SEARCH FOR THE SOURCE OF THE SORCERERS' STONES

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ABSTRACT

Ethnohistoric literature as early as 1822 refers to the toshaawt, a spiritually powerful stone used in sorcery, rainmaking, curing, and other rituals by several of southern California's indigenous peoples. Unformed by human hands, these distinctive stones were naturally lens-shaped, dense, and almost like iron. Several examples have been preserved in museum collections. Despite the importance of toshaawt stones throughout the region, their reputed place of origin -"on an island" - was mysteriously vague. Though two Chumash men stated that the stones were found "only at Santa Barbara Island," field investigations by the late Travis Hudson failed to locate any source of toshaawt stones there. More recent explorations on San Nicolas Island revealed iron concretions weathering out of a sandstone outcrop. A previously overlooked ethnographic note, "Jalashat, magicians' stones from this island," seems to confirm San Nicolas as the source of the sorcerers' stones.

Keywords: Chumash, Gabrielino, Kitanemuk, Luiseño, rituals, San Nicolas Island, Santa Barbara Island.

INTRODUCTION

Certain early ethnographers and other observers of native cultures in southern California described ritual and ceremonial use of a distinctive stone called *toshaawt* (variant spellings include *tosaut, to-sawt, tu-caut, tishait*; the phonetic spelling used in this paper follows McCawley 1996). There are several published ethnohistoric descriptions that discuss the characteristics and properties of these mysterious stones.

The earliest recorded description of *toshaawt* stones comes from Fr. Gerónimo Boscana, a priest at Mission San Juan Capistrano, one of the few missionaries sincerely interested in thoroughly documenting the culture of the indigenous people. His 1822 manuscript - translated, annotated, and published in 1933 - contains extensive material on the beliefs held by the Juaneño (Acagchemem), the coastal Indians of the San Juan Capistrano area who are now considered a subgroup of Luiseño. According to Boscana's account, the *toshaawt* stone played a role in the creation of the Juaneño world:

An invisible and all-powerful being called Nocuma made the world, the sea, and all that is therein contained, such as animals, trees, plants, and fishes. In its form it was spherical, and rested upon his hands. But, being continually in motion, he resolved to secure the world by placing in its center a black rock called Tosaut, and it remained firm and secure as at the present time.

The sea, at that time, was no more than a small stream of water, running from the south to the north, encircling the world, so filled with fish that they were literally piled on top of one another in such a state of inconvenience that they held a consultation, and some were for landing upon the earth. Others were of the opinion that it would be impossible, for they would perish when exposed to the air and the heat of the sun, and besides they had no legs and feet as other animals had. While conferring upon this matter, there came a large fish, bringing with him the rock, Tosaut, which having broken, they found in its center a ball formed like a bladder and filled with gall. This they emptied into the water and from its fresh state it was converted into a bitter condition. The water then immediately swelled and overflowed upon the earth, covering the space which it does now, and the fishes were rejoiced to find themselves so amply supplied with room, and at the change effected in taste.

Nocumo, having created all the things contained in the world and secured it with the rock, Tosaut, as before remarked, [then] created man, or the first Indian, out of the earth... [Boscana 1933:31].

In mythic time, Boscana continued, one of the descendants of the first people was *Wiyoot*, who became a powerful and increasingly tyrannical captain. The *toshaawt* stone provided a method of recourse.

Having suffered so much from Ouiot, they determined to rid themselves of the tyrant, and release themselves from the opression in which they had lived for so long a period. A consultation was held by the elders, and it was decided that he should receive his death by means of poison. The rock, Tosaut, was procured [and pulverized as an ingredient in the poison]... ... his enemies had secretly prepared the mixture and were consulting how to administer the same, saying that it was so active and effective, that the mere application of it to the flesh would cause almost instantaneous death. One of them was entrusted with its execution, and at night, finding Ouiot asleep, he placed a small quantity upon his breast. Upon waking, he experienced a sickness and weakness in his limbs, and fearing very much that he would die, he immediately called in all the intelligent men from the different towns. But the more they administered for his relief, the worse he became until, at length, he died [Boscana 1933:32].

Several generations after Boscana compiled his manuscripton on the Juaneño, the ethnographer and naturalist C. Hart Merriam found evidence of *toshaawt* stones among the Gabrielino Indian people of the Los Angeles area. In 1905, Merriam recorded information from Mrs. J.V. Rosemyre, a Gabrielino-Serrano woman then living in Bakersfield, about a girls' puberty ceremony in which the *toshaawt* was used. The stone is also central to the song associated with this ceremony:

This [song] is called Sa-we^{ch}. It is sung by the mothers while dancing in a circle around a group of young girls twelve to fifteen years old.

Hah-ming-mi ^{ch}	yowk mi	sow-a-to-tah-rah	(3 times)
Where do they	get it	the singing stone	
We-soo-rah	pi-e-sow-tah	ya-wa'k	tow-sow-tah
Magic	drink this tea	again	the stone
Ham-me-mah	yow'k mah	sow-a-to-tah-rah	(3 times)
[Where do they	get it	the singing stone]	

A curious porous stone called to-sowt came from the sea. It belongs to the chief but is borrowed by an old woman who gives the Puberty dance. The old woman makes a very bitter tea of the large seeds of the manroot vine, *Echinocystis macrocarpa [Marah mactocatpus*]. The vine and seeds are called e-hi-e^{ch}. The tea is called pah-e-hi^{ch}. The stone to-sowt is put into a basket of hot water, when it at once begins to gurgle and sing. The girls stand around it looking down at it. Then the stone is taken out of the water and a small bowl-shaped basket of the bitter tea is placed upon it. then each girl's mother (or aunt) puts a valuable thing (shell or money) under the small cup and the old woman takes and keeps the money and gives each girl a cup of the bitter tea to drink. After the ceremony the chief announces that the girls are women [Merriam 1962:86].

Use of the *toshaawt* stones was recorded among the Chumash, the native people of the Santa Barbara Channel. In the 1880s, the early anthropologist Henry Henshaw interviewed Juan Estevan Pico, Justo, and other Chumash individuals for information about the native use of particular stone artifacts, especially the perforated, so-called "doughnut" stones (Henshaw 1887) and the longer, cigar- or plummet-shaped charmstones (Henshaw 1885). Regarding the plummet-like charmstones, examples were shown to Santa Barbara Indians, and:

I was told that they were 'medicine or sorcery stones' used by the medicine-men in making rain, in curing the sick, and in various ceremonies. The sorcerer arranged twenty of the stones, the proper number, in a circle, pushed them violently together, sprinkled water over the whole, when smoke issued from them.

At San Buenaventura substantially the same account was received. Here it was said that twelve stones was the number required by the medicine-men, exclusive of a centre stone of a different character. The centre stone shown to me, called Tu-caut, is a flattish, round, beach-worn pebble of quartzite, unworked and stained black with iron..

The use of the medicine-stones among the San Buenaventura Indians was as follows: The twelve sorcery stones (mâ-nuc-nu) were arranged in a circle close together. In the centre was placed the Tu-caut; chia (the generic name for seed meal) [sic], together with down from the breast of the white goose, was then sprinkled over the stones. Red ochre (mâ-nö-smö) was then sprinkled over the whole. A dance was held around the pile, while three old men sang, keeping time with rattles. This or similar ceremonies was observed for curing the sick, bringing rain, putting out fires in the mountains, calling fish up the streams, when war was to be made, etc., etc. [Henshaw 1885:6-7]. [Note: In spelling the native term, Henshaw used 'c' to represent the 'sh' sound (Heizer 1955:93). An English phonetic spelling of his "Tu-caut" would be tushout.]

The field notes of linguist-ethnographer John P. Harrington show that *toshaawt* stones were also found among Kitanemuk people living in the Tejon region south of Bakersfield. His 1916-1917 interviews with Magdalena and José Juan Olivas describe the use of these stones:

tishait, a stone from the coast. You keep it in your house to guard the house from the weather - from winds or rains. And when your children are sick at stomach you put the stone in a jar of water and give it to them to drink. MO [Magdalena] has cured [her children] Angela and Marcelino thus many times. Each New Years you take the stone and unwrap it and burn the food wrapped with it from last year in the fire - keep adding it little by little to the fire. They lay the stone out and say to it: Here is your food. Guard the house because you are powerful; care for the house when the wind makes it shake. You give the stone feather down, chia, money, tobacco - wrap it up in these things and keep it till the next year. The stone understands. It is *takat* - person. A man who knew how would talk to his *tishait* and thus prearrange with it. Would start a bet that he could lasso a bronco horse, he being merely on foot on the ground. He would belt his *tishait* on himself and would succeed in holding the horse - the *tishait* was very heavy (magically speaking) and the horse would not be able to pull the man about [Hudson and Blackburn 1986:167-168].

According to José Juan in a later interview, it was said one could not carry the *toshaawt* on horseback, for it was heavy and would soon make the horse sweat (Harrington 1986: reel 95, frame 150)

These quoted passages show that distinctive stones called *toshaawt*, regarded as ritually powerful, were in use among at least four different groups of native peoples in southern and south central California: the Juaneño/Luiseño, Gabrielino, Chumash, and Kitanemuk. The questions that arise are 1) whether a particular stone that one people knew as "*toshaawt*" would be recognized as such by members of the other groups, or if there were different kinds throughout this area; 2) where these stones were obtained; and 3) why they were invested with special powers by several indigenous societies.

METHODS

Ethnohistoric literature was searched and a compilation made of information about the characteristics, attributed properties, and purported source locations of the *toshaawt* stones. Principal references consulted were Henshaw 1885; Boscana 1933; Harrington 1933; Heizer 1955; Merriam 1962; and Hudson and Blackburn 1986, in addition to microfilm of ethnographic field notes by John P. Harrington (1986). Archaeological information was derived from Rogers 1929 and collections at the Santa Barbara Museum of Natural History. Field excursions were made by the author and others to investigate source localities.

DISCUSSION

Characteristics of the toshaawt Stones

The ethnohistoric sources cited above indicate that the *toshaawt* was not entirely uniform across cultural boundaries, but there was some overlap. The Juaneño said it was "a black rock" and that "a large fish" brought the rock Tosaut, "which, having broken, they found in its center a ball formed like a bladder and filled with gall" (Boscana 1933:31). According to the Gabrielino (Tongva) the to-sawt was a "curious porous stone" that gurgled and "sang" when placed in hot water (Merriam 1962:86). For the Chumash, the Tu-caut was described as "a flattish, round, beach-worn pebble of quartzite, unworked and stained black with iron" (Henshaw 1885:6). Elsewhere Henshaw described it as "a roundish oval quartzite pebble covered with a dark deposit of iron and [which] differs little if any in shape and general character from the usual beach worn pebbles" (Heizer 1955:158).

The two Kitanemuk consultants, Magdalena and José Juan Olivas, themselves owned *toshaawt* stones and described them to Harrington in about 1917:

MO [Magdalena] has two of these stones in the box here up under the rafters in northeast corner of the room here... Of these two stones, one belongs to MO and the other to José Juan. MO's is larger. MO showed me the form with dough. It is the color of blue granite ware. José Juan's is small and round and whitish [Hudson and Blackburn 1986:168].

The accompanying sketch by Harrington shows two shapes: the first is oval, rounded on one end and more pointed on the other; the second is circular.

Some sixteen years after that interview, Harrington actually purchased these same stones from a daughter of Magdalena Olivas, and they are now in the collection of the Santa Barbara Museum of Natural History. They were in a small wooden box tagged with a handwritten note by Harrington: "Four <u>tashaawt</u> stones from José Juan Olivas' house, Tejon rancheria." This box contains five stones, shown in Figure 1 - two rounded quartzite pebbles like the ones



Figure 1. Contents of a box labeled "Four <u>tashaawt</u> stones from José Juan Olivas' house, Tejon rancheria," purchased by John P. Harrington in 1933. The largest stone is 5.6 cm long. Photo by Thomas Blackburn.

described in the interview (the larger, oval one about 5.6 cm long) along with a third, smaller waterworn pebble, a piece of grooved steatite, and an angular piece of chert - as well as some feather down and four old rags. The third tashaawt stone in the box may be the smallest pebble, which Angelita Montes thought "went with" the the largest one, Magdalena's (Harrington 1986: reel 95, frame 153), but its description as cream-colored (Harrington 1986: reel 95, frame 148) does

not seem to match the actual specimen. Neither the worked steatite nor the chert piece seem to fit other descriptions of *toshaawt*, though Harrington noted the "steatite thing has some scraped off it, ev[idently] used as medicine" (Harrington 1986: reel 95, frame 153); perhaps the chert piece was meant for doing the scraping. It is unclear whether all the pieces Harrington originally saw were still present in the box when the Museum received it.

Harrington purchased a second box which he noted contained a "<u>tisha'awt</u> stone" that had belonged to Eugenia Mendez's mother, also a Tejon resident. On the tag he added that "Angelita Montes, when she first told me of this stone, said it had bead inlay on it, but when I opened it up, it had none." In this box are two cloth bags tied with strips of rags. Figure 2 shows one of these bags and its contents: a small, oval black pebble (presumably the tisha'awt stone) 2.2 cm long, an 1899 coin, shell beads, glass beads, chia [*Salvia columbariae*] seeds, red maids [*Calandrinia* sp.] seeds, and feather down. The second bag contains more seeds and both shell and glass beads, some of which are strung, but no stone (Hudson and Blackburn 1986:168-170, Fig. 318.8-3).

In his excavations of sites along the Santa Barbara coast in the 1920s, David Banks Rogers encountered several features he interpreted as ceremonial enclosures. On the floor of one of these structures he found "two clusters of the sacred, cigar-shaped 'charm stones,' apparently as arranged by the shaman, all radiating from a central circular piece that was encircled by a band of asphaltum and rested in a small cup-shaped boulder, like a golf ball in a tee" (Rogers 1929:388). This find closely resembles the ceremonial arrangement of the central Tu-caut surrounded by charmstones that Henshaw described, with which Rogers was familiar. The Santa Barbara Museum of Natural History houses these materials collected by Rogers, and the "central circular piece" is apparently his catalog number 791B from site CA-SBa-82. It is about 2.5 cm in diameter, of a dark grey, fine-grained, dense stone, smooth and nearly spherical but flatter on one side, with horizontal banding.



Figure 2. Contents of one of the two bags found in a box said to contain a "<u>tisha'awt</u> stone" that had belonged to Eugenia Mendez's mother at Tejon, purchased by John P. Harrington in 1933. The black pebble at center is 2.2 cm long, 1.3 cm wide, 1.0 cm thick. Photo by Thomas Blackburn.

Figure 3 shows this object along with several similar stones in the Museum collection that were discovered by Rogers and others in Chumash archaeological sites, all but one on the mainland. They range up to nearly 8 cm in diameter, and the shape is often lenticular, that is, thinner around the edges and thicker in the center of the circular piece. All are dark grey or dark brown in color and show banded strata parallel to the largest diameter. Most have a very smooth surface, as though they were tumbled by waves. These distinctive stones were called "tucait" in Rogers's catalog records, perhaps a mis-transcription of Henshaw's "Tu-caut."

In contrast to these archaeological examples, the ethnohistorical descriptions - as well as the Kitanemuk ethnographic specimens from Tejon - indicate greater variation in the *toshaawt*. The stones are described as rounded, often like a beach-worn pebble in appearance, usually black; and in the Juaneño case with something like a ball in the center like a bladder, containing liquid. Merriam alone described the stone as "porous." The Tejon specimens are both circular and ovoid in shape and black, whitish, and grey in color. So there appear to be at least two principal types of *toshaawt* stones recognized by southern and south central California peoples.



Figure 3. Examples of attributed *toshaawt* stones in the Santa Barbara Museum of Natural History collection. The "central circular piece" found surrounded by charmstones during excavations at CA-SBa-82 by David Banks Rogers in 1925 is in the bottom row, second from right. Diameters range from 3 to 7.8 cm, thickness 1.8 to 4.5 cm. Photo by Wm. B. Dewey. [Catalog numbers, top row (left to right): NA-CA-1-6A-1; unnumbered, attributed to CA- SBa-7; NA-CA-7-6A-1. Bottom row (left to right): NA-CA-44-6A-1; NA-CA-46D-6A-1; 131.60/ 3314; 791B; 121/1693]

That there was some variation in shape, size, and composition of stones used in rituals is indicated by Henshaw's comment:

Several other stones of various shapes were shown to me [by Chumash consultants], some in their natural condition, as a piece of iron pyrites, another resembling a natural concretion; those of a third class [the plummet-like charmstones] were fashioned with care and were about four inches long, tapering in shape and encircled with several rings. To all these mysterious properties were assigned, and it is probable that many other kinds were formerly in use [Henshaw 1885:7].

Source of the Stones

In the words of the Gabrielino song, "Where do they get it, the singing stone?" A common thread in all the early accounts is that the *toshaawt* stones came from somewhere near the ocean: from the sea itself, from the coast, or from an island.

In Gabrielino mythic times, the rock Tosaut was brought by "a large fish" (Boscana 1933:31). Merriam's Gabrielino material states the to-sowt stone came "from the sea" (Merriam 1962:86). Harrington learned from his Kitanemuk consultant José Juan Olivas that "almost everybody had them over on the coast. When I ask JO where they were obtained, JO says on the beach. When I ask JO if they did not get them at the islands or at an island, JO says yes, at an island or at the beach" (Hudson and Blackburn 1986:167). In another note, José Juan said "this stone is del mar [from the sea], or from the islands" (Harrington 1986: reel 95, frame 150).

According to Boscana (1933:31), "this black rock, the Indians say, is from a small island near the beach." In his annotations to Boscana's work, Harrington added: "According to information obtained from Fernando Librado [a Chumash man] of Ventura, *tusháwt* was a fragment of presumably black basaltic rock obtained at Siwó't, Santa Barbara Island, ceremonially consecrated and used as a charmstone - which agrees closely with Boscana's account," but he then went on to speculate that the source may instead have been on some offshore rocks along the Orange County coast (Harrington 1933:145, note 66). An alternative explanation may be that Boscana meant the stones came from a spot near the beach on a small island.

Consistent with the Chumash information that Harrington later learned from Fernando Librado, Henshaw, referring to his Ventureño Chumash consultant Juan Estevan Pico, also stated that the <u>t'sa-naut</u> or <u>tu-caut</u>, "a magician's stone," was "said by Pico to be found only on S[anta] Barbara Island" (Heizer 1955:158). That was the only specific location mentioned in any of the early documents.

This attribution sparked the interest of Travis Hudson, late Curator of Anthropogy at the Santa Barbara Museum of Natural History, who in the late 1970s was investigating myth and ritual in south central California (Hudson and Blackburn 1978). Hudson had long been curious about the so-called "tucait" stones in the Museum's collection and had shown them to geologists and many other visiting researchers in a futile attempt to learn their origin. In 1981, Hudson arranged a field trip to Santa Barbara Island, where he, Museum Research Associate Thomas Blackburn, and friend Peter Howorth, a freelance writer and photographer who provided boat transportation, throughly combed the island's surface and steep coastline but failed to find anything resembling the Museum's *toshaawt* stones. Howorth surmised that perhaps the previous authors were referring to the "Santa Barbara islands," an early term for the Channel Islands as a group, rather than specifically to Santa Barbara Island as the source of the stones (Howorth 1988:40). This meant that a much larger area would have to be searched. There the matter rested for several years.

In 1988, after Hudson had died, Peter Howorth came into the Museum with a rock he had picked up on San Nicolas Island while walking the shoreline of the entire island in an effort to document shipwreck locations. The rock contained an iron concretion virtually identical to some of the toshaawt stones in the Museum collection. With the assistance of the U.S. Navy we immediately organized a trip to San Nicolas to visit the spot, a marine terrace near the northwest tip of the island. There, a broad shelf of compacted, fine-grained silty sandstone extends from the low coastal cliffs out to the water's edge. Submerged during high tide, the ledge has differentially eroded into rounded, sculptural forms and exposed numerous dark, rusty iron concretions in a variety of shapes and sizes. As the surrounding grey rock weathers away, the concretions fall out to be tumbled and polished by the sea. Among many more amorphous examples, our team (photographer Glen Allen, Tomas Blackburn, Kathleen Conti, Peter Howorth, the Navy's civilian biologist Matt Klope, and I) did chance upon a few that were strikingly similar in shape to the perfectly lenticular Museum specimens, though with a less smoothly-polished surface.

The San Nicolas Island location discovered by Howorth fits well with the attributed source of the toshaawt stones: from the sea, from an island, at the beach, on an island near the beach. According to geologist Robert Norris (pers. comm. 1988), the geological stratum itself is Eocene age sandstone, that is, 37 to 54 million years old. Concretions are formed by iron-rich water flowing through a deposit of sand or silt and precipitating out around some small foreign object, building up in layers like a pearl and forming a nodule richer in iron than the surrounding sand. The sediments become compressed and hardened through time, and in the process the concretion assumes a flattened form. It may acquire a banded surface due to the layers of sand in which it was embedded. When the sandstone is later exposed through uplift and erosion, the softer rock weathers away faster, exposing the concretions that our team observed. Several geologic units on San Nicolas contain calcareous and pyritiferous concretions (Vedder and Norris 1963).

Similar iron oxide concretions could occur in Eocene sandstones on the mainland and on the three largest Northern Channel Islands, added Norris (pers. comm. 1988), but Anacapa, Santa Barbara, Santa Catalina, and San Clemente islands lack such deposits. To date, no Northern Channel Island deposit containing similar concretions has been located. Coastal mainland sites are rumored to exist on Vandenberg Air Force Base and sea cliffs near Santa Barbara. An interior mainland deposit has been reported on the north side of the Ojai Valley (Dennis R. McCarthy, pers. comm. 1988) but has not yet been investigated. Other sources may also exist, but the ethnohistoric evidence clearly indicates a preference for coastal or island specimens.

This absence of suitable geological substrate for iron concretions accounts for the lack of success Hudson, Blackburn, and Howorth had in their explorations of Santa Barbara Island in 1981. It does not explain why Fernando Librado attributed the stones to Siwo't, Santa Barbara Island. Juan Estevan Pico's apparent misinformation, however, may actually represent conflicting data recorded by Henshaw (Heizer 1955:158). Juan Estevan Pico's own manuscript of native placenames refers to San Nicolas as Jalashat; in the adjacent column of spellings revised by Henshaw, the name is given as "Ha-la-ca't (magicians' stones from this island)" (Heizer 1955:198). After interviewing two elderly Ventureño Chumash women to check Pico's data, Henshaw may have included this note to correct the previously quoted material in which Pico gave Santa Barbara Island, Siwo't, as the true source of the stones (John Johnson, pers. comm. 1999). In his search, Travis Hudson had unfortunately overlooked this explicit association between San Nicolas Island and the "magicians' stones" in the Pico manuscript, and it was only discovered by Kathleen Conti after our visit to the concretion site on the island.

It seems clear, then, that at least one type of toshaawt stone - the banded, iron-like lenticular form called "tucait" in the Museum collection records - did come from San Nicolas Island. Two examples of this type are on the left in Figure 3. Concretions of similar form but smoother texture may have come from this or other sedimentary deposits. The black rock in Juaneño myth, which when broken open was found to contain "a ball formed like a bladder and filled with gall" from which the sea was made, may also be of this type. The source of the other principal kind - those purchased by Harrington or those that Henshaw said "differ little in shape and general character from the usual beach worn pebble" - remains obscure, if indeed there was one particular source of these at all. The question now remains: since these stones all appear unaltered from their natural forms, to what can we attribute their being invested with special powers by native peoples?

Source of the Stones' Powers

Several explanations for the attribution of special powers to the *toshaawt* stones have been proposed. Henshaw was told these stones had the power to make rain, "and as evidence of the power inherent in it the Indian held it for a few moments tightly grasped in his hand, when moisture was visible on it - condensed by contact of the moist hand with its cool surface. The moisture was pointed to as visible evidence of its 'rain-making power'" (Henshaw 1885:6). Aside from the unjustifiable implication of childlike naiveté on the part of Henshaw's native consultants, this "demonstration" of the stones' power does not truly serve to explain it. Many other fine-grained rocks such as serpentine might display this ability to condense moisture from the hand but were not regarded as having special powers. The Gabrielino to-sowt, on the other hand, was described as "porous" and would probably not have this property; instead, it was said to "gurgle and sing" when placed in hot water (Merriam 1962:86).

In his discussion of Gabrielino mythology, Kroeber remarked that "It is not impossible that the [Yokuts deity] Tüüshiut is connected with the Tosaut or tushaut stones so important in Chumash ritual and Juaneño myth," and that the name Tüüshiut was hesitantly translated as "maker" by the Yokuts (Kroeber 1925:623). One might infer that it was the stones' association with the Yokuts deity that conferred their power, but Kroeber suggested that the influence ran in the other direction. He noted that the term might be of foreign origin, part of a widespread religious complex that was probably derived from the Gabrielino and Juaneño and introduced to the Yokuts via the Kitanemuk (Kroeber 1925:622-623, 627). On rather scanty evidence, later authors took this as an indication of "the apparent deification of a Kitanemuk ritual object by the Yokuts in the case of the tishait stones (= Tuushiut)" (Hudson and Blackburn 1978:237). It may instead represent transmission of a very attenuated version of the Juaneño creation belief that the sea was made when the rock Tosaut was used by Nocuma, vaguely preserving the association between the name "Tosaut" (= Tuushiut) and the "making" of the world.

The reason for this association may lie in the appearance of the stone itself. Thomas Blackburn (pers. comm. 1988) has suggested that *toshaawt* stones of the banded, lenticular concretion type may have been seen as a microcosm of the universe. According to Harrington's consultants, the Chumash conceptualized a universe that:

consists of a series of worlds placed one above the other. Usually three such worlds are described, but one myth mentions five as the proper number, and there is some confirmation in the fact that the neighboring Kitanemuk also had a conception of five superimposed and progressively smaller worlds... The middle world, *'itiashup*, is generally flat and circular in shape, and consists primarily of ocean in which float a number of islands [Blackburn 1975:30].

The banded, concentric stones, with the widest layer in the center, may have been seen as the symbolic embodiment of this cosmos. If such a stone were broken open and found to contain ocean-like liquid (as described in the Juaneño myth) or small, island-like particles, the symbolic connection would be strengthened even more. Ritual use of this kind of stone could therefore be thought to tap into the vast, powerful forces at work in the universe and utilize them to attain the desired result. The legendary poisonous mixture containing pulverized Tosout was so spiritually powerful that mere physical contact with it was lethal (Boscana 1933:32).

Finally, the actual source of the stones may also have conferred some power in the indigenous peoples' view. Its remote location, on the most distant of the eight Channel Islands from the mainland, probably enhanced the value of these rare and unusual objects. Remote, barren, and windswept, San Nicolas presented a daunting canoe voyage across long passages of rough ocean and was probably only infrequently visited for trade or other purposes. The Nicoleños did have contact with other island and mainland peoples, but even in the mid-nineteenth-century era of relatively large, seaworthy vessels and a thriving coastal trade, the Lone Woman of San Nicolas Island remained unrescued for eighteen years - testimony to the isolation of this island, its native inhabitants, and natural resources. Distance and difficulty of access enhances the value of many prized items, including certain plants used in medicine and ceremony (Timbrook 1987:173, 178).

SUMMARY

Ethnohistoric information reported by several authors, along with examples preserved in the collections of the Santa Barbara Museum of Natural History, indicates that a variety of both human-shaped and unmodified stones were used for ritual purposes among southern and south-central California native peoples. This study has focused on the category known as *toshaawt*, *tosaut*, *tucait*, *tishait*, etc., and determined that it was apparently not invariably the same across cultural boundaries, or perhaps even within a single cultural group. Some examples bearing this name are small, waterworn quartzite pebbles, either black or lighter in color, with no particular distinguishing features. Others have a very distinctive form: circular, lens-shaped, with noticeable horizontal bands or striations parallel to the widest diameter.

This latter type has been determined to be an iron concretion, naturally formed in this lenticular shape and smoothed by being tumbled in the sea. The most likely source has been identified as San Nicolas Island, although similar concretion-bearing strata of Eocene sandstone or siltstone may also exist on the Northern Channel Islands or mainland coast. The attribution of special powers to these stones may be due to their symbolic embodiment of the superimposed "worlds" of the Chumash cosmos, enhanced by the difficulty of obtaining them from such a remote location.

The reason for attributing special powers to the otherwise unremarkable quartzite pebbles is not apparent, but it, too, may be related to something unusual about their source rather than their visible characteristics. The Chumash spoke of "vulture stones" - small, unmodified stones collected from the nest of a vulture or condor - that could grant one the ability to find hidden things, lost objects or missing persons (Blackburn 1975:278; Hudson and Underhay 1978:92). Other southern California groups including the Kitanemuk, Gabrielino, and Luiseño apparently shared similar beliefs about stones found in certain birds' nests having supernatural powers (Hudson and Blackburn 1986:152-153). Further research into the cosmology, beliefs, and ritual practices of indigenous California peoples may reveal additional connections between objects' appearance, their origin, and the properties attributed to them. The search for the source of the sorcerers' stones is only partly complete.

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