

A Weather Shaman's Rain-Making Bundle from the Tübatulabal and its Relationship to the History of Weather Control in South-Central California

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After Frank Fenenga's death (April 7, 1994), his son Gerrit discovered an unfinished manuscript co-authored by his father and Francis (Fritz) Riddell. It pertained to a Native California rain-making bundle from Kern County. Included with the manuscript were Frank's field notes, a photograph, sketches of the artifacts, and a letter dated January 18, 1980 from Robert Merriam, Curator of the Kern Valley Museum in Kernville. Merriam was interested in obtaining information about the bundle, since he had been informed that it might have been part of a larger assemblage, a portion of which is currently on exhibit at the Kern Valley Museum. This bundle is on loan from one of the local Indians, a granddaughter of Esteban Miranda. Esteban Miranda, a Tübatulabal chief (timiwal) who died about October 13, 1942, was the stepson of a Chumash shaman from Tejon who appears to have first owned and used the bundle. The editors researched the original manuscript and found that Frank had presented a paper on the subject at the 1978 annual Society for California Archaeology meetings. With Gerrit Fenenga's permission, the editors have chosen to edit and complete the unfinished work in order to honor the memory of Frank Fenenga and Francis Riddell. With the exception of some new information, this article remains their work.

NATIVE CONTROL OF THE WEATHER WAS QUITE generally practiced throughout the arid portions of the western United States. There were, however, geographical subdivisions in weather control, distinguished by specializations in the techniques used for ritually influencing meteorological phenomena. One such area was south-central California. Throughout the southern half of the state, there were native people who were famous as "rain doctors," and the greatest development of the idea appears to have been in the region where central and southern California meet. Control of the weather by shamans, however, was believed to occur as far as the northern limits of the state, although it was considerably less emphasized there (Kroeber 1925:854). Notably, Kroeber's landmark California Indian synthesis does not

discuss the essential role of a fetish or fetish bundle in the weather shaman's success.

The authors, Frank Fenenga and Francis Riddell (Figs. 1 and 2), obtained a famous weather shaman's bundle from a Tübatulabal Indian, Mr. Joe Wells (Fig. 3), in November, 1948, while conducting archaeological research for the University of California Archaeological Survey—in cooperation with the River Basin Surveys program of the Smithsonian Institution—in the area scheduled to be inundated by the construction of the Isabella¹ Dam. Mr. Wells told us that he had inherited the bundle from his grandfather (paternal side Sam Wells, or maternal side Manuel Pablo), but it seems possible that it ultimately derived from his granduncle, Esteban Miranda, a noted Tübatulabal weather shaman.



Figure 1. Frank Fenenga.

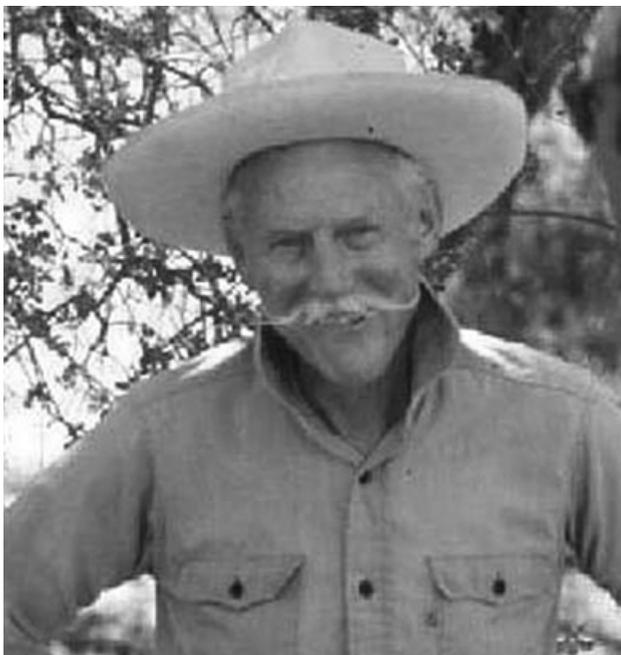


Figure 2. Francis 'Fritz' Riddell.

Esteban was not practicing weather control at the time of Erminie Voegelin's ethnographic work with the Tübatulabal in 1932 because the bundle had been



Figure 3. Joe Wells at Yitiyamup (Miranda Allotment).

stolen from his stepfather, from whom he had expected to inherit it. No account of Esteban Miranda's recovery of the bundle could be obtained, but our informant was insistent that his "grandfather" had used the "rain machine." E. W. Voegelin has presented the earlier history of what is almost certainly this same bundle, based upon the reflections of Francis Phillips, 68 years old (his autobiography was taken in 1933). Francis Phillips' daughter, Legora (Miranda) Tungate, 45 years old, interprets this story from the *paka'anil* dialect into English:

That man from Tejon (Francisco Sastre², a Chumash) whom *Wisimlit* married could make rain; he used to make rain all the time when he lived over at Tejon Ranch; the people paid him to. He made rain over here, too, but we never paid him for doing it. He used to make lots of rain; there was deep grass up at *Yitiyamup*³ all the time and lots of flowers and seeds. It was pretty up at our place then.

He had three different rain machines; one for snow, one for rain, and one to make waterspouts. He could stop the rain, too. A man living up at *Yitiyamup* stole the rain machine though. One day everybody was away; my sister-in-law was up at the spring washing clothes; and that man stole the rain machine. He was mean, that man; he couldn't use the rain machine, because he didn't know how to; I don't know why he

stole it. Then one time after that, the Tejon man got sick. He was in bed; he told *Wisimlit*, 'give me that thing; I want to see it.' She went and got the basket where he kept it; and there was nothing there; it was all gone. The Tejon man felt bad; he cried and cried.

After that, he died. The mother of those two witches up at Onyx⁴ put poison in his coffee. He coughed, coughed, coughed all night; he got thin and died after a while. A long time after that, *Wisimlit's* daughter-in-law, *Tumasa*, got sick; someone went and got Paiute Ramon. Ramon's friend came over here with him that time; he was a doctor, too. They were both Kawaiisu. Ramon worked on *Tumasa* and she got better. They told him about the rain machine; doctors can tell where everything is; they see everything. Ramon told Esteban Miranda who had stolen his stepfather's machine. The thief had been watching Doctor Ramon; Ramon pointed to him and said, 'There he is; he's the one who stole your rain machine.' The other doctor said, 'He's right, he knows.' Those doctors know everything; who is making you sick, or if you are a doctor, too, or if you have poison, everything.

Ramon started to lead that man over to the place where the thief had hidden the rain outfit. 'Come on, show us where it is,' the doctor told him. The man didn't want to go very much; he just stopped every little while. My husband was there. He got mad seeing him stop and he hit him over the head with a shovel. The man didn't say anything; he just walked away; he wouldn't go with that doctor at all then.

A long time afterward, another man found that outfit; he said he would give it to Esteban if he would pay him ten dollars for it, but Esteban wouldn't. He should have though, and then he could make rain now. The man who found it buried it somewhere else, in a dry place; it's there now.

Bob Rabbit Roberts⁵ (a Kawaiisu) [Fig. 4] can make rain, too, but he says he doesn't want to make it anymore. The people won't pay him anything for doing it. He says, 'Let the country go dry.' But, when they had those rain machines there were lots of plants here then, and my husband killed deer all the time; we always had deer meat [Voegelin 1938:76–77].

Joe Wells was neither able to use, nor interested in using, the bundle. It was kept in a two-pound canister which had originally contained Monarch brand tea. Where the canister was kept could not be learned, because the informant 'could not find it' until after we left the house. Mr. Wells wanted the fetish bundle to be preserved in a museum.

The following character descriptions were provided by the Tübatulabal tribal members: Leona (Miranda) Begay, granddaughter of Esteban Miranda, remembers Joe Wells visiting Esteban, speaking the *paka'anil* dialect of Tübatulabal with Esteban, and living at the end of

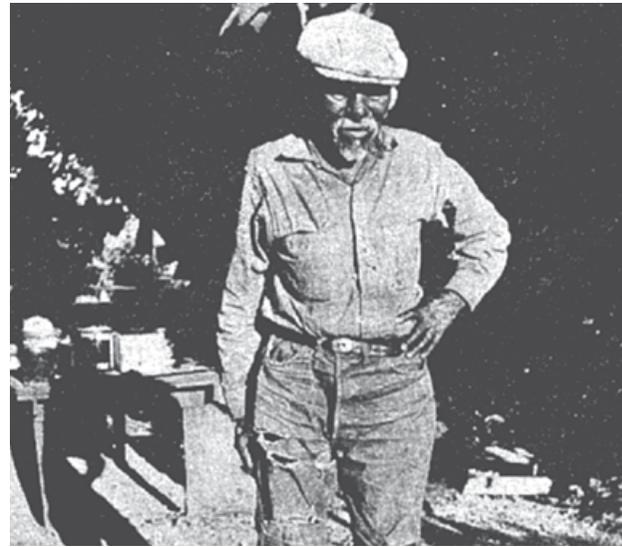


Figure 4. Bob 'Rabbit' Roberts, Kawaiisu rain doctor.

Doyle Ranch Road in Onyx, California. Leona states "Joe was not a medicine man, but did know a lot about ranching." Mickey Stone, Jr., great-grandson of Esteban Miranda, was raised at "*Yitiyamup*" (Miranda Allotment) and remembers Joe Wells as a "clown." He remembers Joe Wells using an old cottonwood tree trunk as an "Indian" drum and singing songs. Bertha (Miranda) Eller, great-granddaughter of Esteban Miranda, remembers Joe Wells riding a horse backwards while holding the horse's tail. Samantha Riding-Red-Horse, great-great granddaughter of Esteban Miranda, remembers stories of Joe Wells dancing backwards at the hand-games held at Bishop, California. Overall, Esteban Miranda's Tübatulabal relatives agree that Joe Wells was a good guy and his intention for the rain-making bundle was to share and educate everyone about this important cultural aspect of life.

The history of the bundle would seem to be that it was first known to be in the possession of a Ventureño Chumash Indian, Francisco Sastre, who had lived at Tejon.⁶ He married a Tübatulabal widow, *Wisimlit*, and moved to *Yitiyamup*, where the bundle was stolen from him. *Wisimlit's* son, Esteban Miranda, had expected to inherit the bundle from his stepfather, but when it was recovered sometime after Francisco's death, Esteban refused to pay for it. It came into Esteban's possession, and he utilized it to practice weather control. It was given to Joe Wells, nephew of those men, in 1940.

Mary Amanda Gorden provided the editors with a translation of a section of John Peabody Harrington's

1916 notes that she had copied at the Smithsonian regarding the Tübatulabal material that Esteban Miranda had provided him:

Esteban's stepfather brought here from Tejon the rain-making outfit of Francisco Sastre's uncle, José Sastre. Esteban has had this outfit here in his small trunk in his large house for years. The stones of it were, however, stones of rainmakers. These old rainmakers used five of these stones for rain-making. Four or five old men sing together in the night after getting out rocks. Esteban had the songs but did not learn them.⁷ There was a round white stone, big as an orange. That rock is to wake the thunder and a black stone (spherical) of the same size. This was to make it rain long and steady and another rock colored half in orado (gold?) and half in black, which was to make the wind blow strong. These rocks were called *tagganizt* (meaning) to make clover and the doctor who used the stones is called *puh'am*. The stones were kept on the white down of the *wahwoywäl* bird, a big bird that has a sack under his chin and flies with several others in circles (the editors suspect that this bird was a white pelican).⁸

The historical events concerned with this shaman's bundle and with its known owners can be chronicled thus:

Ca. 1810—Francisco Sastre was born at Ventura (Ventureño Chumash).

Ca. 1825—*Wisimlit*, Esteban Miranda's mother, was born at Kernville.

Ca. 1840's⁹—Esteban Miranda was born to *Wisimlit* at Kernville (Tübatulabal).

1863—(Kernville Massacre) Tübatulabal husband of *Wisimlit*, father of Esteban Miranda, was killed.

1855–1870—Francisco Sastre was practicing weather shamanism at Tejon.

Ca. 1870—Francisco Sastre marries *Wisimlit* (mother of Esteban Miranda).

Ca. 1888—The bundle was stolen from Francisco Sastre.

Ca. 1890—Francisco Sastre died at Kernville.

1915—Joe Wells was born to Barney Wells and Matilda Pablo.

1916—J. P. Harrington interviews Esteban Miranda about the rain-making bundle (Spanish spoken by Esteban).

1932—The bundle was lost during Voegelin's ethnographic work.

1933—E. W. Voegelin interviewed Francis Phillips (Tübatulabal elder) about the rain-making bundle (*paka'anil* dialect to English translation).

1940—Joe Wells was given the rain-making bundle from his grand-uncle, Esteban Miranda.

1948—The writers obtained the bundle from Joe Wells.

THE CONTENTS OF THE RAIN-MAKING BUNDLE

The twenty-three specimens contained in the canister and comprising the rain-making bundle (as it came to us) are illustrated here [Fig. 5]. They are listed below.

(a) Charmstone. Type WBb2 (see Gifford and Schenck 1926:97); maximum length 15.11 cm., maximum width 3.9 cm.; the material is a very fine-grained sedimentary stone. This specimen has

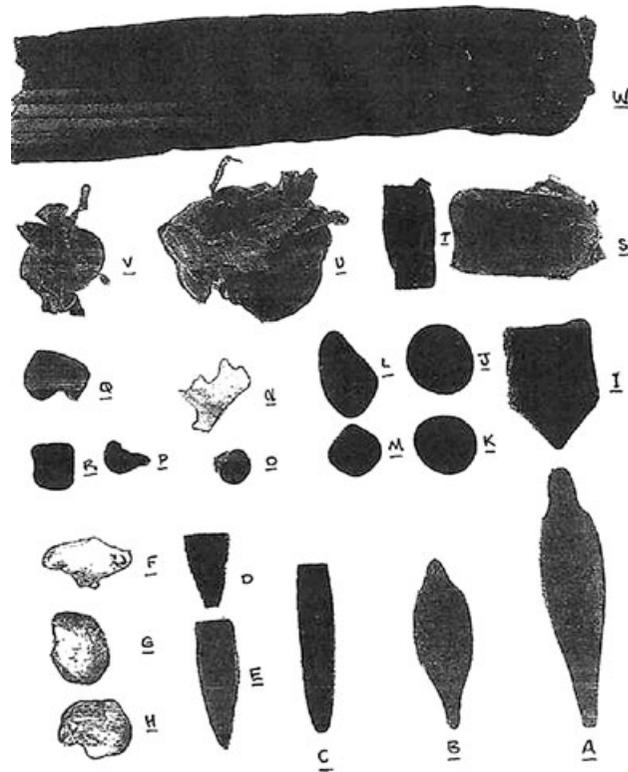


Figure 5. Contents of Fenenga and Riddell's shaman's rain-making bundle (original photograph ca. 1948).

become smooth and has obtained a dull polish since its manufacture. Despite this condition, facets left by manufacture are still visible, particularly on the proximal end where stains (also bands of the stone's natural color) encircle the specimen. These stains might indicate that this end had been wrapped at one time; possibly an adhesive was designed to permit suspending the specimen by a cord.

- (b) Charmstone. Type WBb2; maximum length 10.1 cm., maximum width 3.5 cm.; the material is banded sedimentary stone. The method of manufacture was by pecking as opposed to specimen (a) which was ground. Due to the banded nature of the material there has been differential wearing during and after manufacture, thus leaving the bands standing out as slight surface ridges. In the natural breaks in the surface of the specimen, there occurs what appears to be a slight trace of red ochre.
- (c) Charmstone. Type WC, or perhaps a medicine pestle; maximum length 10.2 cm., maximum width 2.3 cm.; the material is a fine grained steatite. This specimen was manufactured by grinding as evidenced by the longitudinal facets still visible, though the surface of the specimen is quite smooth and polished. The face of the distal or flat end has a few parallel scratches on it that appear to be fortuitous in origin rather than evidence of use.
- (d) Biface Fragment. Maximum length 8.25 cm., maximum width 2.5 cm. The material is obsidian. The basal portion of this blade is missing, so that it is impossible to fit the object into any typology. The workmanship on this piece is very good with both sides of the biface showing secondary flaking (pressure?) almost exclusively.
- (e) Biface Fragment. Maximum length 4.54 cm., maximum width 3.85 cm. The material is obsidian. This specimen, as also noted in specimen (d), is incomplete with both the base and, with this specimen, the point missing. The workmanship on this piece is only moderately good, as a considerable portion of the surfaces of the biface show primary flaking (percussion?) with secondary (pressure?) flaking occurring mostly near the edges. The edges of this biface also show signs of being worn and fractured. Both the surface and the areas from which the missing portions came show signs of wear, too. This also occurs, to a lesser degree, in specimen (d). Some of the small fractures on the edges of these biface fragments seem to be more recent in origin than the surface of the biface indicates, a condition possibly caused by contact with other stone artifacts in the container of the shaman's rain-making bundle.
- (f) Quartz Crystal. Maximum length 4.5 cm., maximum width 3.6 cm. This crystal¹⁰ has quite obviously been modified from its original form, as all edges and both ends show considerable battering. Not only do all the edges show much wear, but all surfaces have become dulled through use. At one time this specimen has been in contact with a reddish-brown pigment, as traces remain in all places that protect the stain from being rubbed off.
- (g) Quartz Crystal. Maximum length 4.9 cm., maximum width 3.4 cm. Like the previous specimen, this crystal has been modified in the same manner, the edges battered, the surface dulled, and with a trace of reddish-brown pigment on areas protected from wear.
- (h) Quartz Crystal. Maximum length 5.3 cm., maximum width 3.2 cm. On this fragmented specimen, only a few small areas yet remain of the original facets of the crystal. It is quite likely, however, that in original form, this specimen was a poorly defined crystal. In all protected recesses of the uneven surfaces, as in specimens (f) and (g), a reddish-brown pigment is found adhering to the piece. Unlike specimens (f) and (g), however, this specimen has had much less battering on its edges and its surface shows less wear.
- (i) Fossil Fish Vertebra. Maximum length 7.5 cm., maximum width 5.6 cm. Dr. Earl S. Herald, Curator of Aquatic Biology, California Academy of Sciences, shared with us that there seems to be no way of finding its exact relationship without knowing the locality from which it was first taken. Also, Dr. Hanna (Curator of Paleontology) was of the opinion that it was closely related to *Portheus*, a giant perch-like form which occurred during the Cretaceous in the Middle West only. On the other hand, there were many large fresh-water fishes in California during the Pliocene. Dr. W. I. Follett (Curator of Fishes) points out that "the vertebra is very similar to that of the present day basking shark, but the elasmobranchs usually do not become fossilized." The vertebra has been completely replaced by a mineral and is semi-translucent when held up to a very strong light. The color of the specimen would approach dark rust.
- (j) Pebble. Maximum diameter 3.8 cm., maximum thickness 1.1 cm. This specimen is a common water-worn, dark-colored, stream-smoothed pebble, flat in cross section. Except for some small natural surface cracks and pits, the surface of the specimen is quite smooth. In two of the larger cracks a reddish-brown stain may be seen that appears to be the same pigment found present on specimens (f), (g), and (h).

- (k) Pebble. Maximum diameter 4.4 cm., maximum thickness 1.7 cm. This stone is very similar in size and shape to specimen (j), although slightly larger. Its color is a natural deep reddish-brown. The surface of this specimen is quite smooth and has a dull polish. In occasional minute pits, traces of the same type pigment found on specimens (f), (g), (h), and (j) may be found.
- (l) Pebble. Maximum diameter 3.3 cm., maximum thickness 2.2 cm. As opposed to specimens (j) and (k), this water-worn stone is irregular in form. It is a dark green stone with a very smooth surface and with a rather high polish. One small portion of the surface has a natural facet which is rough and uneven so that the reddish-brown pigment noted in previous specimens occurs here, too, due to the protection afforded by the roughness of the facet.
- (m) Pebble. Maximum length 5.4 cm., maximum width 3.4 cm., maximum thickness 1.9 cm. The surface of this stone is exceptionally smooth—almost glassy (although many natural pits do occur)—and has a bright polish. All of the water-worn pebbles, (j), (k), (l), and (m), have the appearance of having been handled many times over a period of years. As in the other three specimens mentioned above, specimen (m) has pits on its surface that contain traces of the same reddish-brown type pigment. One end of this stone has been slightly battered as if used as a small hammerstone. The color of this stone is almost jet black.
- (n) Stibnite Piece. Maximum diameter 2.2 cm. This piece of stibnite, approximately the size of the end of one's thumb, has been modified by some tool to such an extent that all the edges have been rounded and some of the surfaces made concave. Though the surface is moderately even, there are enough pockets and pits to allow many traces of the previously mentioned reddish-brown pigment to be trapped.
- (o) Milky Quartz. Maximum length 7.1 cm., maximum width 4.4 cm. This fragment appears to be nothing more than just a piece of milky quartz without any modification, unless one assumes that it has been broken off from another piece. Neither the edges nor the surfaces show any signs of wear or battering. Three of the faces are relatively smooth while the other three are more uneven. There is no sign of any stain from red ocher or other pigment on this specimen.
- (p) Blue-green Steatite. The dimensions are 2.7 x 1.9 x 1.3 cm. This lump of steatite has been cut by some tool, possibly by specimens (d) and (e). Many portions of the surface clearly show tool marks; one side has been so cut as to leave a distinct concavity. Some of the cuts are relatively fresh while others are smooth and polished. In several of the cuts, traces of the reddish-brown pigment may be seen.
- (q) Blue-green Steatite. The dimensions of this piece are 2.9 x 2.5 x 1.6 cm. This specimen has been modified in the same manner as the preceding specimen (p), although none of the cuts are as fresh as some found on specimen (p). This specimen, like specimen (p), has traces of reddish-brown pigment in the surface cuts and small pits on the piece. It is roughly rectangular in shape and, except for the cuts and small pits, has a surface that is quite smooth. Each cut is quite striated, which would indicate that the biface used for cutting had an uneven cutting edge which would characterize the two previously described bifaces, (d) and (e).
- (r) Blue-green Steatite. The dimensions are 3.8 x 3.0 x 3.1 cm. Specimen (r) is of the same material, blue-green steatite, and has been modified in the same manner as specimens (p) and (q) except that this specimen has numerous facets produced by cutting and scraping with a tool with a rough cutting edge. This piece is roughly the size of a walnut and has a deep, wide 'v' notch cut into it from one side. Like specimens (p) and (q), it has the reddish-brown pigment clearly showing in all of the pits and cuts. None of the cuts appear to be fresh, and the surface has a dull polish with all edges being rounded.
- (s) Small Tobacco Sack. It is of the type in which "roll-your-own" tobacco is sold. This sack was used as the container for specimen (t), and is of the "Bull Durham" type so well known to rural people. From fragments of the revenue stamp left on the sack, it would seem that it was a type not in use at that time. It is quite probable that the sack may have been in use for thirty or forty years, but the stamp is so fragmentary that no definite date on its issue can be set. The sack has been turned inside-out.
- (t) A Piece of Rawhide. The length is circa (ca.) 6.4 cm. and the width ca. 5.8 cm. This specimen is a strip cut from the tail of a beaver, *Castor canadensis*, that has been folded once length-wise and twice cross-wise (once over and once under). The skin has not been prepared but is rawhide.
- (u) Plant Material. Circa 20 cc., it is tied in the center with a rectangular piece of a blue denim shirt. This material, identified through the Department of Botany, University of California, Berkeley, is composed of the following types: Snap Dragon, *Antirrhinum magus*; Calliopsis, *Coreopsis tentoria*; Lanceleaf Tickseed, *Coreopsis lancelet*; and Cosmos, *Cosmos bipinnatus*. None of these species are native California plants. All of these are introduced, domesticated flowers. Opposite

corners of the rectangular piece of cloth were lapped over the plant material and tied in simple overhand knots.

(v) Dry Powdery Soil. Circa 15 cc., it is tied in the center of a rectangular piece of cloth that perhaps was made from a piece of an inexpensive house dress. Unlike specimen (u), this specimen was tied by a strip of cloth wrapped around it.

(w) Handmade Sack. Dark-blue denim adhering to the inside of a sack containing a small quantity of feather down. The sack is ca. 33 cm. long and ca. 17 cm. wide. It may have been the container for the entire bundle, but was used as filler for the canister when we first saw it. The canister is not illustrated.

The nature of the bundle's contents indicates it had a composite origin in time and space. Some of the specimens are clearly heirlooms, and others have been added in relatively recent times. The charmstones are all of types which have been found abundantly in the southern San Joaquin Valley in Yokuts territory, and Yokuts Indians are known to have possessed such pieces. The ethnographic records do not mention their manufacture, and it seems unlikely that new specimens have been made within recorded times. The chipped obsidian bifaces are probably fragments of knives. In their broken condition, they reveal no diagnostic features which would permit the suggestion of a place of origin, but the techniques of stone flaking have long been forgotten by the Tübatulabal and by their neighbors. The chunk of milky quartz, the quartz crystals, and the stream-polished pebbles are of too general occurrence to permit a guess as to origin; all could have been obtained locally. The most likely neighboring source for the fish vertebra would be the fossil fish deposits of Shark Tooth Ridge east of Bakersfield in the San Joaquin Valley. The stibnite crystal is almost certainly local in its source, for there is a surface exposure of stibnite near the confluence of the Kern River with South Fork, six miles west of the hamlet where we obtained the bundle. The steatite pebbles could have been obtained at any of numerous surface exposures in the foothills of the Sierra bordering the San Joaquin Valley. All of the textiles are of commercial origin and apparently from American rather than Spanish sources. Beaver can be obtained locally, but have been extremely rare at least since 1860. The ornamental flower seeds represent recent introductions into the area of species ultimately of European origin.

Heirlooms were often passed down for generations through extended family members. Objects contained within a shaman's rain-making bundle were highly treasured, since they were believed to possess the powers of their former owners, who used them in their ceremonies. These were often inherited by the succeeding generation of shamans.

THE RELATIONSHIP OF TÜBATULABAL WEATHER SHAMANISM TO THAT OF THEIR NEIGHBORS

It is notable that data on the rain shamanism complex cuts sharply across the linguistic boundaries being reported for the speakers of eight different ethnolinguistic groups in the south-central California regional complex. Those data include descriptions and representations of material applying to the Tübatulabal, Yokuts, Chumash, Kawaiisu, Southern Paiute (Las Vegas), Chemehuevi, Serrano (Vanyume/Kitanemuk), and Mojave (Fig. 6). [See the discussion in the companion article elsewhere in this journal (Hopkins et al. 2012)]. The presence of this rain shamanism complex is denied for a portion of the Yokuts ethnographic territory and for most of the Southern Paiute groups.

Tübatulabal Rain-Making Doctors

The information which we have concerning magical control of the weather by the Tübatulabal has been recorded by Voegelin (1938). It definitely seems to indicate a source to the south and west for the practice.

Although Esteban Miranda asserted that the Tübatulabal formerly had their own weather shamans (*paha-m*), much of the ethnographic material relating to this type of shamanistic activity concerns performances by Chumash and Kawaiisu weather shamans.

Esteban Miranda's stepfather, a Chumash from Tejon, had practiced weather shamanism until part of his equipment (*tagganizt*) was stolen from him; this outfit consisted in part of white quartz crystals used for making thunder showers in summer and black rocks for winter rain; these were kept in a striped fawn-skin sack in a dry place. In addition, the rain doctor used steatite pipes with bird-bone mouthpieces, small steatite bowls, and dew-claw rattles. To make rain, four old men and the weather shaman sang for three nights; during the



Figure 6. Linguistic Boundaries of California Indian Groups (based on figures in Kroeber 1925 and Heizer 1966, Figure 4).

day, the singers abstained from meat, eating only acorn mush and seeds. At the end of three days, the rain doctor took the outfit outside and delivered an esoteric speech, alone. He then brought the rocks in and it rained. Fernando Miranda said his mother had seen snow made in summer by weather shamans. One rain doctor was said to have 'hollered three times; a cloud came up and it rained right away' (Esteban Miranda). A Loraine¹¹ Kawaiisu rain doctor, Mike Miranda, knew (how to bring rain), (he) had a 'little round thing' (stone?) which he sprinkled with water and sang over. If he had ever put the rock in water, 'he would have flooded everything' (Mike Miranda). Bob Rabbit, Kawaiisu rain doctor, has a notable reputation among Tübatulabal; 'one time when Bob Rabbit was away from home; some hungry boys broke in and stole his meat. He returned, found what had happened, and was so mad he made loud noises in the mountains, and then rain in 20 minutes, although there were no clouds in the sky when he began' (Voegelin 1938:64). "Rain doctor not paid for services; he just made rain, lots; however, when women went to gather cane and rain doctor made shade for them, women gave him some of the sugar they made from cane; same applied to women out seed gathering. Bob Rabbit, the Kawaiisu mentioned above, 'won't make rain now, because the white people won't pay him to do it'" (Voegelin 1938:64).

An interesting extension of the rain doctor's activities, as Esteban Miranda knew them from his Chumash stepfather, is briefly described as follows:

At the new moon, in month when icicles dropped from house (January), rain doctor filled little black bowl with water and planted whole acorn, *chia*¹² seeds, every other kind of seeds in this bowl, and left it inside his house for month; 'he did this to make all the seeds grow well that spring. He talked over these seeds the same way that he talked when he went outside to make it rain (Voegelin 1938:64).

Among (the) Tübatulabal rain machines sometimes were buried at owner's death; Esteban Miranda, however, had expected to inherit his stepfather's outfit, before the key part of it was stolen, and he taught some songs which accompanied its use; what remained of outfit Esteban Miranda had in 1932 in his possession (Voegelin 1938:64–65).

The portion of the outfit mentioned as being in Esteban's possession consists of the steatite pipe, the steatite bowls, and the dew-claw rattle described above.

Mary Austin (1906), in her early travels in the far southern Sierra Nevada, provides the editors with another bit of information on what was apparently a Tübatulabal rain doctor's ritual activity. She writes of how General Beale (when administering Fort Tejon) called upon a woman rainmaker from the Kernville area to respond to the local area's persistent drought. The ceremonies she describes are well within the traditions of the Tübatulabal as reported by Voegelin (1938). Austin's description (taken verbatim) is as follows:

A *Chisera* you must know is a witch, in this instance a rain-maker. In a dry year General Beale put the Indians to turning the creek into an irrigation ditch to water the barley. Said they: "Why not so much bending of backs and breaking of shovel handles? There is a woman at Whiskey Flat¹³ who will bring rain abundantly for the price of a fat steer." 'Let it be proven,' said the General, like Elijah to the prophets of Baal. The *Chisera* wanted more than a steer—beads, calico, the material for a considerable feast, all of which was furnished to her. First the Indians were fed and then the *Chisera* danced. She leaped before the Gods of Rain as David before the Ark of the Lord when it came up from Kirjath-jearim; she stamped and shuffled and swung the roll of the hollow skins and rattles of rams' horns; three days she danced, and the Indians sat about her singing with their eyes upon the ground. Day and night they sustained her with the whisper and beat of their moaning voices. Is there in fact a vibration in nature which struck into rhythm precipitates rain, as a random chord on the organ brings a rush of tears? At any rate it rained, and it rained, and it rained [Austin 1906:238–239].

Stephen Powers interviewed a Tübatulabal (Palawegan band) man at Tule River Reservation in 1875 and heard about how a Tübatulabal rain-making doctor traveled to Hopi (located in Arizona) and helped that tribe with rain-making (Powers 1877:394; Voegelin 1938:51).

Southern Paiute/Chemehuevi and Mohave Rain Doctors

The Southern Paiute of the Panamint Valley also attributed great skill in weather control to a tribe to the west, the Kawaiisu, but at least one Southern Paiute band had a rain shaman:

The *Vegas* were interested in weather control but, with one notable exception, they did not practice it with much success. Usually, they state, they relied upon the efforts of the *Panumints* (Kawaiisu) about Mohave Station (this is the current town of Mohave south of

Ridgecrest). The *Panumints* had some sort of thing which they always kept closed and, when they opened it, rain came. I do not know what this looked like. We would ask them to make rain, give them buckskin, and they would tell us to return home, that it would already be raining there. To stop rain, the *Panumints* patted a piece of clay very thin and set it out in the rain to dissolve. Or, they gathered rain water from the leaves of plants and drank it; this also stopped the rain [Kelly 1939:160].

According to one informant, the *Vegas* weather shamans (*iwa dim-puaxaⁱ*, rain doctor) dreamed, sang, and used the bull-roarer (*me mut*) to bring rain; “but they were not very successful.” According to another:

Only children used the bull-roarer. We told them it would bring rain and thunder and lightning, but it did not. Rain doctors were dangerous; they could cause lightning to strike people. They dreamed of bringing rain. In dry weather, they used their power by smearing black paint around their eyes, by singing, and by wishing for rain [Kelly 1939:165].

Despite the general lack of success which characterized *Vegas* weather control, they boast one famous rain shaman, *Avena rⁱ* (meaningless), who lived originally at *Pa savantⁱ* (spring at the south end of the Paiute Range). Most of his life was spent among the Chemehuevi at *Wia nekat* (from *wiab*, clay), a site along the lower Colorado River, between Fort Mohave and Cottonwood Island (Mohave territory in pre-whiteman’s days). Several anecdotes concerning this shaman follow:

Avena rⁱ dreamed for his power. To bring rain he did not sing but used crystals (*pi utovi*) which looked like diamonds. These he alone could find at a place that had been struck by lightning. He seldom sang to bring rain but instead touched one of the crystals to the surface of a bowl of water. Immediately it began to rain. If he used a large crystal, the storm continued many days. To stop rain he sang, or he gathered rain water from the leaves of trees and drank it.

Once a party of Mohave was on their way to Mohave Station (Kawaiisu) for clamshell beads. They stopped near the camp of *Avena rⁱ*. They taunted him, saying ‘this man cannot bring rain.’ But, before they left *Avena rⁱ* brought a rain so heavy that the country was flooded. There was so much water that the Mohave said, ‘Have we not crossed the Colorado River already?’ They went on their way but two or three of them were drowned.

When *Avena rⁱ* was very old, he gave his crystals to a young man named *Warivⁱ*, or *Warivⁱ tsima*, who was not related to him. He did not want the crystals destroyed and told this young man that he would be

able to use them without dreaming. But, to do so he must neither bury nor cremate *Avena rⁱ*’s body but expose it on some mountain. But, that young man was ‘crazy;’ when *Avena rⁱ* died he burned his body and the crystals.

Only one other doctor used crystals for making rain. He lived at *Timpi Saxwat* (Providence Mountains¹⁴). He could bring rain only in winter, whereas *Avena rⁱ* could bring it the year-round, although in summer it would be only a light shower [Kelly 1939:165–166].

Kawaiisu Rain Doctors

We are indebted to Dr. Stephen Cappannari for the following notes concerning weather shamanism, abstracted from his unpublished account of the ethnography of the Kawaiisu. Cappannari, in turn, has utilized notes in this section recorded at an earlier date by Dr. Theodore D. McCown:

Early in my field trip of 1947, Emma Williams asserted the Kawaiisu did not have rain shamans ‘in the old times.’ The tribes to the south (*pitande*)¹⁵ and the Tübatulabal (*unapa*) did have rain shamans. She cited Esteban Miranda, a Tübatulabal, as being a rain shaman (*opohoruda*), mentioning that his uncle was a *pitande*, that he spoke a southern language as well as Tübatulabal, and suggested that he may have learned his rain-making technique along with the *pitande* language. In later conversations, Emma Williams declared that the Kawaiisu did have rain shamans and cited examples of Kawaiisu *pohorudas*. In 1948, she again affirmed the presence of Kawaiisu rain shamans in the old times and thus agreed with other informants.

In the old times, there was a Kawaiisu woman (a rain shaman) who lived southeast of the present bridge at Caliente.¹⁶ She had not made rain for a long time and the people at Kelso Valley¹⁷ were hungry and worried about their wild plant crop. The drought was widespread and three Koso (meaning “fire or steam” in the Panamint Shoshone language) women from Inyokern¹⁸ walked over the mountains to Kelso Valley. They too wanted rain and carried gifts of bead-money and baskets. Together with some of the Kelso Valley Kawaiisu, they walked down to see the *opohoruda*, altogether they had about one half of a sack of beads and many baskets. They gave these to the rain shaman and she just laughed. The women started back and when they reached Sand Canyon¹⁹ it had already started to rain (this indicates that the three days which are supposedly required for making rain may represent the ‘ideal pattern’). It was a light rain and soon the grass grew as well as various edible seeds. The women gathered many seeds and cached them in a cave. The *opohoruda* had caused it to rain in Inyokern also—‘it rained all over.’

Kawaiisu Methods of Making Rain

The *opohoruda* puts some mud in the center of a small mortar (*teguise*). Around the edges of the mud, seeds are placed. One drop of water is placed on the mud. If the mud doesn't look wet, more water is added. Then the mortar is covered with a spotted baby deer skin. The mortar is placed to the east for two days, then to the north for two days, and the rain comes. The rainmaker sings songs. According to Emma Williams, songs were not learned in dreams. Emma Williams does not know if the rain shaman wears anything special. No one can watch the rain shaman at work.

McCown (1929) obtained especially full information from Bob 'Rabbit' Roberts, a rain shaman who died before Cappannari visited the Kawaiisu. Because Rabbit's data are so full and because some items differ from Cappannari's material, some excerpts from McCown's field notes are quoted here:

A 'plate' of steatite or perhaps a soapstone mortar was used in the ceremony. The rain-making paraphernalia is a series of objects: *chia*, piñons, acorns, a young fawn skin, eagle feathers, special crystals, or rocks. The seed is ground up on a plate made of steatite and especially 'tempered.' The rain-maker had all the kinds of food he could get. All the seed was there. One seed was male and one seed was female.

Bob drew a cross on the ground—arms pointed always to the four cardinal directions. The ritual objects were placed in the north-west quadrant. The north-south line prevented the rain from crossing the mountains and disappearing over the desert. The fawn skin was placed facing east while the rain was coming. When the rain came, it was turned around and faced west so as to follow the course of the storm or its expected course. An important thing was to be able to stop the rain after it had been started. Otherwise, the whole world might be drowned. Also, to make rain successfully, everyone who will be benefited by the rain must make a present to the rain shaman. This might be money, seeds, the necessary fawn (?), etc.

Hair from *pazimora* ('Coyote's hair'—a moss which hangs from trees on Piute Mountain) was especially bad.²⁰ It might make rain sometimes if it was properly used but normally it made cold, sleet, snow, and high winds instead of warm rains. Bob was particularly rabid about it. He said that people all over the country would try to use it. It invariably made trouble and also kept the rain shamans out of work.

The rain makers had three kinds of *puimak* (poison). They were red, white, and blue colored. The red *puimak* was for fighting. I tried to get Bob to describe what *puimak* looked like. From his statements, it might be dirt, rocks, or liquids. *Puimak* might be used to make people go crazy or it might kill them. It works at any distance. *Puimak* apparently

has a fatal attraction for lightning. One Indian (Juan) was killed because he had *puimak* in his pocket. The *puimak* that is best for rain is blue-green like galena.

After the *opohoruda* has got all the apparatus arranged, he sings three songs. Earthquakes are supposed to answer the song. There is a fire to the west of the circle that makes lots of smoke (clouds?). The rain shaman smokes his pipe three times. He blows through a bone tube three times. This is to make the wind.

Bob then described a curious feature of the rain-making ceremony which he had hitherto refrained from telling me. On the settled mud of a dried wash he made and traced a circle with cross lines pointing north and south. The circle represented the world and the lines are trails that the rain follows. The old fellow who answers the prayer of the shaman is toward the south of the circle. When the rain washes out the marks it will then cease to rain. The meal and other paraphernalia were put inside the house to keep it warm. If it got cold, there would be a freeze. This appears to mean that there was another circle made indoors with the apparatus placed in the northwest quadrant while the drawing outside was to determine the length of the rain.

Bob said that his songs (which he had dreamed after eating tobacco and lime) would work if someone else used them. He could teach them to a nephew who would then also be *opohoruda*. There were three songs that were sung on three successive nights several times. He used to sing these in bed. He did not dance. He stayed in the house all the time (?).

Bob said that once an Indian from Ventura had discovered the rain god. The rain god was south of South America and speaks Serrano. The Indian got to the god in some unaccountable way and could not get back. So the god made a boat out of manzanita leaves. He blew the boat back to Ventura. The leaves talked all the time while the boat was sailing. When the Indian reached Ventura, the boat sailed back south again. This is an old fellow (God) who makes the earthquake and tells the shaman whether there is going to be rain or not.

The following incident related by Emma Williams reveals an interesting bit of the Kawaiisu view of rain-making. Apparently, it was only the tribe or person who caused the rain that could control it:

It had been raining heavily for days. A blind old man who lived in Loraine stuck a tule in the river bank to keep it from flooding, an event dreaded by the Kawaiisu. The torrent in question was caused by a *pitande* (a 'southerner' Kitanemuk or Serrano)—an old female *opohoruda* who lived at Tejon. Her son had thrown away the sack which contained her rain-making paraphernalia and it was this that caused the rain. It continued to rain for about a month.

A Kawaiisu rain shaman wanted to stop this rain but he didn't (couldn't) because it belonged to the *pitande*.

A person can control rain by speaking to thunder and telling him (thunder is a male because 'men made big noise, women make little noise') which mountains he should go to. But, if you blow tobacco off the palm of your hand, it rains harder.

A prerequisite for making rain was to know lyrics to a rain shaman's songs. It is essential to know how to stop rain or floods will result. It is the rain shaman who stops each rain after enough has fallen. If the rain shamans are angry, they might not make any rain at all and it will be a dry year. A wife might use the rain-making equipment of her husband.

There was a Kawaiisu rain shaman at Tejon who did not make it rain for a long time. The creeks were almost dry. Some Kawaiisu (and a white cattleman) visited the shaman and gave him some money to make rain. These people watched him [*sic*] and all night he danced and sang. In the morning he told them to look at the sky. There was a huge black cloud. Soon it rained very hard. This rain shaman used special feathers but Marie Girado did not know what they were. She knew nothing of the equipment mentioned by Emma Williams.

Rain shaman could made it snow by singing. Coyote (*suna'avi*) knew how to make it rain by playing his six-holed flute. To make it snow, blow the tail of a cottontail rabbit in the palm of the hand making it rotate. It works, we tried it and three days later it snowed (Clara Girado Williams). "Three is the ritual number of the Kawaiisu" [Cappannari 1950].

Yokuts Rain Shamans

The information on Yokuts weather control is more complex, in part, because it comes from three authors. All of the data presented here are for southern Yokuts bands, probably because this is the area of emphasis, or possibly because information in general is much scarcer for the northern bands. Latta (1949) affirms the existence of rain shamans amongst the Tachi, the Chunut, and the Nutunutu. Gayton denies specialized rain shamans for these specific bands and emphasizes the importance of charmstones as impersonal sources of power for weather control. Kroeber's data seem to support Latta:

The weather doctor chiefly brought on rain, perhaps when it was needed; more often it appears, like Samuel before the people, to prove his power. Again, the national inclination toward public recognition of shamanistic displays is manifest. The famous weather shaman (Hopodno) at Tejon, who was half Yauelmani and half Shoshonean Kawaiisu, staked the rain in a game, and when he lost promptly delivered it to the winners.... The Chukchansi mention only blowing and

dipping of fingers into water as means of making rain; but the Tachi and southern tribes describe cylindrical stones, 6 to 8 inches long and pointed at one end, as the necessary apparatus. Moistened or dipped into a little water, the amulet produced a shower; but, if the doctor was angered, he plunged the whole stone in and a violent storm followed. These objects, which suggest the well-known charmstones of the California archaeologist, were probably a distinct though similar type, were inherited from father to son; and the *Tachi* go so far as to say that the theft of his amulet would deprive the owner of his power. Spirits are nowhere mentioned directly in connection with the rain-making faculty [Kroeber 1925:518].

The Chunut, Tachi, Nutunutu, and Wowol (the Tulare Lake tribes) did not have special practitioners for rain-making. Josie Alonzo recalls a *Pitanisha* named *Hutu'* (*Hopodno*) who was asked to come up to *Pi'sras*²¹ to make rain. He had an object 'like without any shell on it.' When he threw this up in the air, water fell all over from it [Gayton 1948:47].

Rain could be made, or a storm might even be caused, by the use of the charmstones (*unok*) found in the lake region. Any doctor or plain person who wanted to could use one. They are associated with thunder and are thought to be natural; i.e., not man-made objects. To operate these, a little water was sprinkled on them and they were cast out in the direction from which the rain was desired:

Gentle rains came from the west or northwest and hard rains from the southeast. If a violent wind was wanted too, a little earth was put on the charmstone with the water.

In February (1929) Josie Alonzo and her godchild were out gathering mushrooms. The girl found an *unok*, picked it up, and asked what it was. After she heard Jose Alonzo's explanation, she thoughtlessly threw it away, for which she was chided. As a consequence, it rained and stormed for two weeks (which it did).

With the fear that the owner might be careless, Josie Alonzo has consistently refused to sell an *unok* she has in her trunk. When a bad thunderstorm comes up it is always said that someone has been playing with an *unok* [Gayton 1948:37].

A rain shaman from Tejon (*Hopodno*) was renowned for his abilities, but Martha Alto never knew him to control the weather for pay. She related the following:

When Martha Alto was a young girl, (*Hopodno*) was at the Tule River Reservation.²² He gambled at night with several others and lost continuously. People teased him unduly and he became very angry. The following day he called on all his *ai'nic* to make a storm that would destroy the houses of those who had

twitted him. A terrible hailstorm came out of a clear sky. Martha Alto and her sister had gone to the river for water. They ran up a hill and crouched under some rocks for shelter. The storm continued unabated for an hour and many houses were washed away [Gayton 1948:47].

This rainmaker was known to Stephen Powers, who states that in 1870 he traveled as far north as Kings River offering to make rain for pay (Powers 1877). The following year, another one of drought, he made a second pilgrimage and was paid abundantly and caused rain to fall (Gayton 1948:47).

Not many years ago, a prominent Tachi Yokuts rain doctor, Bob Bautista (Bob Tisto)²³ [Fig. 7], passed away at Santa Rosa Rancheria, south of Lemoore (Mitchell 1976:11, Fig. 4). His Tachi name was *Si'-nel*, but he was known to surrounding white settlers as Indian Bob, the Rain Dancer. While this manuscript was being completed, Clarentce Atwell, the last of these Yokuts doctors, died at the same rancheria, his dance costume being buried with him.

Connected with the rain-making ceremony was a magic stone, which, when properly invoked by song and dance, could produce anything from a sprinkle to a cloudburst. It could bring luck in fishing and could bring water into dry stream-channels. They are often referred to as plummets, or plumb-bobs, and are commonly known to collectors as charmstones.

Pioneer San Joaquin Valley residents have furnished numerous parallel data stating that these stones were used to bring fish up the streams and to bring success in fishing. A few have stated that they were also used in rain-making ceremonies. Zachary T. Blankenship, of Visalia, once told the authors, Frank Fenenga and Francis Riddell, that they (charmstones) were used to bring water into streams during drought and to induce the large trout of Tulare Lake to migrate up the various branches of the Kaweah River. Said 'Zac,' "soon after it left the Sierra foothills the Kaweah River divided into six branches—Outside Creek, Deep Creek, Cameron Creek, Packwood Creek, Mill Creek, and St. John's River, which, in its lower course, is known as Cross Creek. Sometimes the heads of some of these creeks would choke with sand and brush so that the water could not run down them. Then the Indian medicine men had to get busy with their plumb-bobs and put on a song and dance calculated to bring the water back."

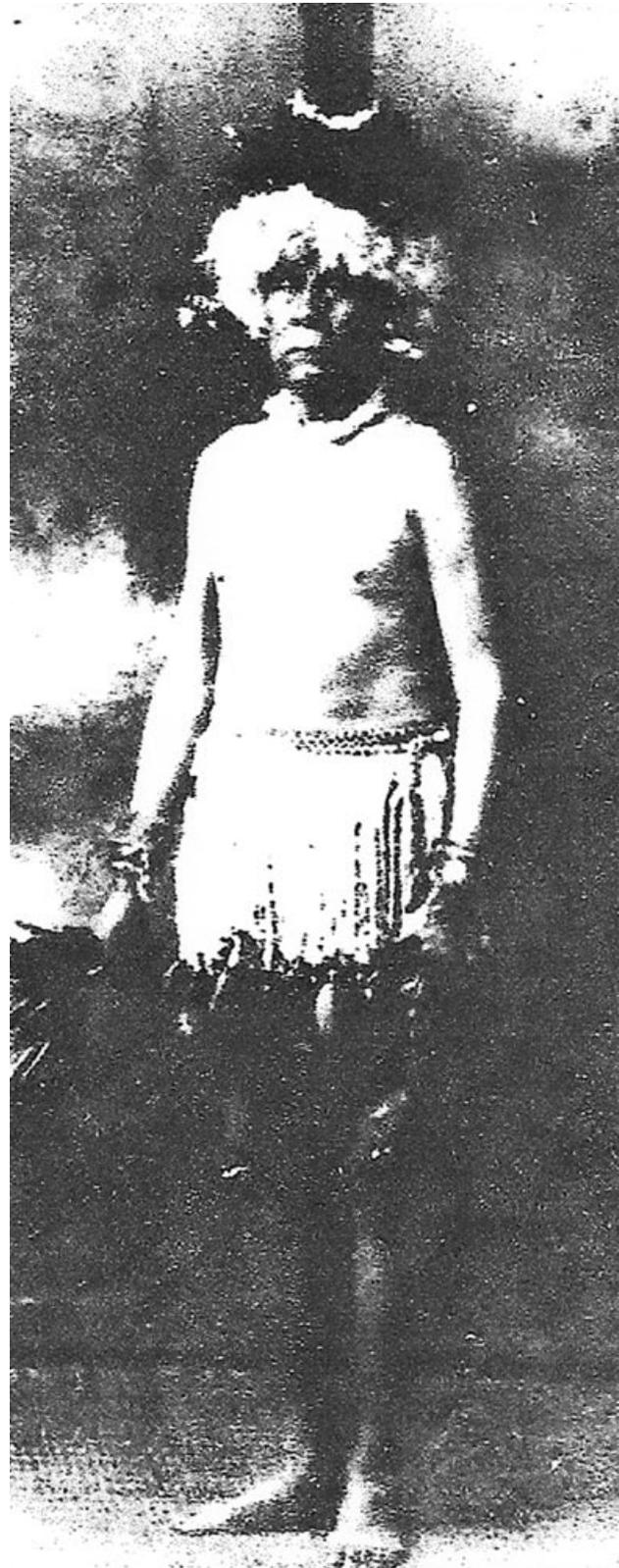


Figure 7. Bob Tisto, Tachi Yokuts medicine man and rain-maker in his traditional religious dress (photograph from Alex Schwed Collection and Mitchell 1976:11, Figure 4).

Each year the large lake trout would run up some of the Kaweah Creeks, but they did not always run up all of them. This cut some of the Indian camps out of their fishing. They hung those plumb-bobs on willow trees in order to make the fish come up to them. I never saw this done, but I know it to be true for I was told about it by an old Indian who had lived on Outside Creek. I found one of those plumb-bob stones hanging on a tree. It took my fancy. There was no one in sight, so I cut it loose, put it in my pocket, and took it home. We had several Indians working on the ranch as vaqueros. One of them saw the stone when I showed it to the other vaqueros. He told the man who had hung it out what I had done and the next day the owner came to me for it. Our vaquero explained to me that it was *tripne* (supernatural) and why it had been hung in the tree [Zachary Blankenship, personal communication 1948].

Frank Latta first interviewed Mrs. Josie Alonzo of Hanford about 1930. Her Indian name was identified as *Yoimut* and she was the last full-blood survivor of the Chunut tribe of Yokuts. *Yoimut* knew much about the Yokuts rainmaker's charmstones. Below is a portion of the information she furnished about them:

I had an uncle named *Teh-nih-pahs*. He was a real old Indian with long hair with beads in it. He was a Wowol. I learned his song that went with the *unuk*. He put a little water on the *unuk* before he sang to make it rain. If he dipped it in water and then sang and danced, he could bring a flood. He was *Tripne*. If he had real bad luck, he would throw his *unuk* in the lake, maybe off of a boat, maybe from shore. The *unuk* was a long pretty stone. It was round and smooth and had a little head at one end. This is the song he sang with his dance while he held the *unuk* in one hand:

<i>Toke'-un</i> (west-side)	<i>lih'-nuh</i> (straight path)	<i>Wa-tin-hin</i> (me)	<i>nah yo'</i> (to mark time)
<i>Hi-yo-um'ne</i> (Wo-wol village)	<i>Ah-he</i> (this is I)	<i>oo-nook</i> (charmstone)	<i>mi-uh-wah</i> (over you)

He sang this song over and over as he danced. West Side was the name of the song. It meant 'I, the charmstone, am over you, showing you the straight path to *Hiyoumne*, the old Wowol village.' It had a very pretty tune.

Lots of Indian doctors tried to learn this song. They wanted to be *Tripne* rain doctors. They tried to sing it, but never learned it right. I heard them sing lots of times, but I never sang my song for them. They were only *Anhtru* (medicine doctors—lack supernatural power). They wanted to be *Tripne*. An old Nutunutu

rain doctor at Kingston knew my song right. I heard him sing lots of times. His name was *Ne'-mah-pah*. He died long time ago [Latta 1949:200].

Information about weather control amongst the Salinan and Esselen is extremely meager but Kroeber's data indicate that there were rain shamans among the Salinan, Esselen, and Coastanoan groups (Kroeber 1925:472, 549). One such weather doctor, an elderly woman living at Carmel Mission, was referenced by Culleton (1950:222):

A *respuesta* (means 'answer' in Spanish) was sent to the California missions requesting information about Indian Natives living at the missions. In the report from Carmel Mission, the old woman (self-proclaimed weather doctor) said that she had not controlled weather because the benefactors would not pay her for her services with offerings. Therefore she never demonstrated her weather control skills.

Salinan and Esselen beliefs, again, were substantially like those of the Tachi and other valley Yokuts. Certain medicine men were thought capable of bringing rain with amulets (Kroeber 1925:549).

Chumash Rain Shamans

The use of a rain-making bundle by the rain shamans in two Chumash groups, the Barbareño and the Ventureño, has been recorded by Yates (1890:17):

... Though admitted to be but a guess, it is remarkable how accurately it proves to be, for in this paragraph we have exactly the use of these plummet-like stones as explained by the Santa Barbara Indians. The moment these stones were shown to these Indians, I was told that they were medicine or sorcery stones. 'The sorcerer arranged twenty of these stones, the proper number, in a circle, pushed them violently together, sprinkled water over them, and smoke issued from them...'

At San Buenaventura, substantially the same account was obtained. Here, it was said, twelve was the number required by the medicine men, exclusive of a center stone of different character. The center stone shown to me, called *Tucait*, is a flattish round, beach-worn pebble of quartzite unworked and stained black with iron. It has, as I was told, a peculiar power in rain-making and as an evidence of its power, the Indian held it for a few moments tightly grasped in his hands. When moisture was visible on it, caused by contact with the moist hand, the moisture was pointed to as visible evidence of its rain-making powers.

The use of the medicine stones among the San Buenaventura Indians was as follows: The twelve sorcery stones were arranged in a circle close together;

in the center was arranged the *tucait*; *chia*, the generic name for seed-meal, together with down from the breast of the white goose, was then spread over the stones and then red ochre spread over the whole. Around this, a dance was held while three old men sang and kept time with rattles. This or similar ceremonies were observed for curing the sick, bringing rain, putting out fires in the mountains, calling fish up the streams, and when war was to be made [Yates 1890:18–19].

Twenty of them (charmstones) were arranged in a square, five on each side; in the center was a bowl of water beside which stood the medicine man with a long stone pipe shaped like a cigar in which an herb, called *pisipivate* by the Mexicans resembling southern wood, was smoked. The smoke was first directed toward the bowl of water then toward the stones. The people came and moistened their faces with the water in the bowl which had been made holy by previous ceremonies. This ceremony brought rain, caused death to enemies, and various other things [Yates 1890:28].

The final reference seems to derive from an independent observation of Ventureño behavior:

The Santa Barbara Indians at San Buenaventura, California possessed a rain making charmstone which they placed centrally on a primitive altar and one of the things they especially prayed for was rain to put out the fires in the mountains. This stone, which is now in the United States National Museum, was thought to be efficacious in bringing rain and other desirable things. It is a water worn pebble of green jasper [Hough 1926:152].

NOTES

¹ Lake Isabella is a community located along the south fork of the Kern River. It is located near the dam for the Lake Isabella Reservoir and is also a place known to natives as where the Bear People traveled on their way to the river (Zigmond 1980:49), as related by Emma Williams. Andy Greene, Kawaiisu elder, mentions that soapstone (steatite) was available to the natives and was procured in the Isabella area.

² *Sastre* is “tailor” in Spanish. It corresponds to the class of occupational names often bestowed and later used as surnames by mission neophytes. There was one Francisco born at Mission San Buenaventura in 1810, and a native Francisco, born in 1810, living in the Tejon region and listed in the U.S. decennial census in 1860 (David Earle, personal communication 2011).

³ This was Esteban Miranda’s hamlet, and it is located in Tübatulabal territory at the north end of South Fork Kern Valley, where he and Francisco Sastre once lived (Voegelin 1938:41). This is currently identified as the Miranda allotment and is located at the juncture of Highway 178 and Fay Ranch Road.

⁴ Small settlement located in the South Fork Valley of the Kern River midway between the towns of Weldon and Canebrake, situated along present-day Highway 178 just west of Walker Pass (Garfinkel and Williams 2011:51).

⁵ He was also known as Bob Rabbit; however, his given name is Robert Roberts. He got this nickname because of his proclivity for successfully hunting and capturing many rabbits. He would eat these and also fashion them into rabbit-skin blankets.

⁶ The name Tejon originated during an expedition in 1806 from the Santa Barbara Mission into the San Joaquin Valley, led by Francis Ruiz. Father José Maria Zalvidea accompanied Ruiz and kept a diary of the trip. A dead badger (*tejon* in Spanish) had been found in the canyon (Garfinkel and Williams 2011:62).

⁷ Our Tübatulabal reviewers disagree with this — Esteban heard these songs, and since he had practiced rain-making, he must have learned the songs from Francisco Sastre, his stepfather.

⁸ Polished tubular objects made of bird bone were found during the Buena Vista Lake excavations (Wedel 1941:44, 58). The largest tube was 97 mm. long and 14 mm. in diameter, which would accommodate most of the smoking pipes examined by the editors at the Kern Valley Museum. The largest bone tubes at Buena Vista Lake were identified as belonging to the white pelican.

⁹ Tübatulabal reviewers note that Esteban’s 1928 Indian Application shows the date of his birth as being 2/15/1844. However, if this were the case, during the 1863 massacre Esteban would have been too young to be considered a threat. The reviewers think that Esteban was about 14 years old in 1863. If Esteban was born in 1844, he would have been 19 years old in 1863. This would be too old to be safe from being executed.

¹⁰ Quartz crystals have been used since ancient times as powerful healing objects and meditation tools, and to make medicinal elixirs. Wise ritual adepts have long known about their qualities and have used crystals for powerful talismans and amulets. They were in widespread use by Native American shamans in California.

¹¹ Loraine is a small town in the Tehachapi Mountain region that was first named by French mine workers. Until 1912, the place was known as Paris-Lorraine (Powers 1971:97).

¹² *Chia*, (*Salvia columbariae*), a member of the mint family, is a key economic seed plant that is gathered in the late spring or early fall and is very nutritious and calorific.

¹³ Whiskey Flat first began as a place for those seeking their fortunes in the Big Blue gold mine on the Kern River in the southern Sierra Nevada in 1860. In 1864 the name was changed to Kernville. Old Kernville now lies at the bottom of the Isabella Reservoir, which was created by a dam on the Kern River between 1948 and 1953.

¹⁴ The Providence Mountains are located in the eastern Mojave Desert in the traditional aboriginal territory of the Chemehuevi.

- ¹⁵The term is alternatively *pita-di* or *pita-ndi* meaning southerners—these were the Tejon Indians, identified by Zigmund et al. (1990:225) as Kitanemuk and Serrano.
- ¹⁶Caliente is a small town located midway between Bena (a small way station on the railroad route from the San Joaquin Valley to Tehachapi Pass) and Keene on the western edge of Piute Mountain (Garfinkel and Williams 2011:31).
- ¹⁷Kelso Creek and Kelso Canyon run south to north between the Piute Mountains on the west and the Scodie Mountains (traditional pinyon grounds for the Kawaiisu) on the east before debouching into the South Fork Valley at Weldon, east of Lake Isabella. It afforded a route of travel between the Tübatulabal region on the South Fork of the Kern and Kawaiisu territory further to the south. Kelso Valley is identified as where the “former people” are now recognized as standing rocks (Garfinkel and Williams 2011:41; Zigmund 1980:23).
- ¹⁸A small town west of Ridgecrest in the Indian Wells Valley (Garfinkel and Williams 2011:40).
- ¹⁹Zigmund referred to Sand Canyon as ‘*iichi-vi’-vi-di*.’ Sand Canyon is mentioned in various Kawaiisu traditional stories and accounts that he recorded. Sand Canyon branches to the north of Caliente Creek and just north of Loraine (Zigmund 1980:76, 202). Sand Canyon is the location of *Tomo Kahni* State Historic Park and is the traditional creation site for the Kawaiisu.
- ²⁰Coyote’s hair or *pazimora* is a tree lichen (*Ramalina menziesii*) that is also known as Coyote’s fur. It was part of the specialized materials included in a weather shaman’s rain-making bundle, but would be used by commoners as well as professional shamans. This tree lichen, to be effective, requires that it be taken directly from a tree and not picked up from the ground. When put in water, it produces rain preceded by strong wind and fog. When you want the rain to stop you take it out of the water and discard it. One native consultant indicated that if you put the lichen in the fire it will chase away lightning and thunder. The Kawaiisu oral tradition called Coyote and Snow provides the association for this material with Coyote (Zigmund 1981:57–58).
- ²¹The main Chunut rancheria, which José Alonzo pronounces *Pi’sras*. Mary Amanda Gorden believes this is a corruption of “Pierce’s Ranch” (Mary Amanda Gorden, personal communication 2011). It was near Farmersville, which Josie Alonzo claimed was Chunut territory (Gayton 1948:7).
- ²²In 1864, the Tule River Farm became the Tule River Reservation.
- ²³Note the charmstone (s?) and pipe (?) hanging from the eagle feather bands on Bob Tisto’s skirt.

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