly the latter are not aboriginal) or simply buckskin breach-clouts, or girded themselves with an untrimmed buckskin. Women wore nothing above the waist, but buckskin dresses below. Both wore moccasins when travelling, and rabbit skin blankets as a cape for protection against the weather. Women allowed their hair to hang loosely from a part in the middle which was sometimes painted red. Men's coiffure varied. Tattooing was not practised, but the face was painted in a variety of ways. (Steward, 1933:274-5, fig. 8 for face paint.)

For sewing and basket making the Yokuts used bone awls (See illus. Kroeber, 1925:806.) Owens Valley Paiutes used cactus thorns.

Basketry.

This is one of the most characteristic arts of California, and it is probably that a museum collection would contain a very large number of specimens. There is danger, however, of giving a disproportionate place to this art in a museum exhibition, conveying the impression that the California Indian did and knew how to do little else than make baskets. Information on Western Mono baskets, except the Northfork group, will remain limited until the publication of Gayton's data. Likewise, the Tubatulabal art must await Vogelin's publications. At present the best description of Yokuts basketry is contained in Kroeber's "Handbook of the Indians of California," 531-4, 819-822, with several illustrations. The Owens Valley Paiute basketry is described in Steward, 1933: 270-274 and illustrated in plates 9 and 10. The Northfork Mono in Gifford, 1932.

Inasmuch as basketry is one of the best known and most widespread of American Indian arts and as it is most highly developed in California, this is an excellent opportunity to accompany a display of specimens by an exposition of the varieties, techniques, and distributions of baskets and their relationship to other kinds of weaving. An exhibition of basketry should first bring out the fact that there are in America three distinctive weaves, the "coil" or "sewed", the "twined" and the wicker and checkerwork. Although the last is the simplest of the three, it does not occur in California, being found largely in the central and eastern portions of the continent where the other two techniques are lacking. A

distribution map, accompanied by sections of diagrammatic weaves could illustrate this broader aspect of basketry in an illuminating manner. The data necessary for such presentation will be found in Mason, 1904. Thomas, 1933, has instructive descriptions of experiments in museum presentation of basketry.

The coiled and twined weaves have slightly different distributions, the latter being limited to the region near the Pacific Coast and therefore being more recent in origin. In central California and among the tribes in the region of Sequoia Park, both weaves are employed, though for basketry containers, coiling is far more characteristic of the tribes of the Great Basin east of the Sierra. (For an excellent photo of a Northfork Mono making a coiled basket, see Gifford, 1932, plate 16-a, b.)

The most distinctive Yokuts basket is coiled, having a flat shoulder, which was formerly often decorated with quail feathers but recently with red worsted, a constricted neck and bore a banded design in red and black. This is sometimes popularly called the "Tulare bottleneck" and is not found outside the Yokuts and their immediate neighbors, including the western Mono and Tubatulabal (Kroeber, 1925:531-2). It is very rare among the Owens Valley Paiute, (Steward, 1933:270-271) being a distinctly south central California form that had not invaded the Great Basin. (For illustrations of this see Kroeber, 1925: plate 50,a.)

Another coiled Yokuts basket is the large, flat tray, decorated generally with bands, and employed for dice throwing and other uses. (Kroeber, 1925:532.) This is another form that did not cross the Sierra.

The characteristic Owens Valley Paiute coiled basket is bowl shaped and bears banded designs in red and black. Sometimes these are oval in shape. (Steward, 1933:270-1, plate 9). The finest of this type are made by a few Shoshoni living in the vicinity of Lone Pine, who nearly equal the Washo in basketry skill. Other Shoshoni to the east and southeast also make excellent specimens. (For Northfork Mono, see Gifford, 1932, plate 12.)

Twined vessels include a number of types. The woman's hat, used largely to protect the head from the carrying band or tumpline, was made by both Yokuts and Owens Valley Paiute and is a characteristically southern California form. (Kroeber, 1925:532) The Owens Valley hat was woven in diagonal twine and was decorated with

banded designs woven in brown, then painted over with black, an unusual method. (Steward, 1933:273, Illustrations, plate 10.)

The large, conical carrying basket, used in gathering food, seeds, etc., and in transportation of various goods, is characteristic of the Great Basin peoples where it is well made and is decorated with banded designs. (Steward, 1933, 272, plate 10.) This was also made by the Yokuts, but the weave is much inferior, being coarser. (Kroeber, 1925:523.) For the Northfork Mono, see Gifford, 1932, plate 9. Another twined basket developed by the Great Basin tribes in conjunction with their use of wild seeds is the flat, fan-shaped, tray-like winnowing basket. (Steward, 1933:272-3, plate 10, Gifford, 1932, plate 10.) This also occurred among the Yokuts but was almost certainly borrowed from the east of the Sierra as it is not general in California. (Kroeber, 1925:523, plate 50-e.) Somewhat like a small winnowing tray but equipped with a handle and of open twine was the seed beater, used by both peoples. (Kroeber, 1925:532, plate 50; Steward, 1933:272 and plate 9c.)

Distinctive of the Great Basin tribes and correlated with their need of transporting water in their arid environment was the pitchcoated, twined water bottle. (Steward, 1933:273 and plate 9-i and Gifford, 1932, plate 14-a.) This was used very little, if at all, by the tribes west of the summit of the Sierra. A distinctive San Joaquin valley basket is that woven crudely of tules, both coiled and twined. (Kroeber, 1925:532-3, plate 50.) The Yokuts also made large baskets to ferry women and children across rivers. (Kroeber, 1925:533.) Practically no detailed information has been published on the basketry of the Tubatulabal, while that of the Western Mono is limited to the Northfork group. In general, the basketry of these two peoples is said to resemble closely that of the southern Yokuts.

For coiled basketry, the Yokuts employed a foundation or warp of a bundle of Epicampes grass, as did most tribes of southern California, and a wrapped or sewed element of woody material which was usually the root fibers of sedge (Carex or Cladium?) for the ground color, Pteridium fern root for the black, and bark of Cercis or redbud for red. (Kroeber, 1925:532.) Mallery, p. 52, adds cedar roots for red, willow roots for white. For red, the Tubatulabal used tree yucca roots instead of Cercis (Kroeber, 1925:608). This was also used by the eastern desert dwelling tribes where available. The Owens Valley Paiute rarely used the grass foundation, but employed instead three (occasionally two) rods of willow (Salix

sessilifolia Nuttall). For the base or ground color, the wrapped element is a willow spint; for the black design, it is fern root or painted inner willow bark; for the red design, it is the root of some aquatic plant or of tree yucca. Twined baskets have the same materials. (Steward, 1933:270-273.)

A recent innovation in Owens Valley basketry, perhaps originating at Mono Lake, is that of covering bowl-shaped vessels with beads.

It is important that a museum exposition of basketry should not indulge the usual white man's fancies as to the meaning of Indian designs. They were not religious or symbolical; they were not pictorial; they did not represent abstract ideas; they did not delineate composite stories. They were merely designs, used primarily for their aesthetic value, and were given names to distinguish them. Such names are "flies", "deer foot", "rattlesnake markings", etc., etc. (Kroeber, 1925:533 has given a number of these with illustrations for the Yokuts. Gifford, 1932, fig. 2, has done the same for the Northfork Mono.)

A museum exposition of basketry designs could also bring out the manner in which basketry technique limits designs to geometric forms, following the illuminating discussion of Holmes, 1888.

Attention should also be called to the fact that among the nonpottery making tribes and to some extent among such poor potters as those under discussion here, boiling was accomplished by lifting hot rocks into water-tight baskets. Basketry also served many other purposes as outlined above. In short, basketry was to the tribes of California and the Great Basin what pottery was to the Southwestern tribes, articles of hide to the bison-hunting Plains tribes, and articles of wood to the Northwest Coast tribes.

Other Weaving.

Nothing in the way of true fabrics was made by any of these tribes. The nearest to it was the rabbit skin blanket, which is of general occurrence throughout California, the Great Basin, and the Southwest. Specimens are now rare, but are more likely to be secured from the desert tribes. In some measure, the tribes west of the Sierra substituted blankets woven of bird skin, but it is not certain to what extent this had taken hold among the

Tubatulabal, Western Mono, and foothill Yokuts. Birds were used to a very limited extent by the Paiute. Making a rabbit skin blanket is described by Steward, 1933:269-270.

String or cord was made by all these people, milkweed fiber generally being employed. For a description with excellent photos of this, see Gifford, 1932, p. 28 and plates 6 and 7.

Belts of glass beads are sometimes woven in Owens Valley, where a bow shaped loom is used.

Pottery.

The pottery of the people in the vicinity of Sequoia Park is of unusual interest because it represents the westernmost occurrence of this art in the general North American pottery area. It is also of interest that a people who were fairly expert at basketry should have taken the pains to carry on this industry. It is unlikely that pottery specimens will be available for a museum collection, but there is little doubt that an aged Western Mono woman could be found in the vicinity of the park who would make a series of specimens for a small consideration. This would have great value to the museum, as it would afford an opportunity to exhibit comparatively two types of containers and to point out the superiority of the weaver's art. It would also be of tremendous value to science, as pottery from this region is exceedingly rare and it is important to preserve as many specimens as possible.

The best description of the Yokuts-Western Mono ceramic ware is that given by Gayton, 1929, whose account is based largely upon the technique of the Western Mono. It is briefly as follows: the clay is dug from a suitable place with a digging stick; carried home; temper seldom added; kneaded; pounded with a pestle; then a pancake of clay with upturned edges moulded; then rings of clay from strips rolled between the hands added until the vessel reaches the required height; scraped with a stick; smoothed with soapstone; allowed to dry thoroughly; baked in a fire in a pit for many hours. After this, many groups, including the Balwisha Western Mono paint the vessel while hot several times with a thin coating of acorn mush to render it waterproof. Small bowls were occasionally modelled from a lump of clay.

The usual form of the Western Mono-Yokuts vessel is a flat bottom with straight, somewhat outsloping sides and slightly in-

curved rim. They range in size from a few inches up to 7 or 8 inches in height, the smaller serving as dippers, medium ones for holding food and soaking basket materials and the largest for cooking. They are reddish grey and undecorated, except for occasional finger nail markings.

(For a detailed description of this, see Gayton, 1929, with excellent illustrations, pls. 95 to 102, also, Kroeber, 1925: 537-8, and plate 51.)

The pottery of the Tubatulabal has not been described, but Kroeber, 1925:608, states that it resembles that of the Yokuts.

Owens Valley Paiute pottery closely resembles that made on the western slope of the Sierra, except that a solution of boiled desert mallow (*Sphaeralcea fremontii* Torr, Jepson) was mixed with the clay and also painted on the dried vessel before firing. Also, as among some of the Western Mono, the clay was ground and sifted before mixing with water. The vessel shapes were like those to the west, but also included some large, more or less spherical cooking vessels. For description in detail and illustration, see Steward, 1933, pp. 266-269 and pl. 5.

Oak and steatite dishes seem also to have been used by the Western Mono. (See Gifford, 1932:25 and plate 14-b, c, 15-b, f.)

Cradles.

The Yokuts used three types of cradles. The first consists of a flat rectangle or trapezoid of basketry, verticle and horizontal rods being lashed together. It is equipped with a hood. (Kroeber, 1925:534, plate 40, h, i, j.) This type, much better made, was used by the Owens Valley Paiute (Steward, 1933:273, plate 8-d and plate 9-a,b). The western Mono (Kroeber, 1925:534), and undoubtedly the Tubatulabal, also used this type. It indicates trans-Sierran diffusion. The second consists of half a dozen sticks lashed across a large wooden fork. This type has a restricted distribution (Kroeber, 534, plate 40-m). The third is presumably related to the first and consists of a mat of twined tules with loops along the edges. (Kroeber, 1925:534, plate 40-g.)

All these tribes indicate the infant's sex by a design on

the hood, a zigzag designating a girl, a row of horizontal dashes a boy. This seems to be of Shoshonean origin.

Musical Instruments.

Among the Yokuts, these included: the split stick, the cocoon rattle, the four-holed flute, but no drums. (Kroeber, 1925:509; for Yokuts flute, see plate 43; for cocoon rattle, fig. 37-a.) The Owens Valley people used a somewhat similar flute made of elderberry (Sambucus mexicana), rattles made either of cocoons, deer's ears, or the split stick, and possibly the musical bow. (Steward, 1933: 277-8. For Paiute doctor's flute see Steward, fig. 9, p. 277.) Were one to go farther afield in the Great Basin he could include the typically Shoshonean notched stick rasp.

Miscellaneous Arts and Implements.

Fire making was accomplished with the widespread fire drill and hearth. In Owens Valley, the former was made of cane. (See Steward, p. 276 and plate 3-a, for a photograph of an Indian using the fire drill).

Paint, glue and knives in Owens Valley are described in Steward, 1933:276-7.

Tobacco.

A species of Nicotiana, which was probably not cultivated, was smoked by the tribes of the western slope of the Sierra. The pipe employed was always tubular, generally being a few inches long, of pottery (see illustrations of Western Mono pipes in Gayton, 1929, pl. 102, and description, p. 246) made in a manner similar to pottery vessels. The Yokuts (Kroeber, 1925:538 and plate 30-c,d) and the Owens Valley Paiute pottery pipes (Steward, 1933:268, 319-320, and plate 4, a-c) resemble those of the Western Mono. Wooden tubular pipes were probably used occasionally by all these people (for Yokuts type see Kroeber, 1925, plate 30-c, d; for Northfork Mono, see Gifford, 1932: plate 15-c,e) while stone (steatite) pipes were less common, probably being employed more often by the shaman. Another form of pipe common to these people is a section of cane. (Kroeber, 1925:538,836-7.)

In addition to smoking, tobacco was chewed with lime by the Tubatulabal (Kroeber, 1925:608) and the Yokuts (ibid., 538.) Tobacco decocted in water was occasionally drunk by the Yokuts (Kroeber, 1925:538) though this may have been semi-religious. The Owens Valley Paiute semi-cultivated Nicotiana attenuata Torr. which was generally smoked by men and chewed by women mixed with burned shells or ashes. (Steward, 1933:319-320.)

Consumption of tobacco among all these people was moderate. It had a number of ceremonial purposes, being used, for instance, by the shaman.

Transportation.

The Yokuts basket for crossing streams has been mentioned under basketry. They, the Tubatulabal, and the Owens Valley Paiute used a tule "balsa", (See Kroeber, 1925:531, 608 for details of this among Yokuts and Tubatulabal, and Steward, 1933:258, for the Owens Valley people.)

Neither dogs nor any other animals were used in native times for transportation. Human carriers among the Yokuts employed the carrying net into which the conical basket or other load could be set. (For an excellent photo of this, see Gifford, 1932, plate 7-b.) Also burdens were carried on the back, a pack strap or tumpline of braided string of milkweed (Asclepias) being slung across the forehead. (Kroeber, 1925: 533-534.) The Owens Valley people used a piece of fish or rabbit net for a carrying net; also a tumpline braided of Amsonia brevifolia Gray or made of buckskin. (For an illustration of this on the conical basket see Steward, 1933: plate 8-b.) The Western Mono used straps of buckskin or braided Fremontica californica Torr., or Cercocarpus betulifolius inner bark and a net woven of milkweed (Asclepias speciosa Torr.) and a species of Gomphocarpus (Steward, 1933:258; Gifford, 1932:28).

Trade.

Owens Valley people traded with the Western Mono and Tubatulabal and occasionally went as far as the Yokuts. They carried, according to their own accounts, pinenuts, larvae of flies (Ephydra hians Say.) breeding in the salt lake, caterpillars (Coloradia pandora Blake), from the mountains, baskets, red and

white paint, and salt. To this list, the western people add tanned deerskins. In exchange they received shell bead money, acorns, manzanita and sow berries, and elderberries, according to their own accounts, while according to the western people they also received baskets and rabbit skin blankets. (Steward, 1933:259-260; Gayton, 1930:59.) The more important trans-sierran routes will be found in Steward, 1933, map 2, and described on pp. 329-330. This includes trails passing through the present Sequoia National Park.

Games.

All the tribes of the Sequoia Park region were inveterate gamblers and it is very probable that a museum collection will contain a number of gaming implements.

Hand game. This is so widely distributed in the west that it is clearly a very ancient pastime. As elsewhere, 4 pieces were employed, being hidden in the hand. The Owens Valley people used 8 counters. The Yokuts made the gaming pieces of wood, bone, or cane, the Great Basin Shoshoneans generally of bone, preferably swan. (For description of method of play and details, see Kroeber, 1925:539 and Steward, plate 6-d. For an illustration of Yokuts hand game and counters, see Culin, fig. 382. For the Western Mono, see Culin, figs. 406, 407, pp. 310-311.) Owens Valley people played a similar game, hiding the pieces under a basket.

Dice. This typically woman's game (in Owens valley) employed 8 dice. These were made of split cane about 10 to 16 inches long, having one face painted red; the Yokuts used 6 or 8 split elderwood or cane dice, having designs burned in, or 6 half shells of nut or acorn filled with pitch or asphalt. The dice game seems to be of Shoshonean origin. (Kroeber, 1925:540; Steward, 1933:286-7. For illustrations of Yokuts cane and walnut shell dice, see Culin, fig. 160, 161. For Western Mono acorn cup dice and basketry tray, see Culin, figs. 202, 203, p. 166.)

Hoop and Pole. This was of unusual importance among both Yokuts and Owens Valley people, being played with a small, buckskin covered hoop (Owens Valley sometimes used a willow ring) and a pole or spear of willow. (Kroeber, 1925:539; Steward, 1933:287) (For illustration of the Yokuts implements, see Culin, fig. 633, and for a similar game in which a peg is used, see Culin, fig. 634. The Western Mono also used the peg, Culin, p. 498, fig. 652.)

Ball race. Balls were propelled over a course with bats by racing contestants. (See Kroeber, 1925:539; Steward, 1933:287.) The Yokuts ball and racket are illustrated by Culin, fig. 767; Culin fig. 902, also illustrates 2 buckskin covered balls that were kicked over a course in a race (p.679). A Yokuts variant of the last is one in which women threw a hoop.

Hockey or shinney. Varieties of this were played on both sides of the Sierra, the Yokuts using a ball (see illustration in Culin, fig. 811.) the Paiute using a rag or ball, and both peoples using a kind of primitive shinney or lacrosse stick. The Western Mono also played this. (Kroeber, 1925:538-9; Steward, 1933:387; Culin, p. 617, 635 and figs. 822, 823.) A related Paiute game is that in which sides struggle to kick a buckskin-covered ball over goal lines at opposite ends of the field (Steward, 1933:287). This, with variations, was played by the Western Mono. (Culin, p. 704.)

Snow snake. This game, employing heated stone balls, was played by the Yokuts and Western Mono. (Culin, 714, and fig. 934.)

Arrow games. The Yokuts and Owens Valley Paiute each had a variety of these. (See Kroeber, 1925:539; Steward, 1933:287-8.)

In addition, there was foot racing and wrestling.

Toys. The bull roarer was used on both sides of the Sierra. (See Steward, 1933; Kroeber, 1925:509. For Yokuts tops, see Culin p. 741 and fig. 985. Culin, p. 760 and fig. 1030 illustrates a Western Mono device for flipping mud balls. On p. 756 and in figs. 1017, 1018, Culin also illustrates a bone whirligig and a buzz used by Western Mono children.)

Social Organization.

The matter of social organization will remain of little importance or interest until means are found to publish descriptive pamphlets of these tribes. Even then, it should await the accessibility of more complete data on the Tubatulabal and Western Mono.

The Yokuts and Western Mono in general were organized in

exogamous and patrilineal societies which cut completely across tribal groupings, and each tribe comprised totemic patrilineal families. Curiously, the Yaudanchi and Yauelmani Yokuts seem to have lacked the moieties, but the Western Mono (at least some of them) possessed totemic moieties. As the totems of social groups are animals and birds, the list would be of considerable interest if available. (See Gayton, 1930-a; Kroeber, 1925:493-496.) The Tubatulabal seem to have lacked any moiety or clan organization, but the catching and rearing of young eagles practised by them is a ceremony carried on by the tribes nearer the valley in connection with moiety ceremonialism, while the association of certain birds with the eagle and of lizards, vermin, etc., with Coyote suggests the totemic associations of moieties elsewhere. (Kroeber, 1925:605-610.) The Owens Valley Paiute lacked even a vestige of clan, moiety, or totemism, having only more or less patrilinear and patrilocal families, thus typifying the Great Basin.

Each Yokuts and Western Mono village had a chief and it is probable that each tribe had one. This was fixed by heredity, passing to the son or a daughter if a son were lacking. A chief of personality and judgment might extend his influence over neighboring groups, but there is no reason to believe that leagues of Yokuts tribes were ever formed. Each chief was supposed to have two heralds whose position was also hereditary. In addition to these, there was an official clown and transvestite. (Kroeber, 1925:496-7.) (For a detailed description of political organization and the shaman's place in it among the Yokuts and Western Mono, see Gayton, 1930-a.)

Tubatulabal chieftainship, like the Yokuts, descended in the male line, the incumbent selecting a son with the approval of the community. Lacking a son, a daughter was chosen. Wealth was of some importance. (Kroeber, 1925:609.)

In Owens Valley each tribe of Paiute had its headman, the position tending definitely to be patrilineal, but passing out of the family if suitable successors were lacking. Each village also had its leader. But the system of chief's herald, clown and transvestite were lacking (Steward, 1933:304-5). Thus, there is again greater simplicity.

Money.

It is possible that some Yokuts or Owens Valley Paiute money

will find its way to a museum collection. This, among the Yokuts, will generally be strings of shell discs, measured, as described by Kroeber, 1925:498, around the hand, or possibly cylinders from the columellae of univalves or from clams.

As all these shells originated on the coast, only the discs seem to have reached Owens Valley, where the measure of money was a somewhat similar turn around the hand. (Steward, 1933:258.)

Other Social Customs.

Other social customs such as marriage, birth, naming, etc., will be found described in Kroeber, 1925:492-499 and Steward, 1933:278-305. There is little point in giving these data here as they are scarcely adapted at present to museum representation. When the time is ripe to interpret them to museum visitors through pamphlets, it is hoped that fuller data on the Western Mono, Tubatulabal and Yokuts will have been published.

In order, however, to allay any misapprehension on the subject of war it may be said that the California tribes were in general very peaceable, the tribes in question here being no exceptions. Squabbles did occur, but warfare never became a great pursuit as among other tribes in the east, notably, those in the Plains. There seems to have been no scalp ceremony or victory dance among the peoples on either side of the Sierra. In fact, the very idea of taking a scalp was scarcely known. (Kroeber, 1925:497-8; Steward, 1933:306.)

Ceremonialism.

It is not unlikely that some ceremonial regalia will be found in a museum collection. This could serve as a means of interpreting the religion, although to do so adequately it should be accompanied by sketches or other illustrations of dances, if such can be had, to make the exhibit more living and graphic.

In the matter of ceremonialism, a great difference exists between the tribes on opposite sides of the Sierra. The Yokuts fall into that region of California proper which nourished the development of strong religious cults. These, however, are of the southern California type. The Owens Valley Paiute fall into the Great Basin region which entirely lacked this kind of thing.

None of these tribes possessed ceremonies devoted to communal ends, such as the rain making and fertility ceremonies of the Southwestern agricultural tribes. Rather, they serve individual purposes though sometime jointly performed.

One of the most characteristic of southern California rituals is the Jimsonweed ceremony, in which the strongly intoxicating Datura meteloides is used to initiate boys into the status of manhood. This was strongly represented among most Yokuts. (Kroeber, 1925:502-4.) It is generally true in California that as one goes into the isolated mountain regions, which supported smaller populations which had less contact with their neighbors, that the complexity of culture rapidly drops away. Thus, leaving the San Joaquin valley and foothills, we find that the Jimsonweed ceremony weakens, perhaps entirely disappears, among the Tubatulabal. Instead, one finds there the older type of ceremonialism, namely, greater emphasis upon crisis rites -- birth, puberty, death. The girl's puberty ceremony, involving roasting the girl in a pit, therefore becomes correspondingly more important. (Kroeber, 1925: 609-610.) The same is true of the primitive Shoshoneans to the east, where the girl is roasted and put through various complex rites. Among taboos she must observe, one of the most interesting is the use of a special stick to scratch her head, a widespread western custom. (Steward, 1933:293.)

Another Yokuts ceremony is that of the rattlesnake in which all future bites to members of the community are healed by the Shaman. (Kroeber, 1925:504-506.) It is not certain how far this southern California ceremony penetrated the mountains, but it is clear that it did not cross the Sierra to the Great Basin tribes.

A Yokuts ceremony which amounts to a contest of supernatural power between shamans, and another involving sleight-of-hand (Kroeber, 1925:506-7), also failed to cross the Sierra. Again, the interesting addition of the ceremonial buffoon, whose duty it was to desecrate and burlesque the sacred rites was limited to the tribes on the western side of the Sierra.

One ceremony of great importance in southern California which is strongly developed among the Yokuts and occurs rather conspicuously among the Tubatulabal and Owens Valley Paiute is the annual mourning ceremony, involving burning of property and destruction of the image of the deceased. This, however, was somewhat weakened in Owens Valley, the last feature, for instance, being lacking and the general complex somewhat less important than among the

other tribes. (See Kroeber, 1925:499-501;609; Steward, 1933: 296-299.)

A type of dance typical of the Great Basin peoples is the circle dance, a social affair held at the annual fall gatherings, in which men and women alternate in a huge circle. Another dance may be held at the same time in which four men dressed in feathers, as described below, perform. (For an illustration of this, see Steward, plate 8-c, e, f.)

Dance regalia exhibits certain differences indicating a cultural cleavage between opposite sides of the Sierra and certain similarities indicating diffusion. The headband of yellow-hammer feathers, a general California trait, occurs among the Yokuts (Kroeber, 1925:508) but is scarcely known to the Owens Valley people. However, the skirt of strings of eagle down, or sometimes of another bird among the Yokuts, is on both sides of the Sierras, and it is not unlikely that it originated in the vicinity of Owens Valley. For illustrations of this skirt see Kroeber, 1925:plate 42 and Steward, 1933, plate 7 and plate 8-c,e,f. The headdress of magpie and crow feathers is used in a variety of dances by the Yokuts (see Kroeber, 1925:508 and fig. 44 on p. 508). A very similar headdress was used by the Owens Valley Paiute, but this included hawk feathers. (See illustration, Steward, 1933: plate 7.)

The Yokuts also used a bunch of feathers held in the hand and a belt of human hair cut from mourners. The hair net was used to hold head ornaments. (Kroeber, 1925:508-9.) This is general in California. For an illustration of a Paiute man wearing a head net, see Steward, 1933: plate 5-f.

The Ghost Dance.

In the early seventies a revivalistic cult of considerable interest swept California, reaching the tribes on the western slopes of the Sierra. The details and regalia of this have been described in detail by Gayton, 1930, for the Yokuts and Western Mono. It seems to have affected the Owens Valley Paiute but little.

Archaeology.

The archaeology of Sequoia Park will naturally be very meager, having little more than occasional arrow points, bedrock

mortars, and possibly a few potsherds and pictographs.

In the lower foothills bordering the San Joaquin valley, however, are a large number of painted rocks or pictographs which are of great interest. Similar ones undoubtedly occur in Sequoia Park although they have not as yet been reported. It is unfortunate that some governmental or state agency has not seen fit to provide for the security of some of these groups, as they are rapidly disappearing, thanks to the work of the elements and vandals.

A great many of this type have been recorded. (See Steward, 1929; 110-139, figs. 39 to 70, pls. 52, 55, 56.) These figures are painted and comprise queer anthropoids, insects and animals. Their purpose and meaning are unknown, though there is slight reason to believe that they have some connection with shamanism. The present rapid rate of weathering indicates that they cannot be very old and therefore must have been made by the Yokuts or Western Mono of the region.

On the opposite side of the Sierra in Owens Valley, painted pictures are scarce; instead there occurs a large variety of petroglyphs or pecked designs which include elaborate but unintelligible curvilinear figures and many animals, such as mountain sheep and other quadrupeds. There is considerable evidence that points to great antiquity for these, and it is not unlikely that most of them, if not all, antedate the present Paiute inhabitants of the region.

It is probable that the Sequoia museum has or will come into the possession of some archaeological objects of the kinds that are exhumed from the ground. As most of these originate in the San Joaquin valley, which is relatively rich archaeologically, this would take us somewhat afield. There is no reason, however, why these should not find a place in the museum, for many of them are representative of certain highly specialized California types of specimens.

The usual word of warning must be uttered in this connection, however. An archaeological specimen is worthless unless it bears ample data concerning its provenience. To purchase specimens which lack ample data for the catalogue is highly inadvisable, for it is not only a waste of money, but encourages professional collectors and unskilled amateurs to exploit our archaeological resources. This is the greatest menace that American archaeology

has to face, for every year thousands of sites are destroyed by such people beyond the possibility of discovering anything of scientific importance.

Archaeological specimens from the San Joaquin valley may be of Yokuts origin. To say this positively at the present time, is however, impossible, as sufficient investigation has not been carried on in the region to determine whether or not there had been a succession of peoples or cultures. This subject has been treated by Gifford and Schenck, 1928, who have a large number of illustrations and plates. Recent investigations in the vicinity of Taft by the Smithsonian Institute may contribute something to our knowledge of this subject.

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