

# A Unique Tubular Artifact from Abalone Cove, Palos Verdes Peninsula

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## Abstract

This article documents a Gabrielino (Tongva) artisan's unique creation, a compound artifact, its two expertly crafted serpentine components (a mouthpiece and a tubular body) glued together. The artifact most probably functioned as a shaman's sucking tube rather than either a smoking pipe or a medical device for counterirritant, cupping, or cauterization procedures.

## Introduction

Our study documents a one-of-a-kind tubular artifact discovered in 1962 at Abalone Cove, Palos Verdes Peninsula, within Gabrielino territory (Kroeber 1925) (Figure 1). The object turned up during grading for a parking lot at the Abalone Shore Club, a private beach club. The exposed midden revealed manos, pestles, mortars, human remains, etc. and consequently attracted local relic collectors (Bates 1964).

The specimen's uniqueness follows from its fashioning of two serpentine components—a wide diameter, tubular body and a nipple-like component, these parts cemented together using asphaltum (Figures 2 and 3). This compound artifact is part of the Kern Osterstock Collection curated at the Point Vicente Interpretive Center (PVIC), a small museum<sup>1</sup> sitting on a coastal bluff that periodically offers vantage to whale migrations and, weather permitting, to the eastern profile of Catalina Island. The specimen's serpentine material was most likely mined on the island, and probably that is where the artifact was manufactured.

Our initial acquaintance with this object evoked several thoughts regarding primary function. Perhaps it was a tobacco pipe smoked for pleasure or smoked in ritual/medical venues, or perhaps it was a remedial, or curative, non-smoking device involved in sucking procedures or in procedures requiring a combustible material (e.g., counterirritant therapy). A counterirritant is an agent that produces inflammation in superficial tissues with the purpose of relieving pain or inflammation in deeper tissues. The question of function first requires familiarity with the specimen, and accordingly, the section immediately to follow describes the piece in some detail. The functional issue begs background information, and so, various observations are drawn from the ethnohistoric and ethnographic records. A secondary role of pipes and tubes as funerary furniture will be noted only briefly.

An interpretation section then considers whether the Abalone Cove artifact was a smoking pipe or whether it served as some kind of curative, non-smoking implement, one that either involved sucking operations or one that was applied in procedures requiring a combustible substance. A summary and concluding remarks section will include some notice of additional pipe/tube artifacts that are highly unusual.

## Description of Abalone Cove Artifact

The specimen seen in Figures 2–7 is comprised of two separate pieces, each crafted out of high grade

serpentine. Stone coloration runs from shades of green to dark grayish black (Figures 3–5). The tubular body and nipple-like extension (mouthpiece) were joined together using a single mastic, asphaltum. Overall length is 114 mm, and it weighs 307 g.

The outer surfaces of the larger body component were roughed out to approximate a tubular form and later deftly shaped using abrasive materials. Subsequently, outer surfaces were brought to a high polish and decorated with incised designs (Figures 2–4). Rotating a

reaming/drilling tool or tools at either end resulted in a biconically holed tube that was further worked. Rotary scars are apparent just inside the visible opening, or distal opening (Figure 5).

Further working almost certainly included removal of material from the channel's more constricted areas with the aid of a sharp lithic tool, effacing the more deeply located circular striae, leaving in their place a series of grooves or cuts (see Abbott 1879a:190–191). No grooves are now detectable, an observation that can be

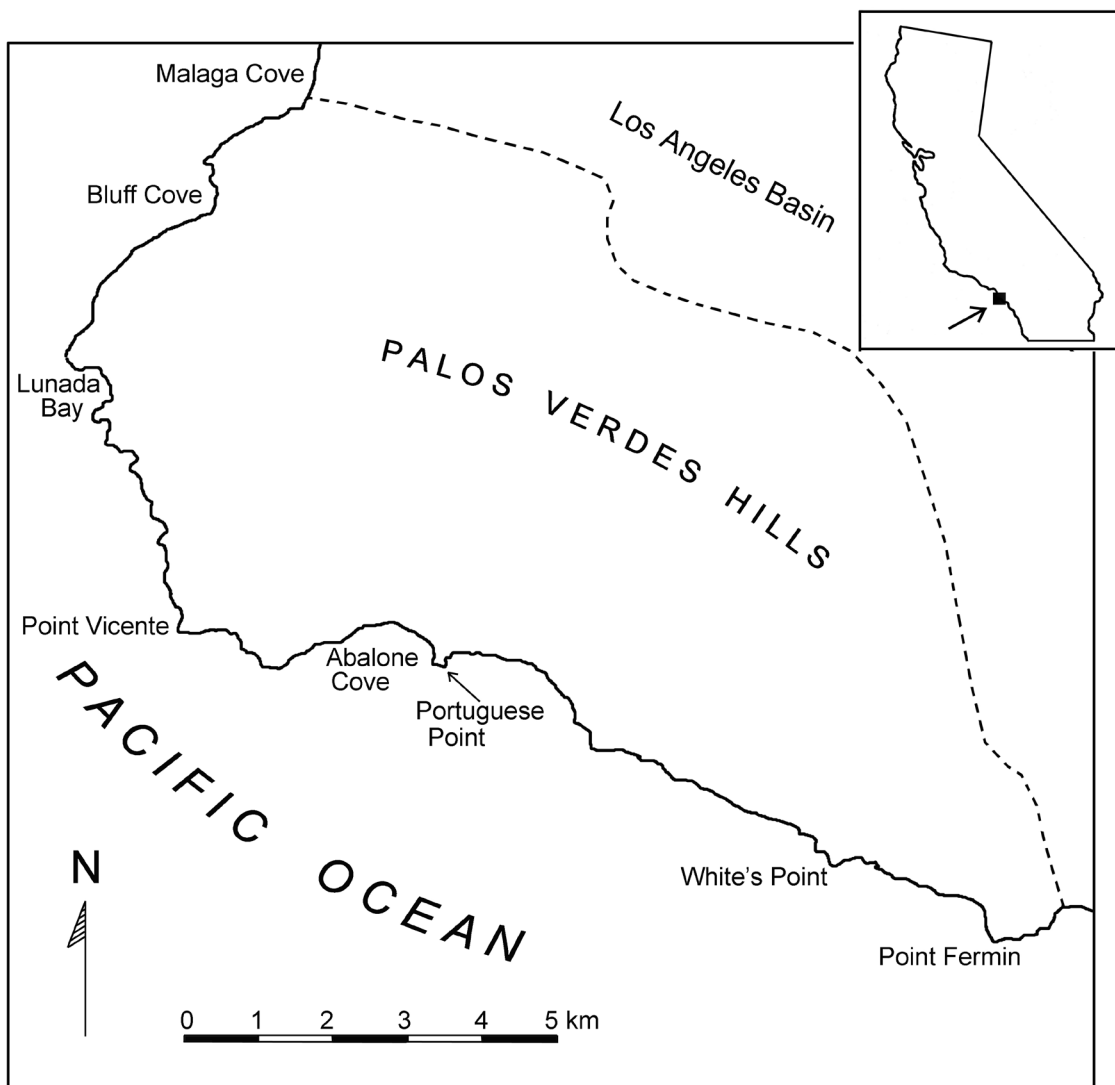


Figure 1. Location map.

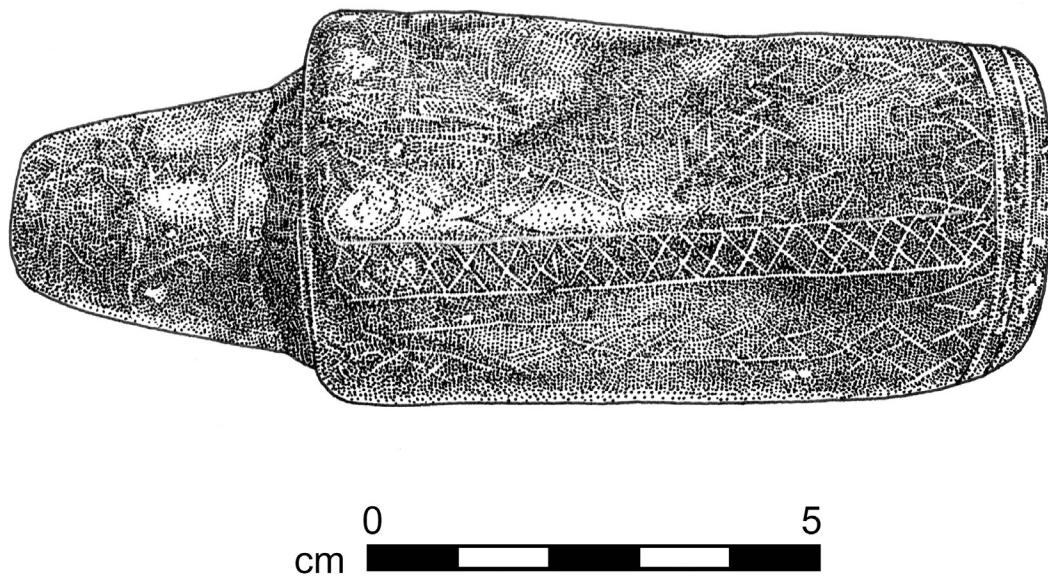


Figure 2. Unique compound tubular artifact found at Abalone Cove, Palos Verdes Peninsula. Drawn by Joe Cramer.

accounted for by another step occurring in the manufacture of the tube's wide, lengthwise perforation.

Since the inner walls are mostly quite smooth, we suppose that a slurry of water and fine grained abrasives (sand) was employed in subsequent drilling/boring activities, but such actions would have proceeded through that distal opening. We suggest such since in peering down the chamber from the distal end with the aid of a small flashlight and a magnifier, it is apparent that near the final approach to the far end, or proximal end, the walls incurve slightly but perceptibly as would happen had a boring tool's distal extension been a bit rounded. The incurved area is very smooth. Incurving starts about 68 mm distance from the opening's rim. Maximum length of the body is 83 mm. Maximum diameter of the body is about 46 mm.

The inside diameter of the distal opening to the body's chamber measures 24 mm. Maximum body wall thickness is found close to the opening, and it measures about 12 mm.

Incising decorates the tubular component. Two grooves encircle the external surface near the open end (see Figure 4). On the rim there are semi-parallel incised lines that radiate out from the aperture, but with the hint in one area of a sawtooth design.

Lengthwise on the body are four longitudinal panels of cross-hatching, the most accomplished of which is featured in Figures 2, 3, and 4. Another of the geometric devices can be characterized as less accomplished, and the remaining two cross-hatched panels are relatively crude. There are other scratch-drawn embellishments, some appearing just short of a random look, and others with recognizable geometric intent, such as the quickly rendered Xs placed just below the two previously mentioned incised parallel rings (see Figure 4).

The second structural component of the Abalone Cove specimen, the nipple-shaped mouthpiece, is drilled through its long axis. A tool was rotated to produce the hole, but it is not possible to say whether the perforation was accomplished with bi-directional drilling.



Figure 3. Serpentine tubular artifact collected at Abalone Cove, Palos Verdes Peninsula.



Figure 4. Incised decoration at the distal half of the study specimen.

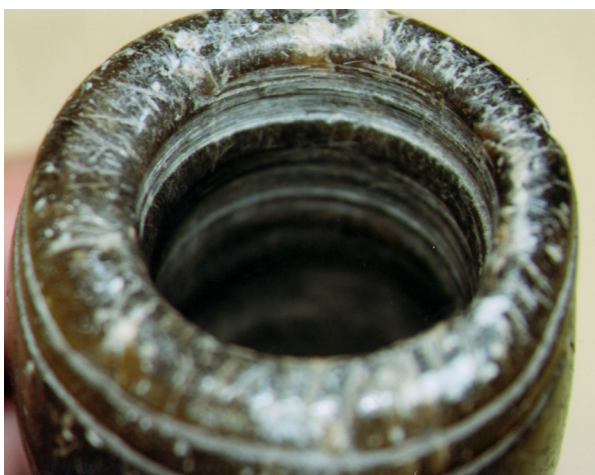


Figure 5. Open end on the body of the Abalone Cove artifact. Notice rotational grinding scars.

This hole runs somewhat off-center. The inside diameter at the visible opening is 11 mm. The minimum diameter within its channel is about 6–7 mm.

The nipple-like part was set within the proximal opening of the tubular body using natural tar, not mixed with any tree pitch and/or ochre. Its visible portion protrudes about 31 mm out and away from the tubular body. We guesstimate that about 6 mm of the distal end of the mouthpiece is sequestered unseen within the proximal end of the body. There is no asphaltum that adheres at or around the small, visible opening of the “nipple,” an indication that neither a hollow bone nor hollow reed was once glued there (see Figure 6). Such hollow elements are typically cemented into the proximal end of stone smoking pipes.

Like the tubular body, the nipple-like part is polished over all visible surfaces. It exhibits minor incising which is too haphazard to qualify as geometric design.

With a small flashlight shined down the body’s chamber, one sees a ring of tar that demarcates the two joined parts—evidence enough to reject any notion that the artifact was carved out of one single continuous piece of stone. Without this determination we might have supposed that the encircling shoulder and its layer of tar were primarily for the purpose of decoration using shell bead inlays. Twenty-two distinct impressions of now missing tiny white, holed discs were counted with the aid of a 16x jeweler’s loupe; there appears to be room for about four more shell beads that could have closed the circle of shell insets, so we estimate that  $26 \pm 1$ , edge-to-edge set beads had once attended the piece (see Figure 7). These beads were probably the Tiny Saucer (G1) type (see Bennyhoff and Hughes 1987:132, Figure 6 l, m), each less than 5 mm in diameter. Such beads are not time sensitive.

When the artifact was collected at Abalone Cove, a “few beads” remained in place (Bates 1964:4). Those beads have not been located.

## **Ethnohistoric and Ethnographic Notes on Tobacco Smoking Pipes and Curative Non-smoking Devices**

### *Tobacco Pipes*

#### **Introduction**

In his Master’s thesis Wayne Bonner proposed great antiquity for tobacco smoking, supposing that it antedated the widespread use of stone pipes in both southern and northern California. Stone smoking pipes, he noted, are documented to about 4,000 years ago in the state. Bonner supposed that earlier pipes were crafted of perishable materials, and he speculated on the origins of smoking:

... it may have been an outgrowth of tobacco burning as an incense in connection with curative or votive practices. The universal custom of historic California groups of ritual tobacco offering other than by smoking indicates it likely was a habit whose practice extends back over a considerable length of time [Bonner 1985:171].

Alternatively, it is also reasonable to suggest that incense tobacco burning and tobacco offerings emerged from ritual applications of pipes to curative purposes, weather control, etc. Clearly, the issue is insoluble.

Chumash, Gabrielino (Tongva), and other ethnohistoric and ethnographic sources reflect varied primary functions for tobacco smoking pipes. Smoking pipes’ mundane purposes revolved on pleasure/relaxation, while pipes’ nonmundane purposes might address the medical/psychological/protective needs of individuals, usually through the intercession of specialists (e.g., medicine men, doctors, shamans), or address the needs of more than just the individual through ritual, both public and private, via the practices of certain kinds of specialists (e.g., weather doctors, shamans, priests).



Figure 6. Proximal end of nipple-like mouthpiece of the compound artifact collected at Abalone Cove, Palos Verdes Peninsula. Note that there is no asphaltum around the hole that would indicate the insertion of a bone or hollow reed tube such as the kind associated with smoking pipes.



Figure 7. Asphaltum was used to glue the nipple-like mouthpiece to the proximal end of the tubular body component of the study specimen. Tiny Saucer (G1) type beads were the probable insets.

### Smoking for Pleasure

Chumash informant Fernando Librado related to J. P. Harrington that smoking pipes were for providing “incense” and were not used for pleasure (Bonner 1985:31; Hudson and Blackburn 1986:119). D. B. Rogers (1929:416) echoed that idea, stating that Canaliño pipes “were not intended to while away the idle moments.” The observation that clay pipes were smoked by Chumash (Hudson and Blackburn 1986:121, Figure 314-14) indicates, we believe, some amount of smoking merely for enjoyment and relaxation. Such clay pipes are categorized as “keel pipes” in Bonner’s taxonomic scheme (1985:164–167), and they almost certainly were traded into Chumash territory. Some Gabrielino, incidentally, did make clay pipes (Merriam 1967:437), and they also smoked straight steatite pipes (Merriam 1955).

Consider that Kroeber (1925:723) presumed the functional distinction between Diegueño stone pipes and pottery pipes broke out, respectively, into religious purpose versus “every day smoking.” Perhaps Fernando Librado’s referent was limited to stone pipes.

Further, Fernando Librado was one of several informants, four Chumash and one Gabrielino, who answered in the affirmative whether there was bedtime smoking (Harrington 1942:28). Such smoking induced a relaxed state and so might be thought of as somewhat medicinal (a sleep aid).

Kroeber is worth quoting here:

Analogy with the practices of other California Indians makes it almost certain that the [Conical Tapered] stone pipes of the Chumash were employed by shamans. Their comparative abundance suggests that they were put to profane use. But, on the other hand, it is scarcely probable that a man would smoke only when he had a stone

implement. Pipes of wood or cane are likely to have been used but to have perished [Kroeber 1925:564].

Kroeber (1925:827), incidentally, offered general notes on smoking in the California culture area, suggesting that California Indians “were light smokers, rarely passionate.” Smoking was of “little formal social consequence, and indulged in chiefly at bedtime.”

An August 2, 1769 diary entry of missionary explorer Juan Crespí, chaplain to the 1769–1770 Portolá Expedition to Upper (New) California, strongly hints at Gabrielino smoking for recreation/gratification:

Some of the heathens came up smoking upon Indian pipes made of baked clay, and they blew three mouthfuls of smoke into the air toward each one of us. Then their chief made a speech and sat down with us. The Captain and myself gave them tobacco ... [Crespí 2001:341; or Palou 1926:134; Bolton 1971:147].

The setting seems casual enough, with the Indians perhaps smoking for their own enjoyment and only subsequently performing a friendly smoke blowing ritual, maybe one that was common to greeting visitors. However, the behavior of blowing three puffs of smoke turns up in other southern California venues, often intended to prevent some calamity, but also in mortuary ritual. Three puffs of smoke occurs in the Diegueño shaman’s invocation to ward off the potentially lethal presence of a raven flying overhead (DuBois 1908:99). Similarly, three smoke puffs sent skyward is a Diegueño prophylaxis against the supposed outcomes of ill-omened events, such as disease or other misfortune. Waterman (1910:336) explained that such ill-omens might be the occasions of a coyote’s cry or a crow’s cawing. Against such information, what we first supposed might have been a simple ritualistic greeting witnessed by Fray Juan Crespí

was perhaps, on reflection, behavior rooted in an apotropaic convention to ward off possible depredations; after all, the Portolá party consisted of complete strangers, their intentions uncertain.

Consider also that according to Chumash Fernando Librado pipe smoke could protect persons from danger as when it was blown upon a rattlesnake to hasten the viper's departure (Hudson and Blackburn 1986:121). In this vein, it is worth noting that in a Diegueño myth reported to Waterman (1906:161) a boy confronted with the presence of a dangerous bear put the animal to sleep with the exhalation of tobacco smoke before proceeding safely on his way. This boy carried his supply of tobacco in a piece of cane that he wore in the perforation of an ear lobe.

As a pleasurable indulgence, smoking in southern California was generally minimal to absent for females (see e.g., Drucker 1937:25; Craig 1967:123–124). However, there were some female pipe doctors active in curing (e.g., Hudson 1980:56), and among some ethnic groups, certain women might smoke on ceremonial occasions (e.g., Hooper 1920:330).

### More on Blowing Smoke

Medical and ritual specialists applied pipes to diverse purposes. Weather doctors' outfits included smoking pipes to induce rain but also to mitigate the effects of storms. Weather forecasting might require pipes.

Voegelin (1938:64–65) provided a detailed description of one Chumash weather doctor's kit. This weather outfit, or *tanganist*, included white quartz crystals to induce summer thunder showers and black rocks to cause winter rains. These minerals were stored in a striped fawnskin sack that was kept in a dry place. Small soapstone bowls, a dewclaw rattle, and soapstone pipes with bird bone mouthpieces were also part of this weather doctor's outfit (see also Voegelin 1938:35, Plate 1a, 76–77). J. P. Harrington (cited in

Lee 1981:38) recorded a Chumash name for a soapstone pipe and another name for a pipe with a bone mouthpiece. Henry Henshaw (Heizer 1955:117) recorded the Barbareño Chumash name for a "straight pipe-shaped stone ornamented with rings (pecked) used in making rain."

J. P. Harrington elicited from Fernando Librado descriptions of how a Ventureño Chumash shaman warded off storms by employing a sacred pipe. After Illuminado (an astrologer and pipe doctor) recited a prayer, he

... would then inhale three times from the pipe, without emitting any of the smoke, and face the direction of the oncoming storm. He exhaled the smoke in three breaths and then addressed all the people gathered around, telling them not to be incredulous lest the storm destroy them. After his speech the prayer and smoke ritual was repeated again for each of the (cardinal?) directions...[Hudson and Underhay 1978:36].

The reader will yet again encounter thrice blown smoke. That the number three holds sacred import seems especially apparent here when it is also noted that Illuminado's prayer consisted of reciting three times "Have mercy on us," followed by repeating "Clear the way!" three times.

Rogers (1929:416) reported that pipes were used in many solemn ceremonies, including funerals. In a *respuesta*, or reply, to question 29 of the 1812 *Interrogatorio*, we learn the following about the Barbareño Chumash:

As to burials, in paganism they bury with the bodies all the pots and other poor belongings; then they blow smoke over the bodies in the direction of the four winds; and finally the relatives wail over the grave [Englehardt



1923:97–98; see also Geiger and Meighan 1976:119].

[Kroeber 1908a:22; see also Geiger and Meighan 1976:59].

With regard to that area along the coast between Carpinteria and Point Pedernales, Pedro Fages' observations included an account of burial customs that mentioned smoke blowing:

When any Indian dies, they carry the body to the adulatory, or place near the village dedicated to their idols. They celebrate the mortuary ceremony, and watch all the following night, some of them gathered about a huge fire until daybreak; then come all the rest (men and women) and four of them begin the ceremony in this wise. One Indian, smoking tobacco in a large stone pipe goes first; he is followed by the other three, all passing thrice around the body; but each time he passes the head, his companions lift the skin with which it is covered, that the priest may blow upon it three mouthfuls of smoke [Priestly 1937:34].

Information immediately above draws from those territories inhabited by the Barbareño Chumash. Bonner (1985:12) erred in attributing this particular burial behavior to Costanoan peoples.

There is, however, good information on smoke blowing from Costanoan territory. It was either Fr. Juan Amoros or Fr. Vincente de Sarria who offered the following as a reply, or *respuesta*, to question 12 of the 1812 *Interrogatorio*:

The kind of idolatry which has been found among these natives is that they sometimes smoke, blowing the smoke to the sun, the moon, and to certain people who they believe live in the sky; and with this they say: "Here goes this smoke in order that you will give me good weather to-morrow"

Another example of death-related, thrice-blown smoke is recorded for the Pass Cahuilla. In their Image Burning ceremony to memorialize persons who had passed on about one year prior, there occurred in the ceremonial dance house, or *kishumnawat*, a gathering of people. Occasionally from among the old men who were smoking, either the *paha* or some other old male would "groan and blow up in the air three times" (Strong 1929:124). A *paha* was the ceremonial assistant to the *net*, or hereditary clan chief. In Hooper's (1920:330) description of the mourning gathering, during the first three nights when old people are gathered in the *kishumnawat*, a tobacco can is constantly passed about with both men and women partaking of its contents for the purpose of smoking, which they do all night.

Blowing smoke occurred in order to allay fear and lovesickness as well as to cure organic and psychic illnesses (see e.g., Drucker 1937:42; Harrington 1942:28; Hoover 1973; Hudson et al. 1977:18–19, 101–102, note 31; Walker and Hudson 1993:57; Bonner 1985:31–32; Hudson and Blackburn 1986:119–122). In California, wherever tobacco was smoked, the shaman smoked it for the purpose of curing clients, and it was standard practice for southern California Shoshoneans and all Yumans to blow smoke to cure (Kroeber 1941:20). Tobacco smoke was curative incense even when not pipe generated.

Hugo Reid (Heizer 1968:34) recorded that a Gabrieliño sucking doctor, prior to engaging in a phlebotomy procedure, would first perform some ritual or rituals. One rite involved smoking to the Great Spirit. Lorenzo Yates described Chumash ritual behavior in which the smoking pipe played a major role.

Twenty [bird stones/hookstones] 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 a [sic] herb, called *pispivate* by the Mexicans ... 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 .... This ceremony brought rain, caused death to enemies, and various other things [Yates 1889:297].

New pipes were blessed by the Chumash in a ceremony that included smoking (Bonner 1985:32; Hudson and Blackburn 1986:119–120). Initiation ritual might embrace sacred pipe smoking. Parenthetically, David Banks Rogers, unfortunately without attribution, wrote:

Filled with the potent wild tobacco of this [Canaliño] region and lit with due formality by some leader in the community, they were solemnly passed around the assembled circle in the council compound; each member took a whiff or two in a ceremonial burning of incense to the powers that prevail [Rogers 1929:416].

This reads suspiciously like supposition based on stereotype rather than any actual witness. We are skeptical.

Interestingly, Kroeber (1908b:183) noted that Luiseño shamans seemed to have regarded their pipes as fetishes. He wrote that “shamans frequently speak to their pipes.”

On a final note, a smoking pipe might substitute for the kind of tube that delivered a counterirritant via combusting material in some curing procedure (Bard 1930[1894:9]). Cephaz Bard did not indicate whether the smoldering punk was made of tobacco.

## *Curative Non-Smoking Devices*

### **Introduction**

The non-smoking remedial, or curative, devices, mostly tubular, were usually employed using sucking actions by practitioners who were removing spiritual/incorporeal entities from the afflicted person, or were removing actual material substance from a patient, or were communicating an impression that something material was recovered when such was not the case. Sparkman reflected on the mindset of Luiseño sleight-of-hand performers and other medicine men:

We have often wondered if they believe in their own arts, and have come to the conclusion that they do to a certain extent, though they must know that their pretended sucking of substances from the bodies of their patients is fraudulent [Sparkman 1908:216].

A shaman’s actions may not be as fraudulent as first appears; consider the possibility that the object “removed” through legerdemain may have been from the shaman’s perspective the prescription for supernaturally capturing out of the victim the nonmaterial, supernatural cause of the patient’s predicament.

Similar looking tubular devices were aids in counter-irritant therapies, generally involving a combustible. The presence of smoke attendant to ignited punk does not qualify the instrument as a smoking pipe since the smoke is not directly inhaled through the device.

Abbott (1879:191), inspired by C. C. Jones (1873:364), proposed that tubes possibly served to cauterize, the burning material dropped through the tube whose distal end was targeted on the diseased spot. We are, however, unaware of the California ethnographic/ethnohistoric record reporting such a practice. Abbott also speculated that tubes perhaps functioned in cupping operations, and he again borrowed

from C. C. Jones, explaining that fire kindled at the upper end of a tube could create a vacuum in the lower part, aiding blood flow from incisions made on the flesh. A “simple contrivance” (small pebble?) would prevent ashes falling to the lower end of the tube and onto the incisions. See also Bard (1894:9) and Walker and Hudson (1993:64).

### Tubular-Shaped Sucking Tubes

Ethnohistoric and ethnographic sources attest to regional use of sucking instruments to remedy various sufferings (Kroeber 1907:332–333). Most such devices were generally tubular, but apparently some were funnel-shaped.

Miguel Venegas’ (1966 [1759]:108) observations of doctoring in the Santa Barbara Channel Islands provided descriptions of hard stone sucking tubes. The Spaniard had previously witnessed just such behavior in Baja California. He wrote:

[The Lower California medicine men] applied to the suffering part of the patient’s body the *chacuaco*, or a tube formed out of a very hard black stone, and through this they sometimes sucked, and other times blew, but both as hard as they were able, supposing that thus the disease was either exhaled or dispersed. Sometimes the tube was filled with Cimarron or wild tobacco lighted, and here they either sucked in or blew the smoke according to the physician’s direction; and this powerful caustic sometimes, without any other remedy, has been known entirely to remove the disorder [Venegas 1966(1759):97].

A more detailed account of Lower California shamanic curing was penned by Johann Jakob Baegert, a German Jesuit stationed at Mission San Luis Gonzaga:

They do not, however, content themselves with ... natural remedies, but have also recourse to supernatural means, which certainly never brought about a recovery. There are many imposters among them, pretending to possess the power of curing diseases, and the ignorant Indians have so much faith in their art that they send for one or more of these scoundrels whenever they are indisposed. In treating a sick person, these jugglers (shamans) employ a small tube, which they use for sucking or blowing the patient for a while, making, also, various grimaces and muttering something which they do not understand themselves, until, finally after much hard breathing and panting, they show the patient a flint or some other object previously hidden about their persons, pretending to have at last removed the real cause of the disorder. Twelve of these liars received one day, by my orders, the punishment they deserved, and the whole people had to promise to desist in future from these practices, or else I would no more preach for them. But when, a few weeks afterwards, that individual, who first of all had engaged to renounce the devil, fell sick, he sent immediately again for the blower to perform the usual jugglery [Baegert 1865:386].

Bard’s (1930 [1894:9]) witness to phlebotomy in Upper California involved not a stone instrument but rather sucking tubes fashioned of seabird leg bones or of wood. Introducing a tube into a cut in skin tissue, a practitioner, mouth filled with hot water, commenced his sucking. Yates (1896:180–181, 1900:246) described the regional practice of Native doctors sucking through a bone or stone tube placed at the site of the cut surface; these incisions were made at the affected part using flint scarificators. Then by suction the operator drew blood from the wounds, presumably at times

removing infectious material. Parenthetically, Abbott and Putnam (1879:228–229) illustrated a hollowed out Barbareño Chumash mammal bone tube, suggesting that it perhaps functioned as a medical instrument.

J. P. Harrington noted that sucking doctors sucked out stones or other things (Walker and Hudson 1993:58). However, the ethnologists' trait list (Harrington 1942:40) for the central California coast denies that some sort of sucking device was used. While Linda King (1982:446) seems to defer to Harrington, at the same time she suggested the possibility that at least some Chumash doctors had used "sucking pipes." Walker and Hudson (1993:58) expressed uncertainty on the matter, writing that the pipe doctor may or may not have been the sucking doctor. Extending their ambivalence, the two scholars expressed that "the sucking may have required no specific tool, although tubes of bone, stone, or wood might have been used" (Walker and Hudson 1993:58). Interestingly, Drucker's (1937:46) informants (Serrano, Cahuilla, Luiseño, Cupeño, Diegueño, Chemehuevi, and Yuma) all denied knowledge of shamans using sucking tubes.

Parenthetically, Koerper and Desautels-Wiley (2009:129–130) considered that a smoking and/or sucking doctor possibly used a certain unique artifact found at the Dobkins site (CA-ORA-145), something that had, at least superficially, a smoking pipe look to it, in order to abet prestidigitation and feign removal of foreign objects from patients. Their legerdemain hypothesis was inspired by John Winterbourne's (1967:22–23) speculation that a 290 mm long, steatite sucking tube excavated at the Goff's Island site (CA-ORA-110) was designed for sleight-of-hand manipulations, allowing a medicine man to create the illusion that a disease object had been sucked out of an ailing patient. Similar "trickery" by sucking doctors, but without mention of a tube, was reported for the 1812 *Interrogatorio* by Fray Fernando Martín and/or Fray José Sanchez at Mission San Diego who were answering question 15 (Kroeber 1908a:5; also Geiger

and Meighan 1976:71). There is frequent mention of small objects sequestered in the practitioner's mouth to carry out these dramas and convince a patient of a cure (see Moriarty 1964:8–11). Such legerdemain was widespread, recorded, for instance, for the Luiseño, Ynezeño Chumash, and Costanoan sucking doctors (e.g., Kroeber 1908a:10, 23; Geiger and Meighan 1976:72, 75, 78).

### **Funnel-Shaped Sucking Tubes**

Of particular interest with regard to the Abalone Cove artifact is information on curing sores that was given to J. P. Harrington by a Spaniard, Luis Antonio María Ortega. Ortega described a procedure of the Barbareño Chumash and the Ventureño Chumash that employed an implement shaped like a funnel. Its smaller end had a restricted opening. Presumably the larger opening was placed at the site of a sore. That end was greased and moved about, drawing the skin (Hudson and Blackburn 1986:286). This almost certainly was a sucking device, and the grease, we suspect, may have helped effect a better seal between the artifact's larger opening and a patient's skin.

### **Combustion Instruments (Counterirritant Tubes and Vacuum Tubes)**

Certain tubes had been used to deliver a counterirritant. As previously explained, a counterirritant is an agent that produces inflammation in superficial tissues, usually with the purpose of relieving pain or inflammation in deeper tissues. The counterirritant process described for the Chumash might involve a tube containing burning dried leaves (moxa) or some sort of punk that gets placed over a "diseased spot," thus producing a blister. As previously noted, Bard (1930[1894:9]; see also Walker and Hudson 1980:57–58; Hudson 1993:64) explained that in the absence of a stone tube, a tobacco pipe qualified as a functional equivalent. This practice might also have been "to raise an area of skin with the vacuum created when

the hot air in the tube cooled and contracted” (Walker and Hudson 1993:64[citing Bard 1894:9]). Again, the regional literature is silent on any use of tubes to effect cauterization.

### Brief Archaeological Notes

Archaeological sources attest to a secondary purpose for both smoking pipes and sucking tubes—funerary furniture and Mourning Ceremony offerings (e.g., Yarrow 1879:37; Putnam 1879:24; Bowers 1884; Olson 1930:14; Orr 1943:31–32, 1968:162; Walker 1951:112, Figure 19; Meighan and Eberhart 1953:120; Jones 1956:203–204, 277, Plate 95e; Reinman and Townsend 1960:12, 16, Plate 10d; Grant 1964:15; Winterbourne 1967:22–23, 155, Plates 34, 35; L. King 1969:38, 1982:442–443; McCawley 1996:164; Koerper and Cramer 2009:121, Figure 5). It was presumed that it was with the final dispositions of medicine men/shamans that pipes and sucking tubes were placed. We have no information regarding any direct association of the Abalone Cove specimen and mortuary remains. Parenthetically, Chester King’s (1976:315) reference to whole pipes in cemeteries was that of Burnett (1944); almost all artifacts in Burnett’s book are either fakes or embellished pieces (see Koerper and Chace 1995).

### Interpretation

Again, the Abalone Cove specimen is unique for its composite character, incorporating two distinctive carved stone components. Their arrangement, enabled by tarry glue, offers a stylistic tour de force previously undocumented for smoking pipes or remedial non-smoking devices in the record of California prehistory. The artifact was undoubtedly pleasing to the Native aesthetic for its colorful serpentine material polished to a high shine and also for its surface decoration, scratch-drawn geometric designs, and small disc beads asphaltum-glued in a ring that encircled the external interface of the two parts. Familiarity

with the regional ethnohistoric, ethnographic, and archaeological records allows quick assessment that the compound artifact served no mundane, utilitarian purpose, but rather served magico-religious or medical practices.

Had the Abalone Cove specimen shown any asphaltum adhering to the exterior hole of the nipple-like component, then a smoking pipe hypothesis would be supported. However, there is no mastic to indicate a bone, wood, or reed tube had once served as the sort of mouthpiece typical of so many California Indian tobacco pipes. Looking into the opposite end of the artifact, the observer will find no organic residue, no smoke blackening, and no evidence of heat alteration, any one of which would offer some credence to the hypothesis of a smoking pipe function. Absence of these conditions does not automatically invalidate the pipe idea since we know that relic collectors were wont to thoroughly clean their finds.

A large diameter tubular body is a less than suitable bowl for a smoking pipe, as tobacco becomes easily dislodged and falls away. The strongest argument against any ignited combustible held within the body chamber is that heat energy would so soften the asphaltum that the specimen’s two components would not hold together. Consider also that petroleum vapors attendant to smoking tobacco in the Abalone Cove artifact might offer an unpalatable mix of fumes, possibly inducing nausea.

Process of elimination now directs us to consider that the Abalone Cove artifact once served as some kind of remedial non-smoking device. We might further eliminate the artifact as having been a counterirritant instrument connecting with moxibustion since, again, heat would precipitate disengagement of the two stone components.

As previously noted, ethnohistoric and ethnographic records attest to the past use of remedial non-smoking

devices in sucking procedures carried out by specialists in Native doctoring. Certain tubular artifacts are identified for such, yet certain funnel-shaped objects have also been implicated in sucking cures. Sucking actions accomplished removals (actual or feigned) of things (substantive or noncorporeal) to effect remedies for perceived maladies (organic and spiritual/psychological). Sucking procedures requiring a truly effective vacuum, as with operations involving phlebotomy or excisions of infectious matter at or near skin surface, could have been accomplished. Our “experimental archaeology” began by grasping the tubular body and positioning the lips and tongue to make a seal at its open end drawing air out of the artifact. At the same time, the aperture of the nipple-like component was pressed against the underside of the free arm. The amount of suction felt was not impressive. Flipping the artifact and putting the large opening against the skin and sucking on the nipple-like component resulted in suction that was pronounced. We have little doubt that the artifact was a sucking tube, and its smaller part was its mouthpiece. We did not use grease to better effect a seal, and we suppose that it would not have mattered much, if at all.

### Summary and Concluding Notes

This article described an artifact from the Abalone Cove area, Palos Verdes Peninsula, and determined that it was most probably a curing instrument once belonging to a sucking doctor. Its uniqueness was

mainly its compound construction, two conjoined serpentine parts, a tubular body and a nipple-like mouthpiece. Functional interpretation focused especially on the asphaltum that set the components flush and fast with one another; the tarry glue would have melted had the artifact cradled an ignited combustible. In other words, it is improbable that the artifact was either a smoking pipe or a counterirritant device that required burning punk. We noted that pipes and tubes are sometimes burial goods; no evidence was available to implicate the compound sucking tube in a burial related venue.

We labeled the piece “unique,” also “one-of-a-kind,” as we did not encounter a similar artifact during an extensive search of the regional archaeological literature. There is one caveat here, for a May 10, 1903, *Los Angeles Herald Sunday Supplement* article, “Remarkable Relics of Aborigines Found at Redondo,” carried a photograph in which one sees what could be a two-piece sucking tube (Figure 8), but of different design. The present whereabouts of this artifact is unknown. *Herald* reporter E. Ogden Sawyer, Jr., was writing about discoveries at what became known as the Palmer-Redondo site, or CA-LAN-127.

In closing, we briefly share with our readers other objects in the pipe/tube realm, all previously published, that are also very unusual, perhaps unique. In doing so we are indulging another of our pet interests, marine animal imagery in the plastic and graphic arts of the Chumash and Tongva peoples.

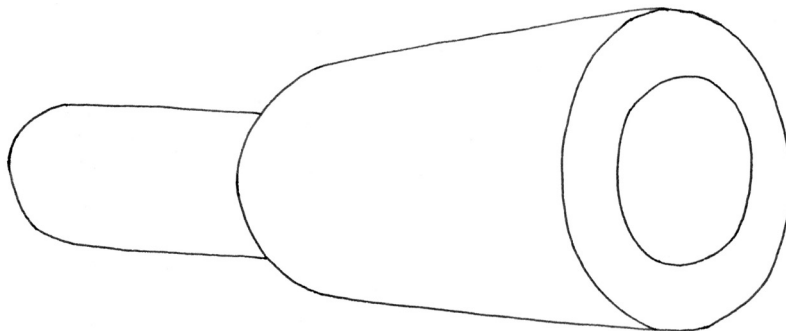


Figure 8. Artifact from the Palmer-Redondo site, or CA-LAN-127, unearthed in 1903. This specimen may have been a compound sucking tube. Drawing by Joe Cramer. After photographic images published in two period newspapers.

A Chumash steatite tubular object of special interest here (Figure 9) is what Hudson and Blackburn (1986:123, 127, Figure 314–9) regarded as an effigy smoking pipe, but what just as well might qualify for sucking tube status. One end is somewhat larger in diameter than the other end, yet it is generally a fit to the Convex Tubular type (see Bonner 1985:153, Figure 15c) should one abstract out the dorsal fin mimic that sits about a third of the distance down the artifact's length away from the end having the larger diameter. Undoubtedly, the imagery is cetacean, not piscine, but Hudson and Blackburn avoided identifying the type of animal. This Phelan Collection artifact is purportedly from the Santa Barbara coastal area.

This was not the first time a tubular cetacean effigy had been published. Yates (1900:239–240) illustrated a variety of southern California pipes, among which was his Figure 369 specimen (Figure 10). He described it thusly: “Pipe of steatite, peculiar form, general outline indicates that it was meant to represent a whale ... Santa Barbara, Hayward collection.” It is less than a perfect fit to the Tapered Conical type (see Bonner 1985:153, Figure 16A), first for the appreciable curve in the body to imitate, we think, a dolphin, and secondly for its dorsal fin. The bone or reed mouthpiece makes clear that it was smoked. Parenthetically, there are additional examples of smoking pipes bearing probable cetacean imagery, but as surface decoration.<sup>2</sup>

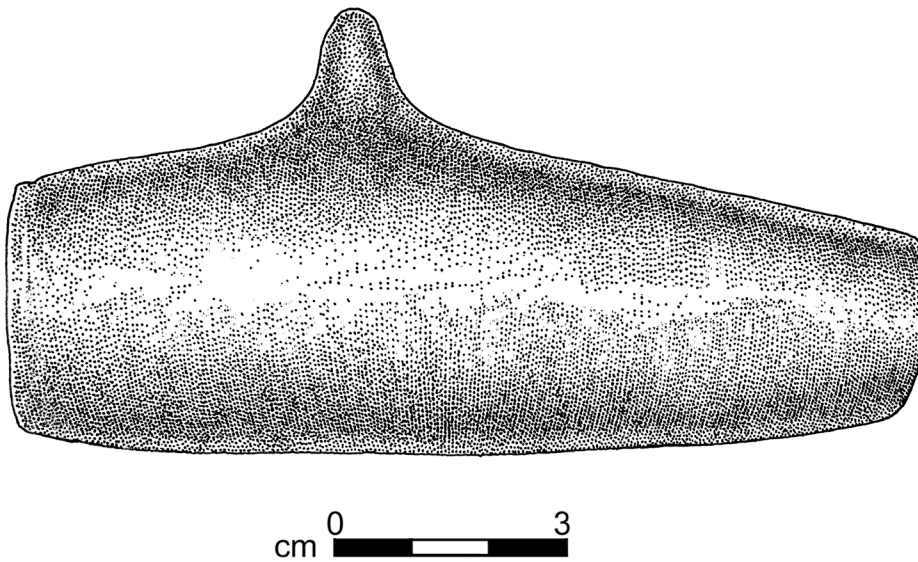


Figure 9. Chumash tubular effigy artifact (after Hudson and Blackburn [1986:127, Figure 314-9]).

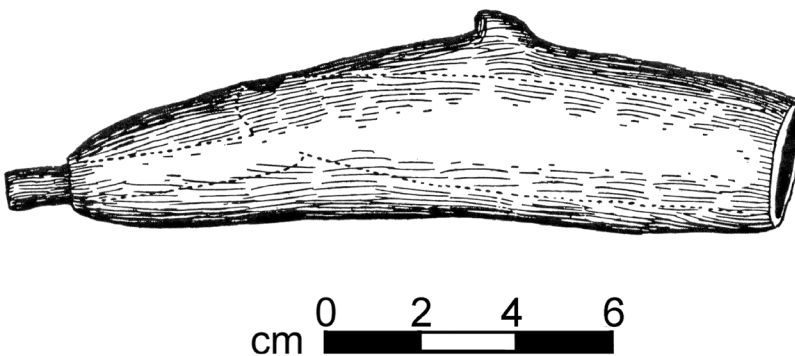


Figure 10. Chumash steatite smoking pipe. Reproduced from Yates (1900:239, Figure 369.7).

On another parenthetical note, a Diegueño shaman's cache consisting of 21 sucking tubes plus a "rudely crescentic" steatite artifact were discovered in the In-copah Range of the San Jacinto Mountains, 5 km from Julian, San Diego County (see Heye 1927; also Polk 1972:15–16).<sup>3</sup> Koerper and Desautels-Wiley (2012:73, see also Figure 35) wrote that the specimen "hints at a dolphin or porpoise referent; however, ... its inland provenance is at odds with such an interpretation." They then pointed out that not far to the south at West Mesa in the Cuyamaca area, two small dolphin/porpoise-like effigies were recovered (see True 1970:41, 90, Plate 5).

### End Notes

1. Point Vicente Interpretive Center: 31501 Palos Verdes Drive West, Rancho Palos Verdes CA 90275; 310-377-5370.

2. A Santa Barbara County steatite pipe (Figure 11) collected in 1881 by A. Barnard has on each of its opposite sides shell bead inlay decorations, both featuring the "aquatic" motif (Hudson and Conti 1981; Hudson and Blackburn 1986:123, Figure 314-8); see also Koerper and Desautels-Wiley 2012:96–97). It conforms to Bonner's (1985:153, Figure 16A) Conical Tapered type. Also, Yates (1900:240, Figure 371) illustrated a San Nicolas Island pipe of "indurated

talc" (micaceous steatite) whose opposite sides were carved in relief, each side showing what Yates took to be sharks (Figure 12). Alternatively, one might reasonably consider that the carvings stood for cetaceans. It also is of the Conical Tapered type (see Bonner 1985:153, Figure 16A).

3. Polk (1972:16) incorrectly reported that the cache of 21 sucking tubes was found in the late 1930s; O'Neil (1983:245) repeated the dating error. The cache was discovered in February, 1927 (Heye 1927:315). Additional errors in O'Neil (1983:245) are his citations of DuBois (1908:97, 99) and Kroeber (1908b:183–184) regarding a sucking doctor, identified as Luiseño, who purportedly sucked a foot long rattlesnake out of a woman's chest. This incident is not from DuBois or Kroeber, but rather it is found in Sparkman (1908:216); also, the sucking shaman was identified as a Cahuilla, not a Luiseño.

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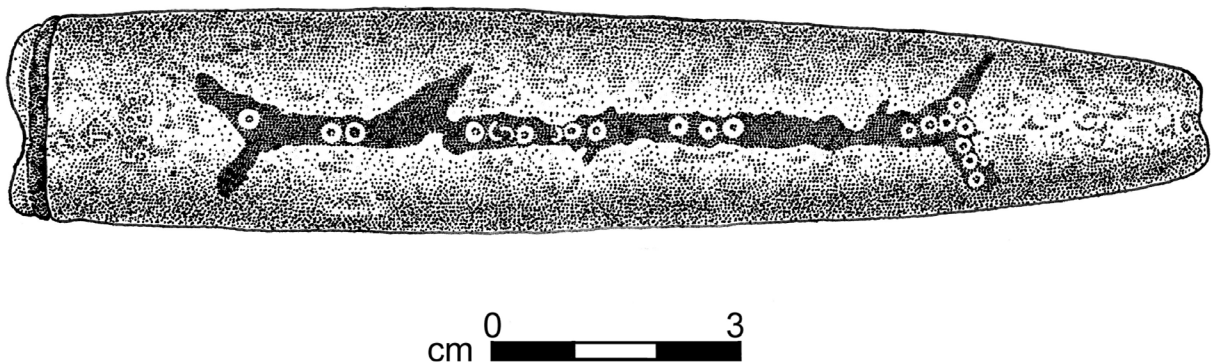


Figure 11. Chumash smoking pipe with aquatic motifs on opposite sides. Note the cetacean-like dorsal fin (after Hudson and Conti [1981:229, Figure 9] and Hudson and Blackburn [1986:127, Figure 314-8]).



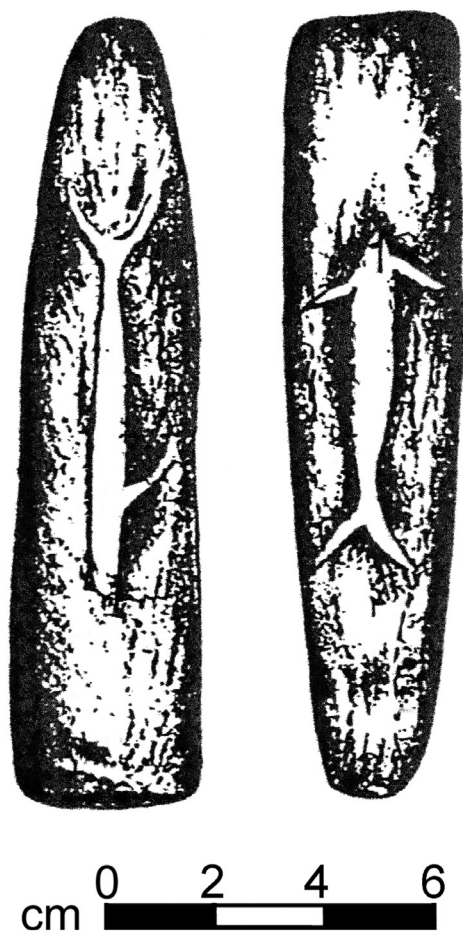


Figure 12. San Nicolas Island "indurated talc" smoking pipe. Reproduced from Yates (1900:240, Figure 371.14).

Cramer produced the map of Figure 1 and the illustrations of Figures 2, 8, 9, 10, 11, and 12. We are grateful for anonymous reviewers' helpful comments and for comments from Dr. Matthew A. Boxt.

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