

HANDBOOK
of the
INDIANS OF CALIFORNIA

A.L. Kroeber

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PREFACE

POSTSCRIPT.

the Indians of California has of course ; the five years since this manuscript was even a summary of this would have meant is the addition of numerous passages—an have therefore only corrected errors, and otnotes indicating the range or significance is to knowledge, and their sources. These ide the reader to the literature that is ps in the world's knowledge of the tribes bibliography has been brought as fully as

Yurok, Yuki, Yokuts, and Mohave consist usly unpublished data collected by myself. arok, Wiyot, Kato, Huchnom, Coast Yuki, Maidu, Costanoans, and Serrano combine or less amount with materials from pub- pter on the Miwok embodies a considerable ata put at my disposal by E. W. Gifford. pter on Prehistory dealing with cultural n Francisco Bay shell mounds is based on r computations by N. C. Nelson.

present volume have been utilized, with the and with changes of greater or less moment, Chapter 53 forms the basis of an article, e Lower Colorado," in volume 16 of the ia Publications in American Archaeology s 54-56, of "Elements of Culture in Native 13; and chapter 59, "California Culture 7 of the same series.

A. L. KROEBER.

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CHAPTER 44.

THE GABRIELINO.

THE FERNANDEÑO, 620. THE GABRIELINO: Territory, 620; general status, 621; mythology, 622; ritual, 626; shamanism, 627; buildings, 628; basketry and pottery, 628; steatite, 629; trade and money, 630; food, 631; various implements, 632; social practices, 633. THE SAN NICOLEÑO, 633.

THE FERNANDEÑO.

This group of people, more properly San Fernandinos, are named from San Fernando, one of the two Franciscan missions in Los Angeles County. At San Gabriel, the other establishment, were the San Gabrielinos, more often known merely as Gabrielinos, popularly Gravielinos. In a larger sense, both people have been designated as the Gabrielino. Their idioms were distinguishable, but not notably so; and if fuller knowledge were extant it might be necessary to recognize half a dozen dialects instead of the two which the presence of the missions has given the appearance of being standard. The delimitation of Fernandino and Gabrielino on the map is mainly conjectural, and there is no known point in which the two groups differed in customs. It will be best, therefore, to treat them as a unit under the caption of the more prominent division.

THE GABRIELINO.

TERRITORY.

The wider Gabrielino group occupied Los Angeles County south of the Sierra Madre, half of Orange County, and the islands of Santa Catalina and San Clemente. The evidence is scant and somewhat conflicting as regards the latter; a divergent dialect, or even a Luiseño one, may have been spoken there. The local culture on San Clemente, however, was clearly connected with that of Santa Catalina, perhaps dependent upon it; and Catalina was pure Gabrielino in speech.

On the west, the Gabrielino limits—here more exactly Fernandino—against the Chumash were at the minor watershed through which the Santa Susanna tunnel has been bored; at the coast, between Malibu and Topanga Creeks. Eastward, toward the Serrano and Luiseño, the line probably passed from Mount San Antonio to the vicinity of Cucamonga, Mount Arlington, and Monument and Santiago Peaks; in other words, through western San Bernardino and Riverside Counties—although San Bernardino Valley has also been ascribed to the Gabrielino. Southward, Alisos Creek is cited as the boundary between Gabrielino and Juaneño.

Most of the ascertained place names of the Gabrielino are shown in Plate 57, whose limitations as regards the inclusion of true village sites have already been mentioned. Other places are these: Pimu or Pipimar, Santa Catalina Island; Kinki or Kinkipar, San Clemente Island; Aleupki-nga, Santa Anita; Pimoka-nga, Rancho de los Ybarras; Nakau-nga, Carpenter's; Chokish-nga, Jaboneria; Akura-nga, La Presa; Sona-nga, White's; Sisitkano-nga, Pear Orchard; Isantka-nga, Mision Vieja. Sua-nga near Long Beach is mentioned as the largest village.

Synonyms or dialectic variants of the Gabrielino names shown in Plate 57 are: Tuvasak for Siba; Iya for Wenot; Pashina for Pasino; Ongovi, Ungüvi for Engva; Chauvi and Unau for Chowi; Shua for Sua.

A language of "Kokomcar" and one of "Corbonamga" are mentioned as spoken by the neophytes at San Gabriel besides the "Sibanga"—Siba, the site of San Gabriel—and "Guiguitamcar" or Kikitanum, that is, Kitaneumuk.

The Ventureño Chumash knew the Gabrielino, and perhaps all the Shoshoneans beyond, as Ataplili'ish (plural I'ataplili'ish).

GENERAL STATUS.

The Gabrielino held the great bulk of the most fertile lowland portion of southern California. They occupied also a stretch of pleasant and sheltered coast and the most favored one of the Santa Barbara Islands. They seem to have been the most advanced group south of Tehachapi, except perhaps the Chumash. They certainly were the wealthiest and most thoughtful of all the Shoshoneans of the State, and dominated these civilizationally wherever contacts occurred. Their influence spread even to alien peoples. They have melted away so completely that we know more of the fine facts of the culture of ruder tribes; but everything points to these very efflorescences having had their origin with the Gabrielino.

The Jimson weed or toloache ritual is a case in point. The religious use of this drug extends far eastward, and its ultimate source may prove to be Pueblo, like that of the sand painting that is associated with it in the region from the Gabrielino south. The definite cult, however, in which the plant is employed, the mythology with which it is brought into relation, the ritual actions and songs that constitute its body, were worked out primarily if not wholly by the Gabrielino. All southern accounts mention Santa Catalina and San

Clemente Islands as the seat of the source of this cult. Whether it was brought from there to the mainland Gabrielino, or whether these had long shared the ritual with their oceanic kinsmen, is not certain. At any rate, the ritual was carried to the Juaneño; from them to the Luiseño; and they in turn imparted it to the Cupeño and the northern or western Diegueño.

The last of this flow took place in historic time. It reached the interior Luiseño and the Diegueño from about 1790 to 1850. The very missions of the pious Franciscans stimulated the spread. They brought San Clemente Indians to San Luis Rey, and highland Luiseño to mingle with the coast Luiseño and islanders there. The Luiseño and Diegueño to-day sing nearly all their toloache songs in the Gabrielino language without concern at not understanding the words issuing from their mouths.

MYTHOLOGY.

Among the Juaneño and Luiseño the Jimson-weed cult is intimately associated with beliefs in a deity called Chingichnich or Chungich-nish. This name has not been reported from the Gabrielino, but Kwawar occurs as a synonym of Chingichnich among the Juaneño and as the "creator" with the Gabrielino. Further, certain of the animals of the Luiseño worship, such as the raven and rattlesnake, reappear with religious significance among the Gabrielino. There can thus be little doubt that these people also acknowledged the divinity. The problem which we can not answer is whether they knew him under another name, or whether Chungichnish is itself a Gabrielino term which happens not to be mentioned in the scant sources of information upon this tribe. Pura, the Luiseño say, is what the Gabrielino called the deity; but the word looks suspiciously like the Luiseño term for shaman: *pula*.

On the other side, to the north, there are some traces of a pantheon of six or seven deities, in part female, more or less associated with the Jimson-weed cult, though whether primarily or not is uncertain. Among the southern Yokuts these divinities present the appearance of being of foreign origin, and this determination is corroborated by their entrance into wider phases of life with the Gabrielino: the names are not only those of gods, but titles of chieftainship. The information on this interesting little system of mythology is sadly fragmentary, but pieces together sufficiently to

suggest some idea of the nature of the scheme. It is presented in the following table:

YOKUTS. In fixed order of Jimson- weed prayers.	YOKUTS. In fixed order of other prayers.	FERNANDEÑO. "Gods" in order of mention.	GABRIELINO.	SERRANO.
Tüüshiut....	Tüüshiut....	.....	.....	.....
Pamashiut..	Pamashiut....	.....	.....	.....
Yohahait....	Yohahait....	.....	.....	.....
	Echepat....	5. Iuichepet..	.....	.....
	Pitsuriut.....	4. Pichurut....	.....	.....
	Tsukit.....	3. Chukit....	Chukit (in myth, sis- ter of 4 brothers).	.....
	Ukat (their sister).	1. Ukat.....	.....	.....
		2. Tamur....	Tomar (title of oldest son of chief).	.....
		6. Manisar (wife of 5).	Manisar (title of old- est daughter of chief).	Six stones at Nanamüriat, Little Bear Valley, were "gods."

FORMULA: 7 Yokuts (-t, prayers)-3 Yokuts (-t, Jimson weed)+2 Gabrielino (-r, chiefs)=6 Fernandeno (-t, -r, gods)=6 Serrano (?).

The Fernandeno list is from San Fernando in mission times, and might therefore go back to a Kitanemuk Serrano source. The Kitanemuk at any rate would have carried the religion to the Yokuts, who would not be praying to native gods under names that contain the sound *r*, which is lacking from their own language. How far the Chumash, Alliklik, Kawaiisu, and Vanyume shared in this complex is entirely undetermined.

It is observable that there is a distinction of function between the gods whose names end in -t and those whose names end in -r, and that this distinction coincides with tribal distribution.

South of the Gabrielino, this mythic-ritual-social six god system has not been reported. Whether it and the Chungichnish complex excluded each other or stood in relation remains to be ascertained by future investigations. But there is an approximation to the Gabrielino plan among the Juaneño, who possessed animal names as titles for their chiefs and chieftainesses; thus "coyote" and "ladybug." It is also possible that the Juaneño female mythological character Ikañt is to be connected with Ukat.

The meanings of the deities' name are obscure. Manisar is very likely from *mani-t*, Jimson weed. Pitsuriut or Pichurut suggests Juaneño *piuts* or *piuch*, the breath of life. The names Tüüshiut and Yohahait, which have been reported only from the Yokuts, are translated by these people with some hesitation as "maker" and "crusher;" but these may be only folk etymologies of foreign terms, like their rendering of Ukat as "looker, seer." It is not impossible that Tüüshiut is connected with the *tosaut* or *tushaut* stone so important in Chumash ritual and Juaneño myth.

The creative mythology of the Gabrielino has been preserved only in the veriest scraps. The reputed creator of the world—he may or may not have

been such to the Indians—was called Kwawar ("Qua-o-ar") by his sacred name, and "Y-yo-ha-riv-gnina" otherwise. Neither epithet yields to analysis. He fixed the earth on seven giants whose stirrings cause earthquakes. The first man was Tobohar, his mate Pabavit. Tobohar is from a widespread Shoshonean stem for "earth;" among the Gabrielino themselves *tobanga* means "the world." Perhaps Tobohar and Pabavit should be interchanged. Everywhere else in southern California the earth is the first mother.

Porpoises were believed to watch the world, circling around it to see that it was safe and in good order. The crow was thought to advise of the approach of strangers. This sounds much like beliefs associated with the Chungichnish cult. Still more significant in this direction is the report that a surpassingly wise "chief," before dying, told the people that he would become an eagle so that they might have his feathers for dances; and that consequently ceremonies were made to the eagle. This is surely the dying god of whom all the southern Californians know; perhaps even the very Wiyot of the Juaneño and Luiseño; and the ceremony must be their eagle killing mourning rite.

The origin of mankind was attributed, as by all the Shoshoneans of southern California, to the north, whence a great divinity, who still exists, led the people to their present seats. Perhaps this "capitan general" was the just-mentioned eagle, perhaps Wiyot or his equivalent.

Chukit, the virgin sister of four unnamed brothers, probably all members of the six-god pantheon, was married by the lightning flash, and gave birth to a wonderful boy who spoke when his navel string was cut.

Coyote raced with water, and ended exhausted and ashamed. Whether he entered also into less trivial traditions is not recorded.

The Pleiades are "seven" sisters—six seems a more likely native version—married to as many brothers, who, however, cheated them of the game they killed, until the women rose to the sky. The youngest alone had been good to his wife; he was allowed to follow them, and is now in the constellation Taurus.

A woman of Mulu-vit, married at Hahamo, lazy, gluttonous, and stingy, is said to have been fed with game stuffed with toads and vermin, and given urine to drink by her husband's people. Sick and with her hair fallen out, she returned to her parents, destroying her child on the way. Secretly she was nourished back to health by the old people, until her brother, finding hairs in his bathing pool, discovered her unrecognized presence, and threw her out. Ashamed, she started for the seashore, and drowned herself from a cliff.

Her father threw his gaming hoop in four directions; when it reached the sea, it rolled in, and he knew his daughter's fate. First he revenged himself on his own son, whom, in the form of the *Kuwot* bird, he carried off and destroyed. Then, taking the shape of an eagle, he allowed himself to be caught by the people of Hahamo; but when they touched him, pestilence spread from him, and killed every one except an old woman and two children.

An inconsequential appendix follows. The two children grow up and marry: then the woman maltreats the old grandmother, but is killed by her. The husband mourns his wife and follows her spirit to the land of the dead, where his experiences are like those of the Yokuts Orpheus. Like him, also, he brings his partner back, but loses her once more and irrevocably at the last moment.

The ethical inconsistency of this story is marked to our feelings. The heroine certainly is blameworthy, but those who rid themselves of her, even more so. Hardly is sympathy aroused for her when she dispels it by dashing out her child's brains. Then she becomes beautiful once more, and elicits interest through the disgraceful treatment accorded her by her brother. But this hardly seems sufficient cause for suicide. Her brother, too, committed the offense unwittingly; and his fatal punishment by his father comes to us as a shock. That the old chief should cruelly revenge himself by his magical powers on the foreigners who had first attempted his daughter's destruction seems natural enough; but the focus of interest is suddenly shifted from his means of vengeance to the successful escape from it of the old woman and her grandchildren. Then these, brother and sister as they are, marry. Now it is the old lady who is abused; but suddenly it is her granddaughter who is persecuted and finally slain; after which follows the episode in which the loving and grieving husband is the central character.

Nothing can be imagined farther from a plot according to the thoughts of a civilized people than this one; it appears to revel in acmes of purposeless contradictions. And yet, this trait is undoubtedly the accompaniment of an effect that, however obscure to us, was sought for; since it reappears in traditions, following an entirely different thread, told by the Luiseño and Diegueño, and is marked in the long tales of the Mohave. This deliberate or artistic incoherence, both as regards personages and plot, is thus a definite quality of the mythology of the southern Californian tribes. It has some partial resemblances in the Southwest, but scarcely any in central or northern California except in the loosely composite coyote tales. In central California we have the well-defined hero and villain of the normal folk tale of the world over; and however much the oppressed endure, there is never any doubt as to who is good and who wicked, and that before the end is reached the wicked will be properly punished. That in the southern California traditions this simple and almost universal scheme is departed from, is of course not due to absence of aesthetic feeling, but rather an evidence of subtle refinement of emotion, of decorative overelaboration of some literary quality, to such a degree that the ordinary rules of satisfaction in balance and moral proportion become inconsequential. The traits that shock us ethically and artistically were the very ones, we may be

sure, that gave the keenest satisfaction to the craftsmen that told these tales and the accustomed public that delighted to listen to them.

Most likely, as among the Mohave, stories like this one are little else than a web that carries a rich embroidery of songs, which yield their own emotional stimulus, and at the same time endow the plot, when sensed through their medium, with a brilliant and profound luminousness that makes immaterial the presence or absence of everything else.

RITUAL.

Almost nothing specific is on record concerning the Gabrielino Jimson-weed cult, except that it is reported that the plant, called *manit*, was drunk mixed with salt water, in order to give strength, impenetrability to arrows, immunity from bear and snake bites, and fortune in the hunt. These very practical aims in no way indicate that the drinking was not also part of the sacred and esoteric ritual that we know to have been associated with it.

Among the Fernandeano a four-sided and roped-off ground painting was made, in the middle of which a man stood, holding twelve radiating strings, the ends of which were in the hands of as many assistants. When he shook the cords, the earth quaked, and whatever person he had in mind became sick. The setting of this rite is obscure. It suggests the Chumash use of charm stones more than any Luiseño ceremonial act; but the sand painting is Luiseño and not, so far as known, Chumash.

The mourning commemoration was held in the *yoba* enclosure. For eight days songs and perhaps dances were rehearsed outside. The ceremony itself endured another eight days.

On the first, the enclosure was erected or consecrated.

From the second to the seventh day men and boys danced inside the enclosure and women sat in a circle and sang. The dancers' faces, necks, arms, and thoraxes were painted; which makes it seem that their feather costume was the feather crown and skirt of the Luiseño and Juaneño. The songs related to the deceased, or perhaps to the god who first died; some were sung "to the destruction of his enemies." Each song or verse ended with a sort of growl. A pole with a feather streamer was erected at each of the four cardinal points.

On the eighth day the old women made ready more food than usual; about noon it was distributed. A deep hole was then dug and a fire kindled in it, whereupon the articles reserved at the time of death were committed to the flames. Baskets, shell money, and seeds were thrown to the spectators or out-of-town visitors. During the burning, one of the old men, reciting mystical words, kept stirring up the fire to insure the total destruction of the property. The hole was then filled with earth and well trodden down.

The end of this ceremony allies it with the Luiseño *yunish mata-kish*, made for a dead initiate. The rehearsing, the participation of boys, and the type of costume, all point to the existence of the

kind of initiatory organization which the Juaneño and Luiseño possessed and in fact believed that they derived from the Gabrielino. The four poles suggest the one erected in the Luiseño *notush* mourning, to which, again, they attribute a Gabrielino origin. The cursing songs of hate are also southern. All that fails of mention is the image of the dead; and with the Kitanemuk on one side and the Luiseño on the other employing this, it is practically certain that the Gabrielino knew it.

It must be said once more that the frequent mention of the Juaneño and Luiseño in connections like the present one must not lead to an inference that the Gabrielino were in any sense dependent upon them. The influence was positively the other way. It merely happens that for the Juaneño a fuller account of the religion, and among the Luiseño the ceremonies themselves, have been preserved; so that the knowledge of the borrowed rites of the southerners must be drawn upon for an understanding of the recorded fragments of the older and probably more elaborate Gabrielino cult. Thus, something is known of the Luiseño *notush* and its *kutumit* pole; for the Gabrielino there is no record other than that at San Fernando a similar pole was called *kotumut*.

Several round stones, perforated, hafted on the ends of rather slender sticks, and feather decorated, have been discovered in a cave in Gabrielino territory. Such stones, which abound most among the Chumash, are ordinarily digging stick weights; but in this case the character of the handles precludes any employment as a tool. An unknown ritualistic use is therefore indicated.

That the Gabrielino word for "tobacco," *shuki*, is not from the usual southern Californian stem *piva*, but borrowed from Yokuts *shogon*, *sohon*, which has penetrated also into the Mono, Koso, and Tübatulabal dialects, suggests that the plant was perhaps more widely used, at least in religious connections, by the Yokuts, and that the neighboring Shoshoneans came under their influence in this matter.

The number most endowed with significance to the Gabrielino seems to have been four, or its double, eight. Six, seven, and ten are also referred to in connections that make probable a certain degree of sacredness or suggestive value; but five, which predominates among the Juaneño, has not been reported here.

SHAMANISM.

The removal of disease was by sucking blood and perhaps the disease object. Smoking, manipulation, and singing preceded. The words of the songs appear to have been descriptive of the practices applied, as among the Mohave. It may be conjectured that the doctor sang not so much of what he was doing as of what had been done to a god in the far past, or what he in a dream had seen a deity or animal perform.

Diseases were also treated by a variety of remedies. Jimsonweed was drunk for paralysis, debility, and stagnation. Whipping with nettles was resorted to in the same cases, as also for side pains. Eating red ants or letting the insects bite the skin, a favorite Yokuts remedy, were remedies for body pains. For local inflammations, blood was drawn. Tobacco, with or without an admixture of shell lime, was eaten for fever, strangury, wounds, stomach aches, and whenever vomiting was desired. Whether the old men habitually ate tobacco and lime, as was customary among the Kitanemuk and Yokuts, is not clear. Against rheumatism, blisters were burned with nettle or wild hemp furze and at once opened. Anise was for purging; *kayat*, "chuchupate," for headache; *thaitah*, *Echinocystis*, for inflammations, eye disease, suppressed periods, wounds, and urinary troubles; when boiled it was taken to produce sweating. Medicine men were called *ahubsuvotrot*.

The bear doctor was a Gabrielino institution, although more than the naked fact is not known.

BUILDINGS.

The house was of tule mats on a framework of poles: size and shape have not been recorded. On the islands and in the hills thatch of other materials may sometimes have been used. Earth-covered dwellings have not been mentioned. The sweat house had a roof of soil; but it was small, and a true sudatory, heated by fire and smoke, of course, as in all California, and not by steam. The sweat house of the Serrano or Pass Cahuilla (Pl. 60) probably serves as a representative.

The place of assembly for any occasion not savoring too formally of ritual was presumably any large dwelling, such as the chief's, or the open brush shade. Religious gatherings took place in the open air ceremonial enclosure, the Juaneño *wankech*, Luiseño *wamkish*, Diegueño *himak*. The Gabrielino seem to have called it *yoba* ("yobare," "yobagnar") and to have built it circularly of willows inserted wicker fashion among stakes. It was consecrated for each ceremony. A similar structure, without sanctity, was used for rehearsals and the instruction of children. Each village had one *yoba*.

BASKETRY AND POTTERY.

Few if any baskets authentically assignable to the Gabrielino have been preserved. The type of the tribal ware was that common to all southern California and usually known as "Mission basketry"; it is described in the chapter on the Cahuilla. The pitched water bottle is specifically mentioned.

Pottery had come into use by the end of the mission period. But it is stated positively that clay was not worked in aboriginal days. Archeology confirms: no pottery has been found in ancient remains in the Gabrielino habitat.

STEATITE.

In the soapstone ledges of Santa Catalina the Gabrielino possessed the best available supply of this serviceable material in California; or at any rate the source most extensively utilized. The discoverers found them using stone vessels for cooking; and the condition of the island quarries, with half-finished pieces and tools still on the surface, is evidence that the industry was only interrupted after the importation of our civilization. From Santa Catalina the pots, and perhaps the raw material, were carried to the villages at Redondo and San Pedro and gradually distributed to the inland towns. The eastern Chumash may have got them from the people of Santa Monica and Topanga and from the Fernandeano. But the presence of steatite articles in fair abundance on Santa Cruz and the other northern channel islands suggests also a direct maritime dispersion to these Chumash, and from them to their kinsmen of the Santa Barbara coast. Inland the vessels penetrated at least sporadically as far as the Yokuts of Tulare Lake, if scant archeological records may be trusted. It is not sure that this entire area was served from Santa Catalina. But much of the supply evidently came from the island.

It is interesting that the steatite and the pottery areas of southern California substantially exclude each other. Gabrielino and Chumash were flooded with the one material, and did not touch clay. Juaneño, Luiseño, Cahuilla, Diegueño, Serrano, Mohave, and Yuma made pots; and it is only now and then that small or ornamental pieces of steatite were to be found among them.

When the soapstone pots broke, their pieces were bored at one corner to allow of the insertion of a stick to handle them by, and utilized as baking slabs or frying pans. Hundreds of such salvaged fragments have been found in old village sites. The occasional fine vessels of stone were not cook pots, but religious receptacles—possibly to drink toloache from. They are shell inlaid and untouched by fire. The shape, too, is that of an open bowl, not a jar. They have sometimes been taken for mortars, on account of their general form; but it is obvious that one blow with a pestle would have destroyed irreparably most of these delicately walled, polished, symmetrical, and ornamented objects of sandstone or waxlike steatite.

Most abundantly on Santa Catalina, but also on the coast immediately opposite, on the Chumash islands, and even on the Santa Barbara shore, a profusion of soapstone artifacts have been found. Besides recognizable ornaments and beads, there are several types whose evident lack of any utilitarian purpose has caused them to be generally classed as made with ceremonial intent. Besides peculiar

objects of the shape of hooks, spades, and scoops, there are carvings of whales, which are of particular interest as one of the very few instances, in all aboriginal California, of anything like a representation. They are as simple as the stone is easy to work, but suggest a dorsally finned cetacean with considerable fidelity and no shadow of doubt. They may be plastic figures of the porpoises that guarded the Gabrielino world. The hooks and other shapes range from a fraction of an ounce to several pounds in weight, and pass through a transition of shapes which retain indeed a certain decorative or symbolic likeness that makes their unity of class certain, but are so variant in structural features as to dispel any possibility of each type having possessed a common utilitarian purpose. They served a religious purpose, then; and as their source corresponded with that ascribed by evidence and tradition alike to the Chungichnish cult—the balmy island of Santa Catalina—the conclusion is very hard to avoid that the worship and the art forms must have been associated. From this conviction we can argue, with somewhat less confidence, but yet with probability, that something of the same specific Chungichnish ritual and mythology traveled with the figures from Santa Catalina to the Chumash islanders and mainlanders. That the Chumash drank Jimson weed we know; the present reasoning establishes some likelihood that their cult of it was not a particular one.

TRADE AND MONEY.

For the islanders' journeys, canoes of the kind described by the discoverers, and known also from fragments in Chumash graves, were employed. The canoe may at times have been dug out from a log, but owing to the scarcity of suitable timber, especially on the islands, was usually built up out of planks, lashed and asphalted together. For lagoon navigation the rush balsa may also have been used.

Between the coast and interior trade was considerable. The shore people gave shell beads, dried fish, sea-otter furs, and soapstone vessels. They received deerskins, seeds, and perhaps acorns.

The standard currency was the disk bead, of clamshell, from one-half to three-quarters of an inch in diameter, and the thicker the better. The unit of measurement was the *ponko*. This reached from the base to the tip of the middle finger, thence around the outside of the hand past the wrist back to the point of the middle finger, and then once more not quite to the wrist. The length, about 30 inches, is half of the scant fathom reach of a man of small stature. The various local manners of this type of money measuring have been brought together in Table 6 in the chapter on the Chumash.

The next highest unit was four *ponko*, called a *sayako*. Two *sayako* were reckoned, in mission times, a Mexican *peso* or dollar; which made the *ponko*

a *real*. This equivalation to the Spanish standard obtained also among the Chumash and Salinans, but the reckoning of values by doubling and quadrupling is probably native.

It is curious that the heavy clamshell beads are rare in ancient Gabrielino and Chumash graves, thin convex disks of *Olivella* being the common prehistoric type. These have also been found among the modern Luiseño and Cahuilla. The *Olivella* shell was known throughout central and northern California, but little esteemed; it ranked as beads rather than money. In the south it was more frequently ground into disks; but at that, it must have been secondary to the heavy clam bead, whose broad edge is susceptible of a much higher polish.

Both types are represented among the Southwestern tribes. The modern Zuñi bead is prevailingly of *Olivella*. The Pueblo, however, never distinguished as sharply between a mere necklace and currency as the Californian; he thought in terms of property rather than of standardized money.

FOOD.

When the Gabrielino first met the Spaniards they politely accepted every gift, but every scrap of food was held in such abhorrence as to be buried secretly. It was not that the natives feared deliberate poisoning, but they were evidently imbued with a strong conviction similar to that of the Mohave, who believed that every nation had its own peculiar food and that for one to partake of the characteristic nourishment of the other or to mingle with its women, or in fact associate in any prolonged contact, was bound in the very nature of things to bring sickness.

The native foods rejected are not known. They can not have been many, as dogs, coyotes, all birds whatsoever, and even rattlesnakes are mentioned as having been eaten. Whether the omission of the bear from the list of edible animals is significant or not must remain doubtful.

The Gabrielino are the first people of all those passed in review to use movable stone mortars to any great extent for the ordinary purpose of grinding acorns and plant foods, at least in historic time. The soil of northern California is studded with pot-shaped mortars, but the natives misunderstand their purpose or regard them as magical objects, and pound on slabs or in holes worn into natural surfaces of rock. In the central part of the State the portable mortar begins to appear, and the basket hopper, the accompaniment of the pounded slab, commences to go out of use, but the bedrock mortar hole remains the standard, at least for acorns. From the Gabrielino on, however, south to the Diegueño, east to the Mohave, and west,

perhaps, to the Chumash, the stone mortar is not merely a buried relic from a remote prehistoric age but a utensil of everyday modern use. Some of these southern tribes cement a basket to the rim of the stone; the Chumash asphalt it also to slabs; but the mortar can often be used just as successfully, and sometimes perhaps more conveniently, without this extension. Perhaps this is why the hopper has not been reported from the Gabrielino. That they knew the device is nearly certain from their location between groups that employed it.

VARIOUS IMPLEMENTS.

The Gabrielino war club ranged from a straight heavy stick to a shorter form with a definitely marked cylindrical end—the southwestern type.

A curved flat stick, called *makana*, for throwing at rabbits and birds, is another southwestern type that pervades all southern Cali-

fornia and seems to have come to the limit of its distribution among the Gabrielino. (Fig. 55.)

Rattles in the Spanish period were made of gourd or rawhide. These are almost certainly recent modifications of the old turtle-shell rattle still employed by the Luiseño and Diegueño, and, as a knee attachment, used from time immemorial by the Pueblo Indians. The modern Mohave rattle is a gourd; but it is not sure that this is native; in any event, the Mohave were an agricultural people, while the Gabrielino and other southern Californians were not.

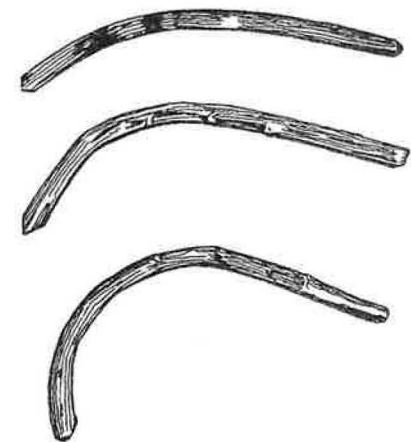


FIG. 55.—“Boomerang” rabbit killers of southern California. From above downward, Cupeño, Luiseño, Mohave.

A wooden clapper rattle has been reported from the Gabrielino. This is the most southerly occurrence recorded for this universal north and central Californian implement. At that, the Gabrielino rattle is not a half-split stick, as elsewhere, but two boards bound and cemented together at one end.

Meat was cut with a splint of cane and not with a stone knife. Practicability or habit rather than any religious reason appears to have been the motive.

For arrow poison, gall was boiled down.

SOCIAL PRACTICES.

As in the whole of southern California, social institutions constitute the least known side of Gabrielino culture. Marriage was by purchase, but more was made of the wedding rite than of the payment; chiefs and prominent men often had several wives. All this is typical Juaneño procedure. The wife seems to have lived in the husband's village. It is said that he was at liberty to punish her at will for infidelity, even by death; but that the usual solution was to leave her to the seducer and appropriate the latter's spouse, with which practice no interference was tolerated. Deliberate incest was punished by shooting to death. There was a chief in each village. If any exercised wider influence, the fact has not been reported. To judge by Juaneño analogues, as well as the above-mentioned titles for the chieftain's children, the position conveyed much deference and respect. Each chief was known by the name of his town plus the suffix *-pik* or *-vik*. The rank was hereditary, apparently in the male line. It is said that the chief took no action against sorcerers, other than to leave punishment to the magical machinations of the medicine men of his own town. As an absolute negative, this statement may be doubted. It is likely to have been true under the outward restraints of mission life.

Captives taken in battle were tortured and killed.

The hair was at times plastered with clay for 24 hours, to impart gloss and keep it from splitting. The Mohave mix in a vegetable dye for this purpose; plain mud is applied by them to kill vermin.

The dead were burned by both Fernandean and Gabrielino proper until the padres introduced interment. On Santa Catalina many skeletons have been found, but few if any evidences of cremation. Burial must therefore have been the prevalent manner on this island through most of its history. The mainland, on the other hand, is remarkably free of ancient human bones, except at immediate coast points opposite Santa Catalina, such as Topanga, Santa Monica, Redondo, and San Pedro. It seems, therefore, that an ancient difference of custom separated the islanders from the bulk of the Gabrielino on this point.

THE SAN NICOLEÑO.

San Nicolas, the farthest seaward of the Santa Barbara Islands, foggy and wind blown, harbored a tribe of which the last survivor died more than 60 years ago. Four badly spelled words are all that has been preserved of their speech. These suffice to prove it Shoshonean: they do not establish its dialectic relation. A divergent idiom may well have developed in the isolation of this sand-swept and

rocky island. It is stated that when the last survivor was brought to Santa Barbara her speech was thoroughly unintelligible not only to the Chumash of the vicinity but to the "Pepimaros" of Santa Catalina (Pimu, Pipimar, the name of the island), of whom some were sent for from Los Angeles.

The last handful of the natives, who are said to have suffered previously in quarrels with Aleuts imported by Russian fur hunters, and whose numbers had probably been diminished by drafts to the missions, were taken to the mainland in 1835, soon after secularization. A woman who at the last moment missed her child was left behind. Eighteen years later, when California was American, she was discovered. Her romantic case aroused the greatest interest, and she was given the best of treatment in her new home at Santa Barbara; but she died in a few months. More attention was bestowed on her humble belongings than on the panoply of many a tribe; and while the objects themselves seem all to have been scattered and lost—the last traceable piece perished in the San Francisco fire of 1906—the descriptions, together with random but rather full recoveries from ancient village sites, enable a partial insight into the life of this remote little group, the most westerly of all Uto-Aztekan.

Wood was scarce and small on the island. There was enough brush for huts, but most dwellings were reared on a frame of whale ribs and jaws, either covered with sea-lion hides or wattled with brush or rushes. Bone implements were very numerous, and the use of several varieties is far from clear. The island may have afforded sufficient timber for plank canoes, or dugouts may have been burned from drift logs. Steatite was imported from Santa Catalina, but is represented by small ornaments or charms rather than heavy bowls. Whales must have been very abundant and frequently stranded; there is nothing to indicate that they were hunted. Sea otters were to be had in comparative profusion, and, to judge from the habits of other tribes, their furs formed the most prized dress and the chief export in a trade on which the San Nicoleño must have depended for many necessities. Seals, water birds, fish, and mollusks were no doubt the principal food; but roots were dug industriously. Baskets are spoken of as of the type ordinary in southern California. They were often asphalted, hot pebbles being employed to melt and spread the lumps. Water baskets were in plain twining, as among the Chumash; but the neck was long, much as in our wine bottles. The lone woman wore a sort of gown of squares of bird skin sewn together; but this does not seem wholly aboriginal. The usual dress may be conjectured to have been the scant costume of all California, with capes or blankets of woven strips of bird skin added at need.

The cylinder-headed wooden war club was in use. The dead were buried, as by all the islanders, not cremated as on the Shoshonean mainland. Of religion we only know that there were weather invocations and hunting charms; whether the toloache cult or the image form of mourning anniversary had reached the island must remain in abeyance; and as to society, there is total ignorance.

Ghalas-at has been given as the name of the island. This is perhaps the native or the Chumash pronunciation of Gabrielino Haras-nga.