

Further Reflections on California Rain-Making Shamanism: “The Other Half” of the Tübatulabal Shaman’s Rain-Making Bundle

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Additional information is presented here that pertains to the Fenenga and Riddell article (this issue) documenting a Tübatulabal weather shaman’s bundle. This paper describes additional materials that were once part of the original bundle but were unknown to Fenenga and Riddell at the time their research was conducted. We can now reconstruct virtually the entire assemblage and are able to present an overall interpretive synthesis. We also provide informative material regarding the weather shamanism ritual complex present in California and the Great Basin.

BOTH ERMINIE VOEGELIN (1938) AND PRIVATE Native American Indian papers on file at the Kern Valley Museum in Kernville strongly suggest that a portion of a shaman’s rain-making bundle, currently on display there, once belonged to Tübatulabal chief Esteban Miranda (Fig. 1). A portion of his rain-making bundle was stolen from him or his stepfather, Francisco Sastre (a Chumash) who was practicing rain-making shamanism at Fort Tejon. The stolen portion of the bundle is discussed in the preceding article in this journal (Fenenga and Riddell 2012). The other portion of the bundle is stored at the Phoebe A. Hearst Museum of Anthropology, University of California (formerly the Lowie Museum of Anthropology), in Berkeley, California.

A review of Robert Merriam’s notes (he was curator of the Kern Valley Museum at the time of the museum’s initial opening) reveals that he was related to C. Hart Merriam (1855–1942), noted zoologist, ornithologist, entomologist, and ethnographer. The notes also show that Chanza (Miranda) Andreas (Fig. 2) (a Tübatulabal native who lived in Weldon, California) inherited the bundle upon Estevan’s death. Lucy (Andreas) Arvidson (a Tübatulabal native who lived in Onyx, California; Fig. 2) had the bundle and loaned it to the Kern Valley Museum in 1976. The bundle was brought to the museum by Ardis Walker when she attended a meeting of the local historical society.



Figure 1. Esteban Miranda, Tübatulabal rain-making shaman (photograph copied, with permission, from the Kern Valley Museum).



Figure 2. Sprague Ranch, Weldon (Kern County), California, May 9, 1971. Tübatulabal elders and fluent speakers. Left to right: Sundy Vincent Andreas (on horseback), James "Jim" Vincent Andreas, Sr. (on horseback), Chanza (Miranda) Andreas (married to Sundy), Lucy (Andreas) Arvidson (sister of Sundy and Jim), Tony Pablo (cousin of all those depicted in this photograph). Photograph courtesy of Samantha Riding-Red-Horse.

We recently visited the museum and examined the materials within the museum portion of the bundle. The artifacts within the display were then photographed, and images of the artifacts are included here along with descriptions of the articles on display. According to Robert Merriam's notes from his interview with Buck Raines of Pomeroy, runaways from Ventura Mission brought objects with them to Kernville. These were "antiques" which were part of the weather bundle. This may help explain why there were so many smoking pipes in the bundle at the Kern Valley Museum.

CONTENTS OF THE TÛBATULABAL SHAMAN'S RAIN-MAKING BUNDLE

The shaman's rain-making bundle displayed at the Kern Valley Museum includes a total of twenty-three noteworthy objects, and are illustrated here (Figs. 3 and 4). They are described below.

- (a) Large Bowl. Exterior diameter 15.1 cm., interior diameter 13.4 cm., height 7.1 cm. The material is a fine-grained steatite. The vessel is symmetrical with the outside surface and rim polished.
- (b) Small Bowl. Dimensions were not measured. The material is a rough-grained steatite. The outside



Figure 3. Shaman's rain-making bundle, Museum Display Tray 1. Steatite bowls, steatite vessel, abalone shell pendent, sucking tubes, smooth pebble, geode, pieces of quartz crystals, seeds, and fragments of obsidian material in large soapstone bowl (photograph by Devlin Gandy).



Figure 4. Shaman's rain-making bundle, Museum Display Tray 2. Smoking pipes and medicine bag fragment (photograph by Devlin Gandy).

- surface is polished and what appears to be red ochre has stained the interior of the vessel.
- (c) Small Vessel. A container with a dipper-like shape with one handgrip (a second handle on the opposite side of the vessel has been broken off). The dimensions were not measured. The material is a fine-grained steatite. There are minor scratches on the bottom of the vessel.
- (d) Contents of the small vessel (c) above: three squash seeds (burned?), three ordinary obsidian flakes, one quartz crystal flake, and a piece of modern elbow macaroni.
- (e) Abalone Shell. *Haliotis* sp. (either *Haliotis californiensis*—salmon-pink color, or *Haliotis rufescens*—red abalone) “banjo” ornament (Gifford’s Type N1b—double lateral projections) with four drilled perforations. Type N1b resembles the human form with torso, arms, legs, and an enormous head (Gifford 1947); a portion of one arm and one leg is missing. Robert T. Merriam, first curator of the Kern Valley Museum, reported that the shell ornament may be a valley form from the Tulare area.
- (f) Sucking Tube. Length 7.0 cm., interior diameter 2.0 cm., width 3.3 cm., wall thickness 1.0–3.3 cm. The material is a grey-green, fine-grained steatite. The object was biconically bored causing the walls to be of unequal thickness. The specimen is highly polished and of fine workmanship.
- (g) Sucking Tube. Length 10.7 cm., interior diameter 1.8 cm., width 3.7 cm., wall thickness 0.8–0.9 cm. The material is a gray-green, fine-grained steatite. Like (f), the tube was biconically bored causing the walls to be of unequal thickness. What appears to be the likeness of an hourglass was (carved?) on one side of the specimen. This may be an artistic expression.
- (h) Smoking Pipe. Length 16.0 cm., outside diameter of the wide end 3.2 cm., outside diameter of the narrow end 2.0 cm., interior diameter of the wide end 2.2 cm., interior diameter of the narrow end 1.1 cm. The material is a tan-gray-green, mottled, rough-grained steatite. The exterior of this pipe is pitted and has an elongated hole (carved?) extending lengthwise through the wall into the tunneled portion of the smoking chamber (possibly for ventilation?). The pipe contains dark stains from use. This specimen may be an antique heirloom, as it is the only smoking pipe in the bundle made from a distinctive steatite source.
- (i) Smoking Pipe. Length 12.1 cm., outside diameter of the wide end 3.8 cm., outside diameter of the narrow end 1.6 cm., interior diameter of the wide end 2.8 cm., interior diameter of the narrow end 0.8 cm. The material is siltstone. The pipe was fitted for a bird-bone pipe stem and has asphaltum on the stem. A wiggly mark or snakelike design (?) is visible on one side of the specimen. The authors suspect that this design was an artistic expression by its maker. The number 17 was written on the specimen (by museum staff?).
- (j) Smoking Pipe. Length 10.9 cm., outside diameter of the wide end 3.5 cm., outside diameter of the narrow end 2.1 cm., interior diameter of the wide end 1.9 cm., interior diameter of the narrow end 0.7 cm. The material is light gray-brown, fine-grained steatite. The specimen is burnt and has 1G printed on one side.
- (k) Smoking Pipe. Length 12.6 cm., outside diameter of the wide end 3.6 cm., outside diameter of the narrow end 1.4 cm., interior diameter of the wide end 2.4 cm., lip thickness 0.6 cm. The material is a fine-grained steatite. This specimen has an ornamented orifice (lipped) and the remnant of a bird-bone pipe stem along with asphaltum. The pipe has scratches and is burnt.
- (l) Smoking Pipe. Length 5.9 cm., outside diameter of the wide end 3.4 cm., outside diameter of the narrow end 1.3 cm., interior diameter of the wide end 1.8 cm., interior diameter of the narrow end 0.7 cm. The material is a fine-grained steatite. There is neither evidence of asphaltum on the interior nor any blackening observable. This pipe may never have been used. It is the smallest pipe specimen in the bundle.
- (m) Smoking Pipe. Length 8.8 cm., outside diameter of the wide end 3.2 cm., outside diameter of the narrow end 1.5 cm., inside diameter of the wide end 2.4 cm., interior diameter of the narrow end 0.9 cm. The material is a fine-grained steatite. The specimen exhibits traces of asphaltum and has burnt ends.
- (n) Smoking Pipe. Length 7.8 cm. (5.4 cm. excluding the stem), outside diameter of the wide end 2.9 cm., interior diameter of the wide end 1.9 cm., diameter of the narrow end 1.1 cm. The material is blue-black in color and of fine-grained steatite. The specimen is complete with a split bird-bone pipe stem caked with tobacco residue.
- (o) Smoking Pipe. Length 12.0 cm., outside diameter of the wide end 3.5 cm., outside diameter of the narrow end 1.3 cm., interior diameter of the wide end 2.5 cm. The material is light gray in color and of fine-grained steatite. The large end has been slightly dinged in several places. No measurements were taken of the interior diameter of the narrow end, since it was caked with asphaltum. The interior shows evidence of usage.

- (p) Smoking Pipe. Length 10.8 cm. (8.3 cm. excluding the stem), outside diameter of the wide end 2.8 cm., interior diameter of the wide end 1.7 cm., interior diameter of the narrow end 1.2 cm. The material is gray in color and of fine-grained steatite. The pipe is complete, with a mouthpiece fixed in place with asphaltum. The interior displays evidence of usage.
- (q) Pebble. Length 5.6 cm., width 3.3 cm., thickness 1.5 cm. The material is a jet-black, smooth metamorphic stone. The specimen has light scratches and small inclusions on both faces.
- (r) Geode. “Inside-out” type; length 3.7 cm., width 2.3 cm., thickness 3.6 cm. This natural formation is a hollowed-out spherical rock with a crystalline interior. Tiny crystal formations are growing inward towards the center of the void and are surrounded by black-red volcanic rock (silica?). Its exterior is bumpy, resembling cauliflower.
- (s) Quartz Crystal fragment. Length 3.5 cm., width 4.3 cm., thickness 1.2 cm. The specimen has a banded brown cortex and is flaked. The crystal¹ has red pigment in its fissures.
- (t) Quartz Crystal chunk. Length 7.4 cm., width 3.5 cm., thickness 2.1 cm. This specimen is chipped on both faces and has red pigment in its interstices.
- (u) Quartz Crystal. Length 7.3 cm., width 6.3 cm., thickness 2.3 cm. This specimen has reddish-brown powder imbedded in its crevices. It is also chipped on both sides.
- (v) Fragment of what appears to be a medicine bag.² No dimensions were taken. It is made from tanned deerskin and has a leather fringe at the bottom.
- (w) Large Pouch. Length 18.5 cm., width 16.4 cm. The pouch was made from tanned deer hide. It is hand-laced with a drawstring made from a vegetable fiber cord.

The smoking pipes in the shaman’s rain-making bundle displayed at the Kern Valley Museum have been recently packed with dried white sage leaves by local Indian people living in the Lake Isabella Basin. (Chumash Indians used white sage (*Salvia apana*) for ceremonial healing. The leaves were smoked and the seeds chewed.) It is a wide-spread practice among native peoples to use sage to smudge or ritually anoint themselves. The white sage is intended to protect individuals who view or come in physical contact with sacred items and keep them safe from any harm emanating from such ritually potent and powerful objects.

AN INVENTORY OF THE COMPLETE TÜBATULABAL SHAMAN’S RAIN-MAKING BUNDLE: SUMMARY AND REVIEW

By combining the two collections (the Fenenga and Riddell materials from the Phoebe Hearst Museum, totaling twenty-three items, and the Kern Valley Museum assemblage, also totaling twenty-three objects), we have a large inventory representing what appears to be most of an entire rain-making bundle containing forty-six or more objects. Enumerating these materials (from the most numerous to the least), we have the following tallies:

- nine conically-shaped smoking pipes (all but one made of steatite, and several with bird-bone mouth-pieces intact)
- three quartz crystal fragments, a quartz crystal flake, a geode with crystals, and a piece of milky quartz
- five water-worn pebbles
- five obsidian artifacts—two biface fragments and three small flakes
- three steatite vessels of various shapes and sizes
- three pieces of steatite (some worked)
- three charmstones
- two sucking tubes
- a piece of stibnite
- an abalone-shell ornament
- a fossil fish vertebra
- plant material
- seeds
- dry soil
- feather down
- sack made of blue denim
- tobacco sack
- piece of beaver-tail rawhide
- medicine bag of animal skin
- animal-hide pouch
- a piece of elbow macaroni

A majority of the lithic artifacts show traces of a reddish-brown stain that appears to be red ocher. This hide pouch may have originally contained much of the entire rain-making bundle. The items within the rain-making bundle may be examined with respect to their relative frequency—as it might be argued that those items occurring most often would reasonably be expected to have been of the most importance. Those



Figure 5. Estefana (Miranda) Salazar harvesting native tobacco in Kern Valley, July, 1932.
Photo taken by Erminie W. Voegelin.



Figure 6. Estefana (Miranda) Salazar picking native tobacco in Kern Valley, July, 1932.
Photo taken by Erminie W. Voegelin.

classes of items would include the smoking pipes ($n=9$); the quartz crystals, the quartz flakes, the milky quartz, and the geode ($n=6$); the water-worn pebbles ($n=5$); and the obsidian artifacts ($n=5$). Some brief comments relating to each of these classes of objects are presented below.

Native Tobacco and Smoking Pipes ($n=9$)

A species of native tobacco (*Nicotiana attenuata*) (Figs. 5 and 6) was smoked by tribes on the western slope of the Sierra. The pipe employed was always tubular, generally was a few inches long, made of pottery (see illustrations of Western Mono pipes in Gayton 1929, Pl. 102, and description, p. 246), and made in a manner similar to pottery vessels. The Yokuts (Kroeber 1925:538, and Pl. 30, c and d) and the Owens Valley Paiute pottery pipes (Steward 1933:268, 319–320, and Plate 4, a–c) resemble those of the Western Mono. Pipes of wood or

cane are likely to have been used, but have perished. Stone (steatite) pipes were less common, probably being employed more often by shamans.

In addition to smoking, tobacco “so’goonüt” was chewed with lime by the Tübatulabal (Kroeber 1925:608) and the Yokuts (Kroeber 1925:538). In Tübatulabal territory (the Kern Canyon, Green Horn Mountains, the southern slope of Mount Whitney, the North Fork of Kern River, the Kern Valley, the Kelso Valley, and Walker Pass), native tobacco was harvested in late spring through mid-summer. Esteban Miranda’s daughter, Estefana (Miranda) Salazar, was well known for her tobacco harvest, for making tobacco cakes for storage, and for tobacco for medicines and as a sedative against rattlesnake bites (Fig. 6).

Tobacco decocted in water was occasionally drunk by the Yokuts, although this practice may have occurred

in more religious contexts. The Owens Valley Paiute semi-cultivated Indian tobacco (*Nicotiana attenuata*), which was generally smoked by men and chewed by women after it was mixed with burned shells or ashes (Steward 1933:319–320).

Two wild species of tobacco were of considerable importance to the Kawaiisu, *Nicotiana bigelovii* var. *wallacei* and *Nicotiana attenuata*. These were identified in the field by botanist Noel Wallace for Maurice L. Zigmond. Tobacco was never planted but it was carefully pruned and tended by women. In 1937, Dr. Zigmond accompanied four women while they pruned three separate fields of wild tobacco. The women began at various sections of each field and worked independently, without order or procedure. Five days after the last pruning the women gathered five gunny sacks of leaves, which yielded sixty-four cakes of tobacco, said to be worth one dollar each. The exact distribution of these "cakes" was not noted, but they probably were divided equitably among the four women. In the summers of 1947 and 1948, I observed a woman tending the tobacco plants which grew wild near her garden. She planned to sell some to her Kawaiisu neighbors for five dollars per cake, each being approximately the size of a bar of hand soap [Cappannari 1950:32].

Quartz Crystals, Geodes, and Milky Quartz Rocks (n=5)

Quartz crystals are widely recognized as extremely powerful physical embodiments of sacred, natural environmental energies. Crystals are traditional shamanic power objects perceived to be living beings that operate as allies in the realm of spirit (Levi 1978). Jay Miller (1983:81), in his study of Native American and Great Basin religion, makes a special point of emphasizing that quartz crystals were seen as animate and "cosmic mediators" that represented crystallized thought and memory.

Miller argues that crystals were seen as related to water and power. Words for these elements in Numic (Great Basin Paiute Shoshone languages) show close associations. The terms for power (*puha*), water (*paa*), path (*po'ai*), and to breathe or think (*sui*) are semantically and phonologically intertwined. These words evidence deep connections and imply that quartz crystals (*pihituu-vi* or *pihitoo-vi*) were symbolically connected as living, powerful, and mystical objects.

Complete or fragmentary quartz crystals, thought to be the property of ancient shamans, are frequently found in southern San Joaquin Valley Yokuts archaeological sites (Gifford and Schenck 1926:99). These artifacts are

sometimes incorporated as mortuary offerings. Quartz and other crystalline stones comprise the second most frequent element in the rain bundle.

Water-Worn Pebbles/Naturally Polished Stone Amulets (n=5)

Pebbles of unusual color, marking, and shape (referred to as "luck stones") are often recognized in California archaeological sites (Wallace 1999:5). Among the Yana Indians of Northern California, men picked up and kept small stones of this kind, convinced that they bestowed good fortune on their finders (Sapir 1908:42). The Pomo, who once occupied a considerable portion of north-central California north of San Francisco Bay, shared this same belief (Barrett 1952:335):

"Lucky Rocks" were very important. Any peculiarly formed water-washed pebble (particularly one with a perforation), any small stone with a cleft at one end or which resembles some object like a pestle or some other well-known form, was considered to possess special power and was used as a charm.

A number of peculiarly smooth stones that were jet-black in appearance comprised a prominent class of objects within the rain-making bundle. It may be that these stones were especially important since they have the color of darkened thunderclouds bringing rain. Given the predilection in animistic societies of attributing like from like (in the pattern of sympathetic or contagious magic), such an observation appears sensible.

Charmstones (n=3)

Three charmstones were identified in the Fenenga and Riddell (2012) discussion. A charmstone is a mineral specimen believed by adherents of certain cultural or religious traditions to have healing, mystical, or paranormal powers of energy. Among other things, they were often employed for weather control in the southern San Joaquin Valley and in southern California. We propose to restrict the definition of charmstones to deliberately ground or pecked stones such as those having a plummet-like shape. It may be noted from the archaeological literature that the heirlooming or rediscovery and usage of charmstones by later native peoples probably was not at all uncommon (Elsasser and Rhode 1996:3). Charmstones are some of the more enigmatic objects in California's archaeological record. The term 'charmstone' first appeared in an article

published by Lorenzo Yates (1890). The label that Yates chose for these artifacts was derived directly from the testimony of Native American consultants that these artifacts were in fact used as charms rather than as utilitarian tools. Elsasser and Rhode (1996:46) make reference to the charmstone tradition as follows:

According to our data, the true Central California charmstone tradition effectively began with the coming to the region of the Penutian-speaking peoples around 4,000 years ago. Subsequently, their course of development appears to accord well with Moratto's (1984) tracing of movements of peoples, most notably Utians, in Central California. Although there was sharing of certain types between the Delta, the southern San Joaquin Valley, and the San Francisco Bay Area, each of these regions shows distinctive variations, such as would contribute to the picture of a region with several distinct archaeological patterns.

Charmstones have been found in several contexts that allow age assessments. They occur at Lovelock Cave, Nevada in deposits assigned to the Early Lovelock phase, likely between 3,400–2,900 years B.P. (Hector et al. 2007:13). At Kramer Cave (Signal Hill), Nevada, two ground and pecked stone artifacts of a gray volcanic rock were classified as charmstones. A plummet-shaped charmstone, comparable to early Bay Area specimens, was recovered from the West Berkeley Shellmound. Specimens from other Central Valley and East Bay Area sites in California, and a lemon-shaped specimen, uncommon in the Central Valley though similar to forms recovered from the Karlo site (LAS-7) in Lassen County north of Honey Lake, most likely date to sometime between 4,300–3,000 years B.P. (Hattori 1982:52–53, 151; Figs. 22h, 22g). Large numbers of these artifacts occur in southeastern Oregon, and they were identified in stratigraphic context at Nightfire Island, where they disappear after 4,400 B.P. (Sampson 1985:235). We conclude that such ground and pecked stone objects represent an age range from ca. 4,400 to 2,900 years B.P. (see Van Bueren and Wiberg 2011:203).

REVIEW OF ETHNOGRAPHIC/ ETHNOHISTORIC ACCOUNTS OF SOUTH- CENTRAL CALIFORNIA RAIN SHAMANISM

Reviewing the available accounts presented in the preceding article (Fenenga and Riddell 2012), as well as other relevant literature, we can assess what were

apparently the most centrally important elements of the rain-making bundle and the most significant features of the accompanying ceremonies (Table 1).

Songs were of greatest importance (n=13). It is reported that songs were the source and substance of the rain-making ceremony and that they were inherited or dreamed by the rain-making doctors themselves. Water was also frequently mentioned (n=7), and it often appears to have played a key role in the rain-making ceremony. Crystals are also consistently described as one of the more prominent elements, and they are identified as actual objects necessarily included in the rain-making ceremony (n=5).

The different accounts of weather shamanism are associated with various ethnolinguistic groups. We see that the Kawaiisu (n=8) had the greatest number of associated ethnographic and ethnohistoric descriptions. Southern Valley Yokuts (n=7) material was nearly as frequent, and observations on the Chumash were a close third (n=5). These three geographically restricted yet spatially contiguous native peoples appear to have been some of the most significant players in this practice (Table 2). They form a tight and apparently interrelated set of groups concentrated at the southern end of the San Joaquin Valley, running east to west from the Tehachapi Mountains and through the Central Valley to the Coast Range and coastal plains, from Kern County across to Ventura County.

Shamanism and Weather Control

Shamanism is an anthropological term referring to a range of beliefs and practices regarding Native American communication with the spiritual world. Among other things, ritual adepts (Native American Indian doctors) used intention, songs, prayers, medicine objects, and shaped stone sucking-tubes (sometimes referred to as “medicine tubes”) in their curing practices. They also employed an array of finely-finished stone objects called “charmstones” that likely had wide-ranging uses, including weather control. These ceremonial objects were held in high esteem by the shamans that made use of them.

Three kinds of ritual adepts are often recognized in the literature on Native Californian shamanism: (1) “curing shamans” that diagnosed and healed illness and pain; (2) “sorcerers” that might attack their victims through supernatural agents, causing them to become

Table 1

CLASSIFICATION AND FREQUENCY OF RAINMAKING ELEMENTS IN ETHNOHISTORIC ACCOUNTS*

Classification/Element	Frequency
Materials and Objects Employed	
Charmstones	n=8
Water	n=7
Stone Amulets	n=6
Quartz Crystals	n=5
Seeds / nuts	n=4
Bowls	n=4
Feathers (down)	n=3
Paint (ochre)	n=3
Bullroarer	n=3
Rattle	n=3
Pipes	n=2
Tobacco	n=2
Animal skin	n=2
Vessel	n=1
Lichen	n=1
Total	n=54
Ritual and Ceremony	
Songs	n=13
Dancing	n=5
Ritual Numbers—three	n=4
Speeches / hollering	n=3
Mud	n=2
Dreaming	n=2
Fasting	n=1
Drawing	n=1
Blowing	n=1
Ritual Numbers—twelve	n=1
Ritual Numbers—twenty	n=1
Feasting	n=1
Wishing	n=1
Total	n=36
Other Related Matters: Sources and Effects	
Rain	n=12
Wind	n=4
Thunder	n=2
Opening the Rain Kit	n=1
Luck in fishing	n=1
Lightning	n=1
Cold	n=1
Snow	n=1
Earthquakes	n=1
Hail	n=1
Smoke	n=1
Fires in the mountains	n=1
Total	n=27
Grand Total	n=117

* Twelve individual sources were reviewed and the elements described above were tallied for this table: Austin 1906; Cappannari 1950; Gayton 1948; Harrington 1916; Kelly 1932, 1936, 1939; Kroeber 1925; Latta 1949; McCown 1929; Voegelin 1938; Yates 1890. These sources were in some cases detailed at length in the Fenenga and Riddell (2012) research paper in this journal.

Table 2

FREQUENCY OF ACCOUNTS IDENTIFYING GROUPS WITH RAIN SHAMANISM

Ethnolinguistic Groups	Territories	Frequency
Kawaiisu	Foothills between Mohave Desert and San Joaquin Valley and western Mojave Desert; Southern Numic branch, Uto-Aztecan.	n=8
Yokuts	Southern San Joaquin Valley and foothills; language belongs to the Penutian family.	n=7
Chumash	Lands in coastal and inland southern California, and previously recognized as speaking one of the Hokan languages but now recognized as a linguistic isolate.	n=5
Serrano (Vanyune/Kitanemuk)	Southern California in Mojave Desert and San Bernardino Mountains; Takic branch, Uto-Aztecan family.	n=3
Southern Paiute (Las Vegas)	Southern Nevada in central Great Basin; Southern Numic branch, Uto-Aztecan.	n=2
Tübatulabal	Kern River Valley in southern Sierra Nevada; Uto-Aztecan language family but appears to be very different from similar languages of this type. Now posited as Takic rather than a true linguistic isolate..	n=3
Chemehuevi	Southern Paiute speakers in the eastern Mojave Desert and along the Colorado River; Southern Numic branch of the Uto-Aztecan language family.	n=2
Mohave	Along the Colorado River; a language belonging to the Yuman grouping of the Hokan language family.	n=1
Total		n=31

ill or die; and (3) specialized “weather shamans” who influenced the weather by making it rain or snow.

According to Cappannari (1950:22) Kawaiisu rain doctors

...owned paraphernalia and songs for producing rain. The desire to exclude others from mastery of their techniques was indicated by their reluctance to have others witness their rain-making ceremonies. Everyone who would be benefited by the rain was obligated to make gifts of seed, shell money, baskets, etc. The rain shaman was also supposed to exercise his skill to stop rain, lest it reach torrential proportions, sending flash floods racing through the canyons.

In Native California, rain could only be made by first creating “ritual rain.” The simplest method was to throw water into the air, as the Pomo, Coast Miwok, and Yokuts

are all known to have done (Gayton 1948:157, Kelly 1991:485, Kroeber 1925:518, Loeb 1926:318). For example, the Yokuts rain-maker was believed to have made rain by “blowing” (Gayton 1948:207). Additionally, the Paiute twirled a bullroarer³ in order to bring a warmer wind to melt the snow (Kelly 1932:202), and the Chemehuevi used a bullroarer made from mountain-sheep horns for rain-making (Kelly 1936:137). Tübatulabals also used bullroarers for attracting birds while hunting and as toys for their children (Voegelin 1938:15,36).

Interestingly, the control of rain was believed to be related to the tribal affiliation of the rain shaman. To illustrate, a Kawaiisu rain shaman did not have the power to stop rain that had been produced by a Tübatulabal or Yokuts colleague.

The method of transference of rain shamans’ songs and techniques is not altogether clear. One case was noted in which a wife successfully used her husband’s songs and equipment. Techniques and knowledge were sometimes transmitted from maternal uncle to nephew or from parents to children, but the pattern is neither clear nor consistent. However, it does appear that the knowledge of rain shamans was especially highly regarded and set apart from the layman’s abilities. The rain shamans received gifts or payment, and groups of people made long trips to get their services when fearful that drought would damage their seed crops (Cappannari 1950:22).

Songs learned from visions were not alienable, and very often the efficacy of a supernatural experience, as well as the safety of the person involved, depended upon his keeping it secret, at least for a specified length of time, which varied from five days to several years.

Curing Shamans and Sorcerers

A widely-held disease concept among the Indians of western North America was that illness could be caused by the lodging of a physical object in the body due to witchcraft or accident (Jorgensen 1980:285, 568). While variations in healing practices existed from culture to culture and even from shaman to shaman, typically the operation involved manipulating the patient’s body, blowing air or tobacco smoke over it, letting out a small amount of real or pretend blood from the site of the “pain,” and finally removing the intrusive object by sucking with the mouth directly or with a “sucking tube.”

The curing process usually culminated with the shaman showing the patient and spectators the foreign object as proof of its extraction. Such objects were generally small enough to fit into the mouth or closed hand of the shaman and hidden until the appropriate time for their presentation. The objects often were overtly mundane things such as sticks, rocks, small reptiles, insects, or worms. However, objects that Western peoples typically identify as “inanimate” were generally thought of as often being living things under supernatural control (Jorgensen 1980:285; Kroeber 1925:855).

Cappannari (1950:37–38) makes the following observations:

An individual received the ‘call’ to become a shaman through dreams and visions, which often came unsought to a young person. Later, such an individual cultivated his power by actively seeking visions in lonely vigils on mountain tops. Techniques of curing included dancing, singing, sucking, and lying on hands. Since illness was invariably caused by a witch, it was particularly important for a shaman to determine the sorcerer’s identity. The patient’s relatives would confront the witch and urge him to stop his malevolent activities. If a patient died, the responsible witch might be killed. Some shamans were suspected of being in collusion with witches in order to collect curing fees. Although a shaman ‘dreamed’ his song, anyone was allowed to use it. The people present at a curing might join the shaman in singing his songs. The song, as part of the curing complex of a shaman, seems to have had a power it lacked when used by laymen alone and successful shamans were eagerly sought and well paid. Moreover, the laymen who knew shamanistic songs did not ordinarily attempt to cure bewitched patients. This knowledge of a curing song did not itself grant curative power. Although indignant relatives might subject a witch to violence, appeasement was sometimes tried. Pleading with a witch or giving him baskets, beads, food, etc., was not unusual. The power to bewitch was derived from supernatural experience, but the techniques involved were often transmitted from parents to children.

A Wukchumni Yokuts consultant (Sam Garfield) made this comment to Anna Gayton (1930:400): “Usually we had good chiefs with good doctors, but sometimes even a good chief would bribe a doctor to kill some man he thought ought to be killed.” A Kechayi Yokuts made a brief statement which hints at the guilt of chiefs in such matters (Gayton 1930:400):

Sometimes a doctor would be killed if he lost a patient. A doctor and his chief would meet the bereaved family and their chief for the supposed purpose of

making an adjustment. A discussion was held and often the family killed the doctor and his chief right on the spot.

CONCLUSIONS

The San Joaquin Valley is in the “rain shadow” of the Coast Range, and consequently suffers from deficient rainfall. Tribes that inhabited the arid region of south-central California and the Sierra foothills were particularly dependent on rain for survival in their harsh environments. Rain was also needed to put out fires in the mountains, which endangered the game and plant life that natives depended on.

In Native American traditions, an individual who claimed or was acknowledged as having supernatural powers to influence weather control was a special and powerful person. Shamans were often called on by their people to assist nature, bringing rainfall when and where it was most needed. The rain shamans were especially respected in communities during periods of long droughts, times when meadows and valleys in the region were dry and rain was scarce, threatening their very survival.

It would be expected that one of the key domains of the ritual adept, the shaman, would be the weather. A set of related matters that are believed to be under the shamans’ control are unified in that they are all closely connected to matters of health (curing) and food (hunting, fishing, and economic plant resources). Naturally, health is achieved by the avoidance of illness, but it is also assured only through a sufficiently satisfactory supply of food. The basic factors sustaining life in its various forms (plant, animal, and human) are the critically necessary elements of water and proper environmental conditions. Weather, then, is the ultimate source that shapes and supports these conditions.

For the shamans, it was his/her ability to control the weather that demonstrated a rapport with the spirit world. Such an expression was a key means of manifesting power. Power came in dreams (Kelly 1939:159; Steward 1941:322), and dreams were the source of the words and songs that ritualists used. It was words, thoughts, and songs that created a special reality through their articulation. Words, songs, and dance were identified as the key foundations of a shaman’s ritual power. The shaman used the powers granted from the spirit world

to heal people and to heal the land—to restore balance to the world. By dancing, the ritualist would wake up the earth and make it come alive again.

The rainmaking ceremonies described in the accounts from south-central California and the western Great Basin provided in the accompanying paper (Fenenga and Riddell 2012) and referenced here (Table 2) have a consistent theme. They are culling like from like. They are examples of sympathetic magic, in that a desired event is produced by imitating it through personification (Frazer 1981:13–22).

Parkman (1993), in a masterful synthesis of the California rain-making rituals, concluded that weather-making methods fell into four distinct classes that produced the weather effects of thunder, clouds, wind, or rain (also perhaps lightning). Sacred rain was then made by “imitation” or ritual rain. The property of making things grow was the evident result of rain-making rituals, and was effectuated with ritual mud and planted seeds, ceremonial water sprinkled on animal skins, and droplets of water trickled into soapstone vessels.

The rain-maker blowing through his hollow tubes created ritual wind. The smoking of Indian tobacco in stone pipes produced ritual clouds in the air, bringing “sacred clouds” needed for weather creation. Quartz crystals, when roughly tapped together, produced an internal fire and color known as “piezoelectricity,” mimicking the bright color and fire of lightning. Quartz crystals rubbed together also produced sparks, and were identified by some California Indian tribes as “lightning stones” (Tyler 1964:183).

Obsidian blades and projectile points were known to the Hupa of Northern California as “Thunder’s Stones.” A Chumash story identified “Sacred Thunder” as killing *hap*, a monstrous supernatural having a mouthful of sharp flints (Blackburn 1975:113–114). Charmstones, when violently struck together, produced a loud thunderous sound, and such actions were an element of the Chumash rain-making ritual (Grant 1966:67–68; Henshaw 1885; Hudson and Blackburn 1978:239). Chumash oral traditions associated “Sacred Thunder” with the charmstone (*sopo*), and the northern Californian Patwin called their charmstones thunders (*k’imir*).

The California and Great Basin Native American worldview perceives every object in nature as potentially

having power (*puha*). Humans receive this power through a guardian spirit or by seeking such power through visions or dreams. These dreams and visions are recognized as indistinguishable from human thought and speech. Thought and speech affect the reality at which they are aimed. Shamans—through thoughts, words, songs, dances, complex ritual actions, and esoteric artifacts—created the milieu for weather control.

NOTES

- ¹Faceted clear quartz crystals were particularly prized by Native Californians and were believed to possess the highest power. Quartz crystals played a major role in California Indian shamanic beliefs and practices, including witchcraft and magic.
- ²There are many depictions of what some researchers have labeled ‘medicine bags’ in the rock drawings found in the Coso Range in the vicinity of Ridgecrest, on the China Lake Naval Air Weapons Station in the western Mojave Desert. The medicine bags are typically represented as large square or trapezoidal images with fringes at their bases and drawstrings at their tops (see Grant et al. 1968:36).
- ³The bullroarer is an ancient musical instrument, and a device historically used in religious and healing ceremonies and as toys. It usually consists of a weighted, thin slat of wood attached to a long cord. It is swung in a large circle in a horizontal plane, creating a roaring vibrato sound. Almost all the Indians in North America used this device. Among certain native peoples the bullroarer was used during communal ceremonies to imitate the sound of rain in rituals calling for rain; in general, the instrument was used during religious gatherings to ensure that animals and plants would be in sufficient number to provide proper sustenance, and that all would go well with native people.

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