SOUTHERN CALIFORNIA SHOSHONEANS

THE great Uto-Aztekan family includes the Shoshonean, Piman, and Aztekan stocks, the essential unity of which, originally affirmed by Brinton, has more recently been given convincing proof by Kroeber.[1] It is by far the most extensive of all North American stocks, and even the northern subfamily, the Shoshonean, is surpassed only by the Algonquian and the Athapascan.

Roughly defined, Shoshonean territory was the greater part of the vast extent of the Great Basin between the Rocky mountains and the Sierra Nevada, and a generous stretch of country east of the Rocky mountains. In the north it extended into central Oregon, central Idaho, and southwestern Montana; in the east, to central Wyoming and Colorado, with an outlying area in eastern New Mexico and northwestern Texas; in the south, to northern New Mexico and Arizona, and almost to the California-Mexico line; and in the west, to the sagebrush plains in northeastern California, beyond the crest of the Sierra Nevada in the south-central part of the state, and in southern California to the coast itself and even to the islands of Santa Catalina, San Clemente, and San Nicolas, twenty to seventy-five miles off shore. The Shoshonean area in California alone is about fifty-five thousand square miles, or slightly more than one-third of the state.

Within the Shoshonean stock we find sea-going islanders, mountaineers, reptile-eating desert-dwellers, root-digging inhabitants of the semi-arid plateaus, buffalo-hunters of the northern plains, the warlike Comanche of Texas, the agricultural Hopi living in stone houses and weaving beautiful fabrics of cotton gathered in their cultivated fields — a far greater variety of life than any other stock of North America can boast.

Of the four main branches of the Shoshonean stock language, as determined by Kroeber, two, the Kern River and the Southern Califor-

1 The reader is referred to Dr. A.L. Kroeber's Shoshonean Dialects of California, *Univ. Calif. Publ. Amer. Arch. Ethn.,* Vol. 4, 1907, pp. 65-165, and to the later discussion of the subject by Dr. Edward Sapir in his Southern Paiute and Nahuatl, a Study in Uto-Aztekan (Pt. I , *Journal de la Société des Americanistes de Paris,* N.S., Tome X, 1913, pp. 379-425; Pt. II, *American Anthropologist,* N. S., Vol., 17, No. 2, April-June, 1915).

nia, belong exclusively to California, and representatives of the widespread Plateau branch also are found in the eastern part of that state. The fourth branch, the Hopi, is confined to Arizona.

The Kern River Shoshoneans are the Bankalachi and Tubatulabal, small and unimportant groups on upper Deer creek and upper Kern river respectively, in the region of Sequoia National Park and southward. Aside from linguistic specialization they are principally interesting as being one of the two Shoshonean groups that have pushed beyond the crest of the Sierra Nevada; the other being the western Mono, immediately northwest of them.

The divisions of the Plateau linguistic group in California are these:

1. The Paviotso, in the northeastern corner of the state, but far more extensively in western Nevada and southeastern Oregon.

2. The eastern Mono, locally called Paiute, in the Sierra Nevada foothills and the country eastward, including Mono county and the northern half of Inyo county.

3. The western Mono, on the western slope of the Sierra Nevada in Fresno and Madera counties.

4. The Koso, locally called Panamint, in the country that includes Coso, Panamint, and Death valleys in Inyo county.

5. The Chemehuevi, in the eastern half of San Bernardino county and the eastern end of Riverside.

6. The Kawaiisu, or Tehachapi, on both sides of the northerly part of Tehachapi mountains.

All these people formerly lived in widely scattered rancherias and led semi-nomadic existence. None were tribes in the proper sense.

The Southern California branch of the Shoshoneans includes three linguistic groups: Serrano, Gabrielino, and Luiseño-Cahuilla.

The Serranos (Spanish, "mountaineers") occupied San Bernardino valley, San Bernardino mountains, a portion of Mojave desert north of that range and east of Mojave river, the mountainous country north of San Bernardino and Pomona, and San Gorgonio Pass as far east as Whitewater, where they gave way to the Cahuilla. Speaking the same dialect, the Vanyume held the country along Mojave river, and the Kitanemuk the southerly part of Tehachapi mountains, where they extended over to the streams flowing into Tulare basin.

The Gabrielinos (a Spanish term from Mission San Gabriel) held

the coast between Santa Monica mountains and Alisos creek in Orange county, with the country back to the summit of the Sierra Madre; as well as the three islands off the Gulf of Santa Catalina.

The Luiseño-Cahuilla group is composed of six divisions:

1. The Juaneños, centering about Mission San Juan Capistrano (whence the name), in the southern part of Orange county from the coast to the crest of Santa Ana mountains.

2. The Luiseños, named from Mission San Luis Rey, which is in their territory, in the northwestern corner of San Diego county, extending eastward to San Jacinto mountain.

3. The Cupeño (from Kúpa, one of their former villages), also called Aguas Calientes and Warner's Ranch Indians, tucked away in the mountains of north-central San Diego county at the head of San Luis Rey river.

4. The Palm Cañon Cahuilla (a Spanish form pronounced and sometimes spelled Kawía), directly east of the Luiseños, south of San Gorgonio pass, east of San Jacinto mountain, and in the region from the easterly end of San Gorgonio pass at White water to the beginning of the desert west of Indio. The Palm Cañon district, at the eastern base of San Jacinto mountain, is the most important centre of this group.

5. The Mountain Cahuilla, in the mountainous country between the Cupeño on the south and Cahuilla peak and Lookout mountain on the north.

6. The Desert Cahuilla, from above Indio to and around the northern end of Salton sea.

Of these Southern California Shoshoneans the Luiseños and the Cahuilla will be discussed.

THE LUISEÑOS

THE Luiseños, so named in reference to Mission San Luis Rey de Francia, which was established among them in 1798, were the southwesternmost of the Shoshonean family. Their territory was the drainage of San Luis Rey river except its very headwaters, which were controlled by the Shoshonean Cupeño and the Yuman Diegueños. On the coast their range extended from Juaneño territory below San Onofre

creek southeastward a distance of about twenty miles, and it ran back into the mountains for thirty to nearly fifty miles. Roughly defined, it was what are now the northwestern corner of San Diego county and the southwestern corner of Riverside, a region generally mountainous, with pleasant valleys here and there. Through it run two river systems: San Jacinto in the north, without an outlet into the sea, and San Luis Rey in the south, debauching into the Pacific. Most of the streams are dry, or practically so, during the rainless summer.

With the single exception of the Yuman Diegueños on the south, all the neighbors of the Luiseños were other Shoshoneans: the Cupeño (otherwise known as Aguas Calientes and as Warner's Ranch Indians) and the Mountain and the Palm Cañon Cahuilla on the east, the Serranos on the north, the Gabrielinos on the northwest, and the Juaneños (Mission San Juan Capistrano) on the west.

With all these Shoshoneans except the Gabrielinos the Luiseños were linguistically and culturally very closely affiliated. They were known as Kawíka-wichum, "Westerners," to the Cupeño, who called the Cahuilla Támika-wichum, "Easterners."[2]

Situated in a fertile valley on San Luis Rey river, with numerous cultivable valleys within easy distance, and surrounded by a large population of docile Indians, San Luis Rey de Francia rapidly became one of the most prosperous of all the California missions. In 1826 it had nearly three thousand communicants, a fact that argues a very considerable population for the Luiseños of that time. Although, after the missions were secularized in 1834, the Luiseños suffered rapid diminution in prosperity and number, nevertheless they were estimated by Government officials to aggregate twenty-five hundred to twenty-eight hundred in 1856. The Census of 1910 enumerated fewer than five hundred Luiseños living on several small reservations in their former habitat.

The permanent villages of the Luiseños were situated in the valleys, and each of the numerous groups held a well-defined tract in the mountains where its members had exclusive right to harvest acorns and other food products.

2 Singular, Kawíka-wis, Támika-wis. Kawíka is probably the original form of "Cahuilla."

Luiseño houses were conical, partially subterranean, brush-thatched structures. Over a circular excavation two or three feet deep were erected several crotched poles, which converged at the top. No central post was used. Against these main supports were leaned numerous lighter poles, and the framework was ready for thatching with tules, or bark, or arrow-weed *(Pluchea),* according to the resources of the locality. A vent for smoke was left at the apex, and the entrance was either an unprotected opening in the wall, or a low, covered approach, which sloped from the level of the ground to the subterranean floor of the hut.

The sudatory was approximately elliptical, and the framework consisted of two forked posts connected by a timber, which supported the upper ends of pole rafters sloping from the ground. The brush thatch was covered with earth from the excavation, and the low entrance was in one of the longer sides. Heat was produced directly by fire, not by steam, and the hut was not used as sleeping quarters.

Except when cold weather demanded a deerskin or a rabbit-fur robe about the shoulders, men wore no clothing at all and women only a small apron of *Apocynum* or *Asclepias* fibre before and a similar one of cottonwood-bark or willow-bark behind. Hemispherical basketry caps were worn by women when carrying burdens with the pack-strap. Deerskin moccasins were used occasionally, when rough footing was encountered by travellers.

Here, as generally in California, acorns were the vegetal staple. Among half-a-dozen species those of the black oak, *Quercus Californica,* and of the coast live-oak, otherwise known as the holly-leaved oak, Q. *agrifolia,* were considered the best. The nuts were stored in basketry granaries, and in preparation for food were first cracked one by one with a stone and exposed to the sun until the shells commenced to open. The kernels, removed from the shells by means of a bone instrument, were made into meal with mortar and pestle, and the excess of tannic acid was removed by spreading the meal on a slightly concave bed of sand and leaching it with warm water. The moist meal was recovered by pressing on it the palm of the hand. It was sufficiently glutinous to adhere in small quantities, and such sand as was lifted with the last of the meal was flicked off with more or less success. Unlike the natives of central and northern California, who boiled acorn mush in baskets by means of hot stones, the southern Shoshoneans

used earthen vessels, which they placed on the fire. The mush was eaten either hot or cold, and was not congealed in cold water, as was the custom of the more northerly Mono. Acorns are here, as generally in California, still an important food.

In high esteem were the seeds of several species of sage, particularly those of chia, *Salvia columbariæ,* as well as those of numerous unidentified composites and of species of oat. All these were parched by adding embers and shaking the mixture in a basketry tray, and were then ground into meal.

Mesquite-beans, so important to the desert-dwellers beyond the mountains, were a purchased luxury for the Luiseños.

The fruit of two species of *Opuntia,* or prickly-pear cactus, was used fresh or dried, and the seeds, as well as those of the cholla, another *Opuntia,* were made into meal. The green scapes and fleshy leaf-bases of agave were prepared for food by roasting in earth-covered, pre-heated pits. This is the food commonly called mescal. The scapes of *Yucca Whipplei* were roasted and chewed for their sugar content, and the leaf-bases were cooked in the same way as was mescal. The flowers also were eaten.

Chokecherries, blackberries, gooseberries, and currants were eaten fresh, elderberries either fresh, cooked, or dried, and wild grapes cooked. The berries of the California holly, or toyon, *Heteromeles arbutifolia,* were parched; those of manzanita, *Arctostaphylos pungens,* and of aromatic sumac, *Rhus trilobata,* were dried, crushed, and mixed with cold water.

Numerous liliaceous bulbs were eaten raw or cooked, and various plants, including peppergrass, watercress, pigweed (*Chenopodium*), and clover, were used as pot-herbs.

Because of the comparative ease with which they were captured, the most important animals used for food were rabbits, jack-rabbits, ground-squirrels, woodrats, and mice, all rodents. Rabbits and hares were killed with arrows and with flat, slightly curved throwing-sticks, and were driven into long nets, where other hunters lying in ambush despatched them with clubs. Snares sometimes were set in their runs. Woodrats were dislodged from their huge nests of sticks and grass, and were killed with clubs, and they were taken also, as were ground-squirrels and mice, in stone deadfalls. A flat stone was propped above another by means of an acorn kernel, and when the bait was gnawed

through, the stone crushed the rodent. For rats and squirrels it was necessary to place a short stick above the acorn, in order to give room for the animal to enter the trap. Deadfalls of this kind are still used by some of the Wintun in Glenn county.

Deer were abundant, and antelope fairly plentiful, but the Luiseños were not skilled hunters. Deer were stalked with the aid of disguise made of the stuffed skin of deer's head with natural antlers, in the same manner as in northern California, and were then killed with arrows. They were also caught by horns or neck in noose snares hung in their trails.

Bears, mountain-lions, and wildcats were occasionally killed and their flesh was eaten. Mountain-sheep also were sometimes shot.

Tortoises and lizards were eaten, and dogs were sacrificed in time of famine.

Ducks were killed with arrows or with rabbit-sticks. Quails were abundant, and were knocked down in numbers with sticks when they flew in toward fires built at night for the purpose of attracting them.[3]

Venison was either broiled, boiled, or roasted in earthen pits. Rodents and birds were usually broiled, but sometimes were roasted. Occasionally roasted meat was crushed in a mortar and stored, a process resembling the manufacture of pemmican.

Fish were of little importance to most of the Luiseños, who, living inland, had only the small fish, principally mountain trout, occurring in the creeks. The usual method of taking trout was to narcotize them by throwing into a pool, above which the stream had been temporarily diverted, quantity of the crushed leaves of *tâvahat,* a plant found in the cañons. The coast bands depended very largely on fish and shell-fish. They fished with hook and line, with dip-nets, and with seines. Curved fishhooks were made of abalone-shell, and the line was agave-fibre.

Luiseño men, besides hunting, fishing, and performing some of the labor of harvesting acorns and other foods, were occupied more or less with the manufacture of weapons, tools, cordage and nets, and numer-

3 The statement of Sparkman in The Culture of the Luiseño Indians, Univ. Calif. Publ. Amer. Arch. Ethn., Vol. 8, No. 4, 1908, that pigeons, doves, and tree-squirrels were not eaten, was not confirmed by any informant interviewed in the present investigation. Personal taboo may be the explanation. It also may account for Kroeber's listing of turtles as inedible.

ous miscellaneous objects. The women, in addition to their ordinary household duties, made clothing, basketry, mats, and pottery.

Bows were of mountain ash, elder, or willow, and lacked the sinew reinforcement employed by many other Indians. The bowstring was the twisted fibres of milkweed, nettle, or Indian hemp, or three-ply sinew. Arrows usually had a cane shaft and foreshaft of greasewood hardened by fire. Those intended for hunting large animals and for war were stone-tipped, others had simply the pointed foreshaft. Arrows were made also of self-pointed arrow-weed (*Pluchea)*. Foreshaft, stone point, and feathers were held in place by sinew wrapping and by mineral pitch or vegetal gum. Arrow-points were shaped in the usual way by flaking with the tip of an antler tool. The instrument used in straightening shafts was a heated stone with a transverse groove along which the shaft was repeatedly drawn until its irregularities had been removed. The quiver was the entire skin of a wildcat, fox, or other small mammal.

A chisel, which was used also as a wedge, was made of a straight piece of antler, and it was driven by means of a stone hammer without a handle.

Indian hemp (*Apocynum cannabinum*), milkweed (*Asclepias eriocarpa*), and nettle (*Urtica*), supplied the fibres used in making the two-ply cordage from which nets were fashioned. The burden-net, for carrying heavy objects on the back by means of a tump-line passing across the forehead, a small-mesh net for carrying acorns, a very long one used in driving rabbits, and a dip-net (and on the coast a seine) were all made by men. Netted aprons were made by women.

The commonest mortar was simply a depression gradually worn in a bowlder until it became inconveniently deep, when a new one was started. This was the practice also of the Miwok of central California. The pestle was an elongate stone not artificially shaped. Transportable mortars were made of stone.

The clay tobacco-pipe was short and tubular, without a mouthpiece, so that the smoker necessarily threw back his head lest the tobacco be spilled.

The musical instruments of the Luiseños included the bullroarer, a wooden slat suspended at one end on a double twisted cord. As a summons to assemble for a feast it was swung rapidly above the head, the combined whirling and the rotary motion caused by the untwisting of

the cord producing a loud hum. The flute was a section of elder with four holes, and cane whistles were used in the ceremony of initiating boys. Rattles were made of tortoise-shells and of gourds.

The fire-drill was of the usual type, a wooden hearth with a notch at the edge for conveying the hot dust from hole to tinder, and a pointed spindle.

The coastal bands used water craft, both dugout canoes and tule balsas.

The principal product of feminine activity was basketry. Rough, open-mesh baskets were made by twining strands of a rush of the genus *Juncus*. Of this sort were burden-baskets for acorns, cactus fruit, and fuel, and sifting trays. Coiled basketry was made of the grass *Epicampes rigens* for the foundation, or horizontal coils, and *Rhus trilobata* for the wrapping material. Patterns in black were effected by boiling the sumac strips in water containing black marsh mud. Of coiled work were trays for winnowing and parching seeds, food vessels, small containers for trinkets, and caps for women.

Mats used principally as mattresses were manufactured by stringing sedges on parallel cords.

Large, cylindrical granaries of interlaced willows were placed on platforms of poles or on large bowlders for the storage of acorns. These were the product of masculine hands.

Unpainted pottery was made by coiling rope of clay upon itself and smoothing the sides with a wooden paddle while a smooth pebble was held on the inner surface. The kiln was a pit partially filled with dry bark, in later days with cattle-dung. The forms of pottery made by the Luiseños included fairly wide-mouth water-jars, small-mouth jars for carrying water on journey, bowls and dishes for serving food, and pots for cooking acorns.

Marriages were arranged by negotiation between the heads of the interested families, and a stipulated price was paid for the bride. Men of means usually married in succession two or more sisters. A widower had prior rights in the unmarried sister of his deceased wife, and a widow was bound to marry her deceased husband's brother if he desired her. The only social barrier to marriage was blood-relationship, however distant; but since all members of a clan were held to be of the same blood, this amounted to law of exogamy.

Sociologically the Luiseños consisted of a large number of localized

patrilineal clans, that is, family groups confined to definite localities, a system sharply differentiated from that of the Yuman tribes on Colorado river, where the clan names have totemic connotation and may occur in all bands of a given tribe, regardless of locality. The Luiseño system is like that of the Yuman Diegueños, their southerly neighbors, but differs again from that of the Cahuilla, Serranos, and Cupeño, on their east and north, in that these latter Shoshoneans have their localized clans divided into two exogamous groups called Wildcats and Coyotes. There is no evidence however that the conception of descent from these animals was ever entertained, or that they were considered to be guardians of the groups named for them. There are thus three sociological systems in southern California: the totemic clans of the Colorado River Yumans; the non-totemic localized clans of the Diegueños and the Luiseños; and the localized clans with moieties of the Cahuilla, Serranos, and Cupeño. In central California is another system, the animal-named, but non-totemic, moieties, without clans, of the Miwok, the Yokuts, and the western Mono.[4]

In each locality there were several social divisions which had to do with the conduct of religious rites. Many of these are still active. Each "party," as they are called in the local vernacular, is headed by a chief (*not*), and normally consists of all, or nearly all, members of one clan or family, and members of other clans in greater or lesser number. Children of certain clans, on coming of age, are expected as a matter of course to join a certain party, but they may exercise their choice or even change their affiliations at any time. It appears probable that the party was originally simply the religious fraternity of clan, to which in time numerically weaker clans attached themselves. The system is

4 See Volume XIV, pages 138-140, 159. The author is indebted to E.W. Gifford's Clans and Moieties in Southern California, *Univ. Calif. Publ. Amer. Arch. Ethn.,* Vol. 14, No. 2, 1918. Gifford describes the Cahuilla-Serrano-Cupeño moieties as totemic, a term which the present writer avoids as hardly justified, although admitting its convenience. In the case of the Colorado River Yumans, all females of given clan bear the same name, that name is associated in the native mind with some certain animal, plant, object, or phenomenon, and the mythologists definitely aver that there was an original male ancestor bearing the name of the animal or thing connoted by the modern clan name. And this seems to be more reasonable basis for the use of the word totemic.

so like the fraternity organization of the Hopi that it can scarcely be doubted that it came, along with the clan system, from the Pueblo culture area to southern California. Party chieftainship is hereditary in the male line, another fact which indicates that the party was originally the clan, the party chief the hereditary clan chief. The office of assistant to the chief also is hereditary. The assistant,*pahá'*,[5] notifies the people of an impending ceremony and in general assists the chief. The leader of the rabbit-drive, *kúmukat,*[6] occupies his position for life, and the best informants describe this as an hereditary office.

There were apparently never any political chiefs among the Luiseños. The head of each patriarchal group was distinguished by the title *kíkat.*[7]

The favorite amusement of the Luiseños was gambling at *tepánish,* the local variant of the hand-game. Each of four players had a looped string with a bit of white bone attached to the end, and another with similar bone distinguished with a black band. The strings were for the purpose of preventing juggling after the guess had been made. Concealing his actions beneath a blanket, each of the four on the defensive quickly slipped a loop about each wrist and clasped a marker in each hand. All four then extended their clenched hands, and one of the opposing four guessed which hands concealed the unmarked bone. For every wrong guess his adversaries took one of the fifteen tally-sticks, and those who had not been "killed" concealed the markers again. Not until the last one had been correctly guessed did the inning change hands. Possession of all the tally-sticks by one side determined the wager. The game is still played at ceremonial gatherings.

The Luiseños did not engage in war. Trespass by hunters and food-gatherers caused occasional brawls, the result of casual encounter rather than of a premeditated plan. A very old woman at Rincon never

5 A Rincon informant gave the title as *ayá,* and said that the official was appointed by the *not* to act only in the ceremony at hand.

6 *Kúmu*, starting-place of the rabbit-hunt; *kat*, suffix indicating the actor; hence, "starter of the rabbit-hunt." Cf. *ámu*, to hunt; *ámukat*, hunter.

7 From *kícha,* house; "house-er," that is, householder. Cf. Hopi *kík-monwi*, houses chief. The Hopi name, however, refers to the village watchman and peace-officer.

heard of anyone being killed in these quarrels.

Sickness not obviously the result of natural causes was ascribed to the sorcery of some malevolent shaman, and only another shaman could break the spell. Men became shamans by dreaming of some animal or person or natural feature, and receiving songs from it. They regarded their tobacco-pipes as indispensable in treating disease. Like many other primitive people, the Luiseño shamans believed that in order to inflict a wasting sickness on a victim it was necessary to make an image of him or to obtain some portion of his body, such as hair, nail-clippings, blood, or sputum, and over this to perform his sorcery. The method of treating sickness was to suck the affected part of the body and pretend to extract something from it, such as greenish or red fluid, a pebble, or a black, wormlike object. Rubbing, blowing the breath, and spurting water on the body, and waving a bunch of hawk-feathers over the patient, were usually parts of the treatment.

As elsewhere in this region, the Luiseño dead were cremated. The spirit, which was identified with the heart, was believed to rise to the sky, and when death occurred the people would blow upward thrice in order to waft it on its way. Widows, and sometimes close female relatives, wore the hair shorn as symbol of their grief.

A few weeks after the rite of cremation, whenever the supplies of food necessary for any public occasion had been accumulated, there occurred Tuvísh, a ceremonial washing of the clothing of the dead person. Inside the *wámkish,* a circular enclosure of brush few feet high with an eastward opening, the people assembled after dark. A song-leader with a tortoise-shell rattle conducted the singing of a large number of songs by a group of old men and women, and in the intervals one of the old men would recite briefly a portion of the myth regarding the origin of death and the funerary and mourning customs. The songs themselves referred frequently to the same subject. Occasionally the women would dance without progressing from their respective places, flexing the knees, and the men at the same time repeatedly struck the ground with one foot while emitting a groan ending with a forcible expulsion of the breath. This last action was to keep the ghost away, and was doubtless prompted by the same psychology that was responsible for the custom of blowing upward to assist the spirit on its journey. At some time during the progress of the ceremony, which lasted until well after midnight, the clothing of the dead person was brought to the

fire and was symbolically washed with water.

About a year after cremation occurred Chúyish,[8] another similar "sing," at which time this washed clothing was burned, not by the ceremonial chief of the group to which the deceased person had belonged, although he had charge of the rites, but by another chief selected by him. Various articles were given away by the members of the party of the chief in charge. As in central California, the purpose of the burning ceremony was to terminate the period of mourning and to efface all feeling of sorrow. It was also in effect the final laying of the ghost, for it was thought the spirit would hover about until the clothing was burned.

At irregular intervals the Luiseños performed Tôchunish in memory of all who had passed away since the last previous observance of the rite. The relatives of each such individual prepared a clothed figure of tules, representing the dead person, and the women made numerous baskets while the men accumulated shell beads and other forms of property. At the ceremony the effigies and part of the baskets were burned, and the remainder of the baskets with the beads and other objects were tossed at random among the spectators.

This image ceremony sometimes included the whirling dance Mâ*r*ahish, and the entire ceremony was then called Nâtish. The chief in charge sent word to his colleague in another village that he would make Nâtish on a certain day, which usually was two or three weeks later, and stated that he would make a certain number of effigies representing that number of dead, requesting that the invited people bring a certain number of images representing so many of their own dead. In each village there was Mâ*r*ahish dancing during the interval between the invitation and the opening of the ceremony, and it occurred also as a part of the actual rites. The host and his people provided a large amount of food, and whatever was left at the conclusion of the festivities was taken home by the visitors. The Mâ*r*ahish dancer was called *tótuwish.* This whirling dance, commonly known in the region as tatahuila (apparently a Mexican variant of *tótuwish),* was performed also in honor of a deceased *tótuwish,* but not in honor of a deceased chief

8 C*húyish,* burning clothes. The form *chúchamish (djudjamish)* recorded by Kroeber is a future verbal form, equivalent to "going to burn clothes."

unless he had been such a dancer. The face and body of a new *tótuwish* were painted black; at subsequent appearances he was painted with red, white, and black. A good deal of latitude was permitted in the painting, but one essential was a black line starting at each side of the nose and curving outward under the cheekbone. This line was dotted with white. The white was gypsum, the black was graphite obtained in the mountains of Cahuilla valley and in San Ysidro mountains. The *tótuwish* wore a skirt of dangling eagle-feathers and a head-dress of owl-feathers, and he danced by whirling rapidly as he circled about the fire. The whirling dance is now performed as an amusing feature of native gatherings.

In memory of a deceased chief his successor held Áswut-mâknish ("eagle killing"). As among the Hopi, who also had an eagle-killing ceremony, but not in memory of the dead, certain localities were the exclusive property of certain clans for the purpose of capturing eagles. The birds were caught in the nest before their flight-feathers were grown, and when a pair of eaglets were brought to the village the chief whose property they were announced a dance and a feast, which continued for several days. One of the birds was then carried to another village, where the festivities were repeated, and leaving it with the local chief its former owner and his people returned home. His eaglet having been reared to maturity, he announced the eagle-killing ceremony, which was held in the usual brush enclosure at night. The men danced around a fire, one of them holding the bird in his arms and breaking a bone in its body, and at the shout "*Hu! Hu*!" passing it to his neighbor, who also broke a bone. This continued through the night, and finally one of the dancers killed the eagle by pressing his thumb into its breast over the heart. In the opinion of the spectators it was killed by supernatural power. Some informants say that only shamans participated in the ceremony. The attendant mourners then set up a loud wailing, and deposited clothing, baskets, shell money, and other objects on the body of the eagle, and all this, with the body itself, was given by the officiating chief to his colleague of another locality, by whom it was divided among his people. The eagle he burned after removing the wing-feathers, which were made into a dance-skirt. Condors were used in the same way.

The so-called war-dance, Tánnish or Púlish, was performed as a supplication of numerous beings, such as the spirits of mountains,

rocks, trees, and springs, for rain and for recovery from snakebite and pleurisy. It is said to have had no connection with war, and may have received this name simply because the participants, always men, wore feathers in their hair and performed in a manner more or less suggestive of the war-dance of other Indians. On the other hand the corresponding Diegueño dance is definitely mentioned as having been held with much enthusiasm after the killing of a Cahuilla chief in early mission days.

Besides the mortuary rites, the most important of Luiseño religious practices were the puberty ceremonies for girls and boys.

In the ceremony for girls, Wekénish, several maids usually participated, though all need not have experienced their first menses. They were necessarily, however, members of the same ceremonial group, or party. The chief of their group, technically in charge of the affair, nevertheless did not himself actually conduct the ceremony, but engaged some other, usually but not necessarily a chief, to act for him. He himself merely acted as host to the assembled visitors.

The rites were begun by causing the girls to sit side by side on the ground within the sacred enclosure of brush, and in front of them was deposited a large basket containing various ceremonial articles, such as feather dance-skirts and head-dresses. The officiating chief, kneeling in front of them, rolled a ball of pulverized tobacco, and after thrice uttering a groan followed by an expulsion of breath, while at the same time thrusting forward his body with hand raised, he placed the pellet in the mouth of one of the girls and gave her a sip of warm water. These acts he repeated for each girl. If the tobacco was retained, it was regarded as a sign of the girl's virtue; if not, she was considered not to be virgin.

In the meantime a pit had been lined with stones, which after becoming properly heated were covered with a bed of green herbs. On this the girls, now somewhat narcotized by the tobacco pellets, were placed on their backs, and two flat, warm stones were laid on their abdomens. There, covered with mats or blankets and with a large basket inverted over the face, they remained until the fourth day, except that each evening they were taken out to be fed while the pit was reheated. During this period they drank only warm water, and they were prohibited from scratching with the nails, using instead bone scratchers attached by strings to their wrists. During the day there was dancing by

women, at night by men.

At the conclusion of their period of confinement in the heated pit the girls had their faces painted red, and circlets of hair were placed on their wrists and ankles, and bands of a certain plant about their heads. They wore these symbols for several months, and at the same time they abstained from meat, fish, and salt. The duration of this taboo was not fixed, but was left largely to the inclination of the individual. After their faces had been painted, the girls with their female attendants repaired to a large rock near the village, and painted on its surface certain geometric designs.[9] At the end of each month for an indefinite period their faces were repainted in different fashion, and new designs were added on the rock.

An important feature of the girls' puberty ceremony was connected with an earth mosaic. Some say it occurred a month after the dance; others, at the end of a year. A small hole was scooped out in the ground, and the material was heaped in a circle several feet in diameter, and within were represented various celestial bodies. With ashes, charcoal, and powdered red paint the enclosing circle and the periphery of the central hole were made black on the inside, red in the middle, and white on the outside. The figure represented the universe, and a northward opening in the circle the road the soul takes in its flight. Having completed this work, the officiating chief walked thrice around it, and with a pellet of pulverized chia and salt he touched various parts of the body of a girl and ended by placing it in her mouth. This he did to each girl. He then made a speech enjoining good conduct, and the girls, kneeling beside the earth picture, expelled the chia pellets into the central hole. Other old men at once destroyed the picture and buried the pellets by pushing the earth into the hole. The significance of the pellets apparently is no longer known, but the purpose of the rites as a whole was to promote the health and moral well-being of the girls, and particularly to insure fecundity and easy parturition.

Most boys at about the age of puberty were initiated into the toloache cult. These rites occurred not annually, but only when there

9 One informant said that the attending women painted the rock. As the rites have not been observed since about 1890, discrepancies must be expected.

was sufficient number of uninitiated youths of appropriate age. The outstanding feature was the drinking of narcotic solution of the crushed root of Jamestown-weed.

Toloache is the Aztec name (*toloatzin*) of the *Datura* plant. The drug was administered at night within a brush enclosure. Each youth was accompanied by a sponsor, and the officiating chief, who was never the chief of the group being initiated, carefully held the forehead of each boy as he knelt to drink from the small stone mortar which contained the solution of the root, lest too large a draft be taken. It was desired that the boys should be in state of partial stupefaction for two or three days. After drinking they were led by their sponsors to another brush enclosure, where the people were assembled, and there they danced around the fire to the accompaniment of singing, partially supported by their sponsors. After a time they became nearly or quite unconscious, and they were carried out and left in the other enclosure under the observation of few old men. The people continued to dance through the night. The singing and dancing, but not the drinking of toloache, were repeated on the following night, and, according to some informants, every night for month. At times the shamans exhibited their magic, swallowing wooden swords, shooting one another with arrows and inflicting apparently fatal wounds which soon disappeared, leaping into the fire and stamping it out.

To test their fortitude the initiates were placed, one by one, in a pit, and ants were poured from basket or jar over their naked bodies. After time the insects were whipped from their bodies with nettles.

A circular sand mosaic, representing the universe and various dangerous animals, such as tarantula, bear, rattlesnake, mountain-lion, and raven, played an important part in the initiation. It occupied the centre of the ceremonial enclosure. Its details varied greatly in different parts of Luiseño territory. Near the end of the initiation rites the candidates stood in a circle around the figure, each attended by his sponsor, and an old man made a long speech, enjoining in detail upright conduct and warning them that if they broke the moral law the avenging creatures represented before them would scourge them and give short life.[10] A

10 A short time prior to the writer's visit in 1914 a rattlesnake bit a dog near a house at Pichanga (Temecula reservation). As rattlesnakes are seldom

bit of sage-seed meal mixed with salt was given to each initiate, and after chewing it he ejected the pellet into small hole at the centre of the ground picture. The old man carefully observed each pellet, and if any were unduly moist he declared that the candidate concerned had not given heed to his counsel, whereat the spectators loudly voiced their displeasure.

Three small, flat stones were then laid in a row, with a circular hole intervening between the second and the third. Each candidate, accompanied by his sponsor, approached cautiously, stepped on the first with the ball of the foot, hopped to the second, and leaped over the hole to the third stone. Failure to accomplish this properly was regarded as an omen of short life. Sometimes this ordeal took the form of jumping three times along a short length of rope laid next to the hole in the centre of the ground picture.[11] In conclusion the brush enclosure

encountered near the houses, this was regarded as punishment inflicted on the people for their neglect of religious customs. The head of the household therefore on the following day held a ceremony for the pacification of the wild creatures. He called in the people, and they sat about the room while he knelt in the centre with a basketry tray containing acorn meal. Moving the shallow basket slowly from side to side, he chanted in low tone, repeatedly, " *Wûsaihayai, wûsaihayai!*" This was an invocation to the wild creatures, asking that they be kindly disposed. Then he raised the tray and blew upward across it as an invocation to Múkat, and food was distributed among the women, who departed with it. On the following night they brought it back cooked, and after the host had repeated the same chant, a feast was held. This was done on three successive nights. Múkat is the younger of the two creators in Cahuilla mythology. Except in the foregoing instance the name was not heard among the Luiseños.

11 DuBois, in The Religion of the Luiseño Indians of Southern California, *Univ. Calif. Publ. Amer. Arch. Ethn.,* Vol. 8, No. 3, 1908, describes a rope figure called *wanawut,* or *wanal wanawut,* with three stones tied in it at intervals, the whole representing, according to one of her informants, "one of the First People born of the Earth-mother," and according to another, the Milky Way. This was placed in a trench and used in the test above described. Her in formants were residents of Potrero reservation. No confirmation of this was to be had at Pala or at Rincon. Wanal was a seine used in sea-fishing, and *wána-wut* is apparently "seine large." *Wanal wanawut* is an example of the ceremonial doubling of terms characteristic of Luiseño practice.

was demolished and the material burned.

During the entire course of these rites, which apparantly occupied several weeks, the boys were restricted as to food and drink, and for some months thereafter they ate no meat. After initiation a youth was known as *púmal* ("initiate").

The drinking of toloache was a custom acquired by the Luiseños from the Indians of San Clemente island, some of whom were attached to Mission San Luis Rey. The inland Luiseños transmitted the ceremony to other tribes, including the Diegueños.

Certain elements of Luiseño religion and mythology are connected with the toloache cult, which are recognized as having come from the Coast Shoshoneans; others are quite unmistakably related to Yuman lore.

Chuníchnish was the unseen, all-powerful being whose messenger Raven travelled about the earth observing the activities of the people. Detecting improper conduct, he circled thrice above the place, and the people, thus apprised that someone had transgressed, took steps to placate Chuníchnish before death overwhelmed them. Venomous reptiles and insects, beasts of prey, and Raven himself were his agents of destruction. Apparently there were no myths concerning this personage, which is good evidence, if any were needed, of the exotic origin of the Chuníchnish cult and the attending toloache rites.

Wiyót, next to Chuníchnish the most important name in Luiseño religious thought, appears to be related to Yuman mythology, as witness the following outline of his activities:

Wiyót was the son of Túkumit [night, or night sky] and Tamáyawut [earth great]. He was called father by the people who lived on the earth. Frog was the prettiest of all the women. One day Wiyót saw her swimming, and he observed that her body was thin and not beautiful. She was repulsive to him. Knowing his thoughts, she said to herself: "My father does not like me. I will kill him by magic." She secured the aid of Badger, Gopher, and other burrowers, and they made sorcery against him. He fell sick. Four shamans were called: Wasímal [a hawk], Sakapípi [titmouse], Púipi [roadrunner], and Chaláka [horned toad]. Sakapípi was the first to try. He cried, "*Pipi', pipi!*"[12] And then the

12 It is assumed that Titmouse was trying to say *píish,* kill by magic.

people knew Wiyót had been stricken by sorcery. The other shamans tried their power in vain. Then Wiyót called Chehémal [kingbird], and told him that after death he would appear in the sky. Soon he was dead. They placed the body on pile of wood to burn it. Then came Coyote. He seized the heart and carried it away. Three days later the moon appeared in the sky, and Chehémal exclaimed, "Oh, there is my father, Mâila [moon] Wiyót!"

The birth of a creator from the union of earth and sky, his death by sorcery at the hands of Frog (the origin of death), the burning of his body (the origin of cremation and the mourning ceremony), and the theft of his heart by Coyote, are all features of Yuman myth.

Both Chunichnish and Wiyót were discussed by Fray Gerónimo Boscana, priest at Mission San Juan Capistrano, in his *Chinigchi-nich,* a treatise on the religious customs and beliefs of the Juaneños.[13]

THE CAHUILLA

THE Cahuilla Indians occupy three areas greatly differing in natural conditions: an elevated territory among the rounded, oak-clad mountains between the head-waters of San Luis Rey and Santa Margarita rivers; the lower country bounded by San Gorgonio pass, San Jacinto mountain, and the desert; and the arid region, partly below sea-level, in the northwestern part of Salton sink. In spite of wide environmental differences, the three groups, whose population is about seven hundred and fifty, are much alike in language, customs, and beliefs. Only in certain phases of material culture is there noticeable variation. The following description applies specifically to the desert group.

The name by which these Indians are known is of undetermined origin. Although the pronunciation is similar, it has no connection with Kaweah, or Kawía, the name of a Yokuts tribe formerly resident on the lower course of Kaweah river in Tulare county. In view of the fact that Indians of this region quite commonly designated their neighbors by directional names, Cahuilla is probably the Spanish rendering of Kawíka, westward (literally "mountain-ward"). The Cupeño called

13 See Alfred Robinson, Life in California, New York, Wiley and Putnam, 1846.

the Luiseños Kawíka-wichum ("westward those-of"). The Cahuilla dialect uses the same word for westward and the same termination in some of the terms for groups of people. It is easily conceivable that some Spaniard of long ago, travelling through the desert of Salton sink and making inquiry of the nature of the country and the people ahead of him, received Kawíkawichum as the name of the westerly inhabitants, and thereupon recorded the name Cahuilla.

The westerly and northerly neighbors of the Cahuilla were the related and friendly Serranos in and south of San Bernardino mountains and beyond that range in the Mojave desert. Also to the west, but farther south, were the Luiseños and the Cupeño. Directly south were the Yuman Diegueños in the mountains of San Diego county and other Yuman bands south and southeast of Salton sea. East of the Desert Cahuilla were the Chemehuevi, another Shoshonean group closely allied linguistically to the Paiute of southern Nevada, and many generations ago residents of the latter region.

The Cahuilla house was oblong, and the average size was about ten by twelve feet. Four forked corner posts of mesquite, and one in the middle of each of the two shorter sides, were set in the ground to a depth of several feet, and on these were laid three timbers, one connecting each pair of corner posts and the third the two middle ones. Short rafters were laid from the side beams, or eaves, to the middle one, or ridge. The nearly flat roof consisted of dry wormwood stalks (*Artemisia*), laid across the rafters (that is, the longer way of the house), slabs of dry mesquite-bark across the *Artemisia,* green wormwood with the tips directed toward the eaves, a thick covering of fallen mesquite-leaves, and finally a thin layer of earth, which was trampled down compact and smooth. In modern practice the covering of earth is generally partially or wholly lacking. The walls consisted of several courses of overlapping wormwood shoots, each course being bound to a long pole extending between the posts. An embankment of earth at the bottom kept out the wind. The doorway, at one end beside the middle post, was ordinarily open, but it could be closed with an unhung door made of mesquite-bark slabs held between a series of battens. The fireplace was in the centre.

In the dooryard was ramada, *kís-váhat (*"house shade"), which was simply a thatch-roof extending out from the house and supported on posts and timbers.

There was no celebration nor dedication of a new dwelling, and the individual built his own house without the assistance of the community. The occupants slept on the floor, and the furnishings were limited to cooking utensils and baskets.

The sudatory was built by first excavating a circular hole six to eight feet in diameter and rather more than two feet deep, and setting up in it two forked posts, which extended five or six feet above the bottom of the pit, one at the rear, the other a short distance from the front wall. They supported a beam, on which rested the upper ends of a series of poles extending from the ground at the edge of the excavation. Against the upper end of the front post, which stood back from the edge, leaned the tops of two sloping beams, the feet of which rested on the ground about thirty inches apart. These formed the entrance. The roof was covered with brush and earth. The occupants sat against the earthen wall, and two men just inside the doorway, one at each side behind a baffle-wall of clay which crossed the doorway, kept up a brisk fire in front of the post. The bathers remained with bowed heads until the fire died down enough for them to pass out. If water was available they took a plunge, otherwise they lay in the sun to dry. The sudatory was used principally to relieve slight physical ailments, such as headache, cough, fatigue. Songs and prayers were not a part of the treatment.

The structure in which are held the memorial rites for the dead is called *kis-ámnawut* ("house power-great"). The circular wall of arrow-weed brush is about four feet high and twenty to thirty feet in diameter, and the conical roof of beams and poles thatched with brush is supported on forked posts at the corners of a square and a fifth in the centre. Sometimes only a brush corral is built, and modern practice favors communal ceremonial dwellings surrounding an uncovered plaza, in which the dancing takes place.

The subject of clothing could be ignored with little injustice to the Cahuilla. Robes made of strips of rabbit-fur with cord twining were the only garment in common use, and they were draped about the shoulders only as protection from cold. Men did not always wear a skin loin-cloth, nor women a short kilt of mesquite-bark fringe. Pad-like sandals of agave-fibre were, and are, used when the feet must be protected from thorns. A fibre thong is so arranged that the foot can be slipped through a loop in such way that the cord encircles the ankle,

extends down the instep, then branches and passes on both sides of the second toe. Flat-topped basketry caps of coiled weave were worn by women to protect the head when carrying burdens suspended in a net on the back.

The fauna of the Cahuilla habitat includes antelope, deer, mountain-sheep, black bears, badgers, mountain-lions, and wildcats, all of which were eaten, although their flesh was not a staple. Rabbits, hares, woodrats, and ground-squirrels were a more dependable source of meat. Dogs, and in later times horses, were eaten in time of famine, and the tortoise and a species of large lizard were esteemed.

Fish were not available to the Desert Cahuilla within historic times, but the mountaineers secured limited quantities of trout.

A boy or youth was not permitted to eat any game killed by his own arrows, nor could his parents eat it. Such game was given to other families. Not until he became a father was the taboo lifted. It was said that transgression of this rule would result in his inability to kill another animal of that particular kind.

Most important of all foods to the desert dwellers were the seed-pods of the mesquite tree (*Prosopis juliflora*), and to a lesser degree those of the screw mesquite (*P. pubescens*). These, the so-called mesquite-beans, are still harvested in considerable quantities. The pods are broken up and the seeds, *káhat,* in their somewhat pithy covering are soaked in water, which imparts a slightly acid flavor to the resulting beverage. The seeds have no further use. The pods are dried, parched by stirring them about in a flat dish containing embers, and ground in a wooden mortar. The brownish meal, *méñikis-tóat,* is eaten dry or mixed with water. It has a pleasant, sweetish taste slightly suggestive of licorice. Mesquite-blossoms are roasted in a pit on heated stones and squeezed into balls ready for eating. This product is called *sel-kólat* ("mesquite-blossoms made of").

The fleshy leaf-base of agave was roasted in stone-heated pits. This is the food commonly called mescal. The dwarf yucca yielded a similar product. The pith of a palm with fan-like leaves was boiled and eaten in time of famine, and the fruit was crushed and stirred in water to make a beverage. Mistletoe, *chaíyal,* a parasitic growth on mesquite trees, has small, pink-white, waxy berries, which, mashed and mixed with a small quantity of ashes to counteract the viscidity, are boiled in an earthen pot for few minutes. This is used as an occasional food, like

dessert. The taste is sweetish.

Various seeds, including those of a sage called *pásal* (*Salvia columbariæ*), are winnowed, parched, and ground into flour. The fruit of *Echinocactus* and of two species of *Opuntia,* or prickly-pear, and the seeds of another *Opuntia*, the cholla cactus, are eaten.

The Cahuilla make, or made, implements and utensils of fibre, skin, wood, clay, and stone.

The burden-net may be described as a small hammock with four-inch meshes. The material is agave-leaf fibres twisted into cord by rolling them with the palm against the thigh. At each end of the net the strands converge into a ring, one of which extends in the form of a band long enough to pass over the head of the bearer and back to the other ring. Small objects to be transported are placed in a rather shallow basket, which is supported in the net.

Agave-fibre sandals and rabbit-fur robes have already been mentioned.

Bows, arrows, rabbit-sticks, fire-drills, flutes, mortars, cradle-boards, seed-beaters, and baskets were fashioned of wood or woody materials.

Bows, usually of willow, sometimes of mesquite, were about fifty inches in length and two inches, more or less, in width. Sinew reinforcement was not employed. The string was either mountain-sheep sinew or agave-fibre. Arrows for small game had a shaft of cane, *páhal,* into which was inserted a pointed piece of greasewood, or they were simply pointed and feathered lengths of arrow-weed *(Pluchea)*. For large game a flint or obsidian point was attached with black gum obtained from a plant, *átukul,* and with sinew cord either to the hardwood foreshaft of a cane arrow or directly to the end of an arrow-weed shaft. Arrows were about three feet in length and were either doubly or triply feathered with feathers from the wing or the tail of a hawk.

Curved, flattish sticks were used in knocking over rabbits as they ran. The hearth of the fire-drill was a piece of palm-wood, the spindle a shaft of arrow-weed. The flute was an open section of cane, beveled at the mouth-end and bored with four holes. Gourd rattles were not made, but were secured in trade, probably from the agricultural Yuman tribes of Colorado river.

The mortar of the Desert Cahuilla is a mesquite block about two feet long, hollowed with fire to about half its length, and embedded

in the ground. The pestle is of the same material. Stone mortars also are used. Wherever mesquite is wanting, that is, generally among the Mountain and the Palm Cañon Cahuilla, are found shallow stone mortars with basketry hoppers attached at the base by means of gum from the plant *átukul*.

The cradle-board was a frame of transverse slats lashed across two parallel rods, with a sun-shield of basketry at the head. The infant was bound in place with a thong, and a strap at the head of the cradle served to carry it.

With the exception of an open-mesh utensil used as a sieve and a tray, all Cahuilla baskets are produced by the coiling process. The horizontal, or foundation, elements are the tall, slender, grass-like stems of *sul* (*Epicampes rigens*), and the sewing or wrapping material is either reed-grass, *maísvat,* also known as *séil (Juncus),* or sumac, *sélet* (*Rhus trilobata*). *Juncus* provides not only the prevailing straw color of Cahuilla basketry, but also brown and reddish patterns, these latter shades occurring at the base of the stalks; and it is dyed black by boiling with mistletoe, *Phoradendron californicum* or *P. coloradense,* both of which species occur as parasites on mesquite trees.

Káputil, the burden-basket, so called although it is used for carrying burdens only when enclosed in a net, and furthermore is quite commonly employed as a container of food or other articles, is from twenty-four to thirty inches in diameter, half as deep, and slopes inward at a forty-fivedegree angle to flat bottom. Contrary to general Indian practice, Cahuilla men were not ashamed to be seen bearing a load on the back.

Káput-mal, judged by its name, is only a smaller form of the burden-basket. Its sides, however, are slightly curved, and the general appearance is that of a broad, shallow dish. Baskets of this kind are about twelve to fourteen inches in diameter and half as deep. They are used both for parching seeds by shaking them with embers, and as food-containers.

Chípat-mal is a shallow basket, almost a tray, used for winnowing seeds and as a plate.

Tévinil, somewhat globose, with flat, wide bottom and opening nearly as large, is used for the storage of valued objects of small size, such as beads, paints, awl, or tobacco.

Basketry caps for protecting the head from the pack-strap have

already been mentioned.

Of pseudo-basketry construction is the outdoor granary, *pénivut*, for the storage of mesquite-beans. Wormwood (*Artemisia*) stalks are horizontally intertwined, but not woven, to form the sides of a large, truncated cone. It rests on a bed of wormwood, to which however it is not attached, and is covered with the same material. Usually it is raised on a wooden platform.

Cahuilla pottery resembles that of the other Southern California Shoshoneans and of the Yuman tribes. It is not to be compared with Pueblo pieces. Although there is no direct evidence on the subject, it is possible that the manufacture of pottery in southern California was derived from the Pueblos. There was a definite trail from the Colorado river to Zuñi, and it is reasonable to suppose that Yuma travellers acquired there the rudiments of this useful art. The clay for Cahuilla pottery, obtained in certain localities at the base of hills, was thoroughly dried and then pulverized on a metate. After a few sherds had been ground and intermixed, water was added until the mass was of the desired consistency. A rope of the material was coiled round and round, and as the sides of the vessel were thus built up, from time to time the potter smoothed them by rubbing with a curving stone on the inside and wooden paddle on the outside. After drying in the sun for a day, the ware was ready for painting. *Tésnat,* brown earth (probably iron oxide), was burned, rubbed on a flat stone, and mixed with water, and with this pigment simple geometrical designs were painted on the vessel. The ware was fired with the roots of a shrub called *séwul,* in later times with cattle-dung. Pottery was made only by women.

The product of the potter's art took the form of water-jars, storage-jars, pots for cooking, dishes for parching seeds and serving food, and tobacco-pipes. Water-jars were spheroidal, with a restricted neck terminating in an opening of the same size, like the well-known Mexican olla. Jars for the storage of edible seeds lacked the extended neck, and the opening was considerably larger, so as to permit the insertion of the hand. Pots had an even larger opening, the lip was slightly recurved, as if to permit the fastening of a thong about it. Vessels used for parching seeds and for serving food were simply bowl-shape dishes with the opening as large, or nearly as large, as the maximum diameter. All these utensils had rounded bottoms. The clay tobacco-pipe was tubular.

The stone implements of the Cahuilla were flint or obsidian arrow-points, arrow-straighteners, mortars (in the mountainous areas), pestles, metates, and mullers. The arrow-straightener was an oval piece of soft stone with a transverse groove in which, after the implement had been heated, the shaft was drawn back and forth. Metates were flat slabs of granite rock worn slightly hollow in actual use, and the muller was a flat, oval or rectangular, piece of the same material, or a naturally shaped stone of convenient size and form. Arrow-points, mortars, and pestles have been noted heretofore.

Sociologically the Cahuilla are a large number of localized, exogamous, patrilineal clans, which are divided into two groups, one identified with the wildcat, *túkut*, the other with the coyote, *ísil*. These moieties also are exogamous, and are designated by the collective forms of *túkut and ísil,* that is, *túktum* and *ístam*. With coyote is associated buzzard (*yúnavis*), with wildcat is crow *(álwat)*. Totemism, in the sense of descent from an animal or guardianship on the part of an animal, is not present.

The clan chief, *net*, who comes to his position by heredity, is concerned principally with ceremonial matters, and is in fact a priest rather than a political leader. One of his duties is to keep mental record of those of his clansmen who have died during the interval between two memorial ceremonies. Again, whenever vegetal food-product comes in season, he directs his people to bring a quantity to him, and his official assistant prepares the food and distributes it among them. Then they are free to harvest for themselves. At intervals of a few months he gives a feast in his house and imparts to the people any news or advice he may have. At the time of the memorial ceremony he sends his assistant to neighboring villages with a small gift of shell money and invites them to the ceremony. Some of these customs are now of course in abeyance.

The clan chief's assistant (*pahá*' among the Mountain Cahuilla, *táhqa* in the Palm Cañon and Desert divisions) is an hereditary official charged with the actual management of ceremonial affairs. One of his duties is to prepare the dead for cremation.

Marriage was normally arranged in conference between two fathers, in which the girl's parent received a gift of some value, such as a quantity of mesquite-flour. The girl having been persuaded to accept her parents' decision, the young man came and led the bride away

without formality. Either spouse, if dissatisfied, could dissolve the partnership and await opportunity for a new match. Sometimes girls not yet adolescent were pledged, and were then regarded as actually married although they continued to live at home. A widower could claim an unmarried sister of his deceased wife, and widow customarily married a brother of her deceased husband. Familiar conversation or association between man and his mother-in-law or his daughter-in-law was avoided, and relations between man and his wife's sister or his brother's wife must be circumspect.

Pregnant women observe many restrictions in order to insure the delivery of healthy children. Little meat and no salt are eaten, and only warm water is drunk. Great stress is placed on the certainty of unfortunate prenatal influence should an expectant mother look at unpleasant or repulsive sights, such as a person marked with sores. She should busy herself constantly so that the child will be similarly industrious. The birth of twins is great misfortune, but it is not known that the Cahuilla ever deliberately exposed one of twins to death by starvation, as did some Indians. After childbirth a woman lies in a heated pit and is covered with hot sand practically constantly for a week or longer, and for a month she avoids meat, salt, and cold water. As among many Indian tribes, nursing mothers do not cohabit, and the early weaning of an infant is the occasion of general chaffing of the impatient woman.

On the fourth day of the memorial ceremony for the dead, when the material for the effigies is distributed, children are publicly named. The clan chief applies to each unnamed infant an ancestral name belonging to its father's family. Rarely were the ears pierced, but sometimes even the septum of the nose as well as the ears was so treated. William Pablo, a Palm Cañon Cahuilla, in his boyhood used to see an old man wearing a piece of iridescent shell hanging from his nose. At a later age each individual receives an "enemy name," which, when known, is used by the members of some other clan in singing songs ridiculing the "enemy" clan. This is comparable to the custom of certain Hopi fraternities, which in their ceremonies sing songs ridiculing the women of certain other organizations. The Cahuilla endeavor to keep these names secret in order to foil the "enemy" clan.

At intervals of approximately two years occurred Távilyoïly, when all children of the age of puberty, or thereabouts, received a course of instruction in the ancient traditions and the right ways of life. First the

older people met on three successive nights and discussed the myths, refreshing their memory. Then on the fourth night the children were brought into the chief's house, each wrapped in rabbit-fur blanket, and the boys were laid on the floor at one side, the girls at the other side. The people sang the old songs, while the children listened and learned.

The next morning the parents or other relative of the children took them to the water, bathed them, brought them back before sunrise, and painted their faces and bodies with gypsum. At sunrise a fire was built in front of the house, and the children lay there to sweat. They were covered with green shoots, such as willow, and then with earth, to prevent them from becoming stiff. The sweat lasted perhaps two hours, and they were then taken back into the house.

The chief's assistant and a woman or two remained in the house to watch the children, while all the other men went hunting and the women gathered seeds and berries for the nights feasting. Thus three nights and three days were spent.

On the morning after the third hunt occurred Pónil, when the children were taken to a plot of cleared ground and trained to dance, one at time. If there were many pupils, this consumed the entire day. Toward evening they received food. This was repeated on the two succeeding days, and on the next (the tenth from the evening of practice singing by the elders) they received a bath and were questioned as to what they had learned; and any songs, myths, or rules of conduct in which they were deficient were repeated to them. Those who showed sufficient progress were dismissed, but the others remained under training as long as three months. Some never acquired any knowledge and were dismissed as hopeless. During this period of training meat and salt were prohibited. At first the pupils had only one meal daily, but if they made good progress they received two meals. The custom has been obsolete for many years.

On the occasion of her first menses a Cahuilla girl was laid recumbent on bed of brush and herbs in a heated trench. Covered with a blanket she remained there throughout three nights, while men and women danced and sang songs alluding to the institution of this custom by Moon and to the proper conduct of menstruating girls. During the day her grandmother or aunt placed her on the floor of the house, where neither sun nor wind could strike her. When she was thirsty

they gave her warmed water, since cold water would cause cramps; and for her two daily meals she received small quantity of thin mush. No salt nor dried food was given, and a bone or wooden scratcher was provided, since scratching with the fingers was prohibited. She remained thus in seclusion and on a limited diet for one moon. The first menstruation generally occurred at the new moon, it is said, and the girl remained under care until that moon disappeared, when she received a warm shower-bath. At the rise of the next new moon the flow, it is said, did not usually recur. If it did, the parents knew that the previous one was not her first period, that she had deceived them; and therefore a shaman was summoned to administer large quantities of bitter herb decoctions. At her second menstruation, and indeed, it is said, at every recurrence, the girl was kept in seclusion for six days, and ate no salt nor dried food.

The initiation of boys by administering a drink of toloache, the root of Jamestown-weed, did not prevail among the Cahuilla. The practice obtained precarious foothold among the Cahuilla of San Jacinto mountain and south of San Gorgonio pass, having been learned, it is said, from the Serranos of San Bernardino mountains.

The games and contests of the Cahuilla included the hand-game and two somewhat similar guessing contests, shinny, hoop-and-pole, dice, various forms of archery, the kicking race, and string figures. Only the hand-game, now generally known by its Mexican name, peón, is extant.

The Cahuilla were not warlike. Such fighting as occurred generally grew out of encroachment on the food preserves of a neighboring group or the supposed sorcery of a medicine-man. The most distant fighting of which a Palm Cañon Cahuilla ever has heard was with the "Kisiánu" (Cristianos, apparently missionized Serranos), who lived between the sites of Redlands and San Bernardino. It was thought that the medicine-men of that tribe had poisoned the food of their Serrano visitors from Morongo, who thereupon sent for the Palm Cañon fighting-man Sísu. This warrior organized a party and joined the Morongo people against their enemies, with what success is not remembered.

Hunters and shamans were predestined, and did not obtain their power by fasting. A youth destined to become a hunter felt an irresistible impulse to go into the mountains to hunt, and without a bite of food he departed at dawn to wander in the wilds. A voice, whether of

a bird or other animal, or a rumbling noise among the rocks, or perhaps a voice inaudible to the ear, informed him where he would find game.

There were shamans of three kinds, who existed in each group of people by the arrangement of the creator Múkat.

The *pá'vol* was a medicine-man who not only cured sickness by means of herbs (very rarely by pretending to suck out blood), but also was a powerful hunter, to whom the animals spoke a language he understood. He could send his thoughts to a distant hunter in the hills and tell him where game was to be found. He treated any disease visited by Ámnaa ("power"), one of the beings existent before the creation of the world, as a punishment for transgression of such rules as relate to religious rites. He could cure snakebites, pneumonia, broken bones, bruises, dysmenorrhea caused by bathing in cold water at the menstrual period or by eating salt at that time, wounds, and colic. In all cases he employed herbs, administering them internally or applying them as a poultice, and rubbing either with the hand or with hot stone. He treated tuberculosis, which was believed to result from an infection of the blood. Thus, if a wound were not cured, the bad blood passed into the system and lodged in the lungs; or the same thing might occur to woman afflicted with irregular menses. The *pá'vol* treated also diseases of the eyes and ears. He could tell by feeling her abdomen and pulse whether or not woman were pregnant, could assume the form of an animal and thus capture deer,[14] could render an archer powerless to shoot, causing him to stand motionless all day with drawn how.

Pol was a shaman who obtained his power by predestination fromÁmnaa through the medium of dreams in childhood. These recurrent dreams distressed the child, but if he disclosed them to anyone they became of no effect. When he became a young man he confided to his elders that he had dreamed, and his clan chief at once ordered preparations for a dance. On three successive nights the novice danced and sang the songs revealed in his dreams. All this conforms to a cus-

14 This belief may have been the result of certain men hunting deer by means of disguise. The custom, common enough in regions not far distant, was known to the Cahuilla, but was not practised by many, and supernatural power would very probably be accredited to men who, having travelled and observed the method, first made use of it. The deer disguise was called *áulavel;* the stalker himself, *áulave.*

tom widely prevalent in western America. The *pol* cured by sucking and singing and waving a bunch of colored feathers over his patient, in order to send strength into the sick one's heart. After sucking he gave the spectators a glimpse of a small black object, which he professed to have removed from the patient. It was this object, entering the body by magic exerted by some other shaman, that had caused the sickness. He usually was rewarded by a gift, but is said never to have made a formal charge for his services.

Sometimes, usually in the case of a woman, a *pol*, after sucking and failing to produce the sickness, announced that there was none in her body, that he would therefore take a night to ask his *ámnaa* (power) what was wrong. The next day he declared that the spirit had gone out of the patient's body, and sent the chief's assistant to call the people together. He placed the woman with her back to the fire, and danced and leaped about her, singing, and finally he shouted, "It is coming!" He made grasp into the air near her and then opened his hand to show a very small black object, holding it up for all to see. This always resembled a diminutive lizard. He placed it on the top of her head, pressing down, and then passed his hands downward over her body. Sometimes after dancing two nights he called in several other *pol* to assist on the third night. It was thought in such cases that the spirit simply had taken temporary leave of the body, not that it had been carried away by evil powers. When a spirit was carried off by Táqish (identified with ball-lightning) or other malevolent beings, it could not be recovered.

Tétaaiwis ("dreamer") had dreams, which came at command and enabled him to foretell events. His power was prenatal. One of his principal functions was to see at a distance poaching parties of neighboring people. By dreaming of a person he could cause his death; but he himself claimed invulnerability and the power to move long, distances with great rapidity. Nevertheless, "dreamers" were sometimes killed by the relatives of those who were supposed to have died as result of sorcery. They were noted for ability to endure hunger, thirst, and lack of sleep.

Tínaivas ("healer"), a woman who used herbs without supernatural assistance, having acquired her ability by human instruction, cared for women in childbirth and treated other similar cases. If she failed, she sent for *pá'vol.*

The "dreamers" neither danced nor sang but both *pol* and *pá'vol* had songs alluding to their special abilities and exploits. On any occasion when a chief called a number of people to his house to sing and repeat the ancient myths, as well as in the course of the mourning ceremony, shamans of both the latter classes would perform certain acts of magic, one of which was to cause some object to disappear from the upraised hand, another to thrust a short rod down the throat and cause something ostensibly to come out of his heart. This, whatever it might actually or supposedly have been, was his *táqia,* the agent or symbol of his guardian spirit. A real feat was the taking of a live coal into the mouth, an act still in vogue. An ember, and not a diminutive one, is placed between the teeth and the breath is forcibly exhaled, causing it to glow brightly and emit sparks. After a moment it is taken back into the oral cavity, held there briefly, and then swallowed. The present writer has not been so fortunate as to observe this act, but he has questioned so many reputable white residents who have seen it at close range that he entertains no doubt the feat is actually accomplished.[15] Shamans are still active among the Cahuilla, especially among the Desert group.

When death occurred, shamans, both *pá'vol* and *pol*, were called in to make certain that life was really extinct. The people present then began to wail, and blew their breath upward three times in order to speed the spirit on its way. After the corpse had been washed and dressed, the chief's assistant, *táhqa, or pahá',* placed it in a carrying-net and took it to the burning-ground. He scraped out a long, shallow trench, laid sticks of wood across it, placed the body on them, and built over it a conical heap of fuel, like a peaked hut. He then set fire under the mass, and the corpse was consumed almost without being seen. Children were not permitted to attend a cremation, but elder relatives and friends stood at a little distance and wailed. When all was consumed, the *táhqa* (*pahá'*) covered the ashes with earth and left the spot like the surrounding surface. A few days later the house and all the individual possessions of the deceased person were burned. Men

15 Since the foregoing was written a trained investigator has observed the "fire dance" and vouched for the genuineness of the act. See Hooper, The Cahuilla Indians, *Univ. Calif. Publ. Amer. Arch. Ethn.,* Vol. 16, No. 6, 1920, page 331.

and women cut the hair and rubbed charcoal on the face as a sign of sorrow, and they continued mourning until the next celebration of the memorial rites.

Nú-kily, or Chóm-nily,[16] the memorial rite for the dead, is held annually, in the winter, unless there is lack of the quantities of food needed for a feast. In the fall, if any members of his group have died since the previous celebration, the chief, whose principal function is in this connection, summons his elders to determine just when the ceremony shall take place. They eat and smoke while conversing, and at length the chief himself suggests a date, to which the others agree as a matter of course. They then decide what other groups shall be invited, and a messenger carries the word to them, receiving for his chief a gift from each invited group.

The ceremony lasts six nights. The invited, and usually many uninvited, guests having arrived during the day, all assemble in the large ceremonial house, and after a period of smoking they begin under the direction of a song-leader to intone the chants that largely compose the creation myth. Sometimes the officiating chief first delivers a speech explaining the origin and purpose of the rites. The chanting goes forward with very frequent intermissions, and at the conclusion of each brief period of singing the leader exhales a groan and blows his breath upward three times, which the others repeat. These ceremonial acts, common to the Luiseños and the Diegueños, may respectively refer to the groaning of the two creators as they lay in darkness after their spontaneous generation in the union of red lightning and white lightning, and to their creation of various things by ejecting them from their hearts. The more immediate reference of the upward expulsion of breath is, however, to the belief that the soul rises to the sky before travelling onward to its home, and to the desire to be rid of the ghost. At intervals in the chanting a shaman dances and sings his personal songs, assisted by the spectators, and the capable ones exhibit their magic as heretofore described. Some of them pretend to receive from Ámnaa instructions which they communicate to the people.

Large quantities of provisions have been accumulated for the occasion, and the baskets and pots of food brought by all the resident

16 The name refers specifically to the making of effigies of the dead.

families are piled together in the ceremonial house, ready for the feast that occurs each morning.

Three nights pass in the chanting of the creation myth, and the second three nights are devoted to singing by the invited guests.

On the fourth night the officiating chief makes a speech, emphasizing the importance of continuing this custom which has come down from the beginning, and then distributes among the women of the bereaved families deerskin, feathers, baskets, nets, shells, everything necessary to make a native costume. On the following day other women of the same moiety[17] construct life-size effigies of reeds, tules, or other such material, one for each dead person mourned, and clothe them in lifelike manner with the goods received from the chief.

On the fifth evening all these effigies are brought to the ceremonial house, the official singer leads the chanting of the ancient songs alluding to the creation of the world and the suffering and death of the creator Múkat, and the effigies are laid away at the rear of the house and covered with blankets.

Crowds begin to arrive on the sixth day, and all sadness is for the moment cast aside. At night when the people have assembled, the chief makes known to the newcomers what persons are being mourned, a signal for general outburst of wailing. Just before dawn, after another full night of song, the effigies are brought in, each borne by a woman relative of the dead person thus represented. Following the chief, the women march around the fire and outside the house, where they form a circle and dance *in situ* by bending forward at the waist, rising on the toes, and settling back forcibly on the heels, always singing while the others loudly lament. Other clansmen of the dead toss money or commodities among the crowd, exactly as if an actual cremation were taking place. After time the women carry their effigies to the burning-ground, where they are consumed amid wailing and the chanting of songs describing the burning of Múkat.

This memorial is intended to put an end to grief, as in fact it does. The mourners thereafter wash their faces, permit the hair to grow long again, and deliberately laugh and joke.

Almost the whole of Cahuilla mythology is included in the ac-

17 Gifford says of the opposite moiety.

count of the creation and subsequent events. Múkat and Témayawut[18] born from the union of a red and a white ball of lightning, effected two creations side by side. The balls of lightning were simply the manifestations of Túkmiut[19] ("night") and Ámnaa ("power"), which existed from the beginning. Night was the mother, whereas in Luiseño and Diegueño mythology Night (that is, the night sky) was the father and Earth the mother. Témayawut, argumentative and headstrong like the Coyote creator familiar in the mythology of northern and central California, brought into existence an ill-formed race, and in displeasure over his defeat in the creative contest, he disappeared beneath the earth, taking his monstrosities with him. Múkat incurred the ill-will of his people by teaching them to fight with bows and arrows, and they had Frog bewitch him. This is a motive found also in Yuman mythology. By his own direction they burned his dead body and so instituted the funerary and mourning rites, the last gift of the creators. These rites, together with the puberty ceremonies for boys and girls, may properly be said to comprehend the religion of the Cahuilla.

18 The Cahuilla profess to be ignorant of the meaning of the names of the creators. Témayawut is identical with Luiseño Tamáyawut, which is translated "earth," and apparently is compound of *témal,* earth, and the common suffix *wut*, indicating greatness.

19 Palm Cañon Cahuilla dialect, Tókmiyawut.