Mortuary/Mourning Associated, Transversely Grooved Stone Artifacts from CA-LAN-62: Another Case of Sexualization-Sacralization?

Henry C. Koerper, Polly A. Peterson, Benjamin R. Vargas, Donn R. Grenda, and Patrick B. Stanton

Abstract

Eight transversely grooved arrow shaft straighteners and/or effigy mimics of the tool type were discovered within the mortuary/mourning area at CA-LAN-62. Five were unambiguously associated with burial features. Similar artifacts are known from death rite contexts at other regional sites. The grooved shaft straightener is a visual approximation of the female vulva and may have symbolically represented fertility or male/female dualism as is the case for other functional artifacts such as mortars and pestles. We propose that life force symbolism and imagery had recommended certain grooved artifacts as suitable for funerary and mourning ritual offerings. If so, the CA-LAN-62 specimens provide additional data that might support the hypothesized sexualization-sacralization process (Koerper 2006a, 2006b, 2007).

Introduction

Five burial feature artifacts from the uppermost (late Prehistoric/Contact period) component of CA-LAN-62 (P-19-000062) at the Ballona Wetlands (Figure 1) exhibit design attributes associated with a familiar kind of tool, the transversely grooved, single piece arrow shaft straightener, a type most often crafted of steatite.[1] The presence of these five specimens (Figures 2a, 2c, 3a, 3c, 4a) strikes a counterintuitive chord since the site's late Prehistoric/Contact period component yielding these artifacts functioned not as a habitation camp or village but rather as a sacred space whose remains reflect, above all, mortuary/mourning behaviors. Even if any of the offerings had been intended to reflect, say, a deceased's gender or occupational status, the total setting begged a question of whether deeper levels of meaning had recommended the artifacts' final dispositions among the deceased. Three additional straighteners or straightener-like specimens were not in direct association with burial features, but two were within the larger mortuary/mourning area; one of those was likely an offering in a mourning rite.

In the section immediately following, some background information on grooved straighteners precedes descriptions of the eight LAN-62 specimens and their spatial associations; in this, comparative data are provided. The section after that offers examples of mortuary associated grooved artifacts from other sites, partly to emphasize that the case of LAN-62 is no anomaly with regard to death contexts. Further demonstration of the type's potential fit to sacred thought and behavior is by reference to a straightener or straightener-like artifact found in a cave that housed varied ritual paraphernalia, by reference to a Chumash mythological narrative, and by reference to mythic events recounted in Luiseño cosmogony.

A subsequent discussion explores the possible reasons why transversely grooved, single piece shaft straighteners and/or straightener-like effigies and their symbolic communications had been integrated into death rites. Interpretation will draw from recent scholarship (e.g., Koerper 2006a, 2006b, 2007:89, 91; see also Koerper 2001:31) that focuses on certain sculpted artifacts from the southern California portable cosmos, sacred stone carvings whose aetiologies have been subsumed under a process of culture change labeled "sexualization-sacralization." This essay closes with a summary and concluding remarks section.

The Five Burial and Three Non-burial Artifacts from CA-LAN-62

Background: Cursory Notes on the Transversely Grooved Type

A variety of tools and techniques applied to straightening arrow shafts are identified in the literature on aboriginal California and Great Basin societies. In coastal southern California, the transversely grooved stone arrow shaft straightener was the tool of choice for minimizing lift and drag resistance of especially, arrows made of cane, the most commonly employed shaft and main shaft material. Cosner's (1951:148) experimental archaeology demonstrated that cane shafts will straighten properly using only a transversely grooved shaft straightener that has been heated. He also found that other materials such as arrow weed and greasewood could be just as effectively worked by heating and hand bending.

Five burial artifacts from LAN-62 (Figures 2a, 2c, 3a, 3c, 4a) exhibit attributes that recall the tool type. Our article illustrates four additional artifacts not found directly associated with graves that were excavated during the Ballona Wetlands Project and that similarly recall the straightener tool type. Three (Figures 2b, 3b, 4c) are from LAN-62, and one (Figure 5) was recovered at CA-LAN-211. Perhaps all had been applied to arrow manufacture. Cane would probably have been the material type most often worked.

In southern California, the variously shaped, transversely grooved artifacts that either were straighteners or faithful mimics of such were usually fashioned of steatite. The lithic material is characterized by a

Figure 1. Location map.

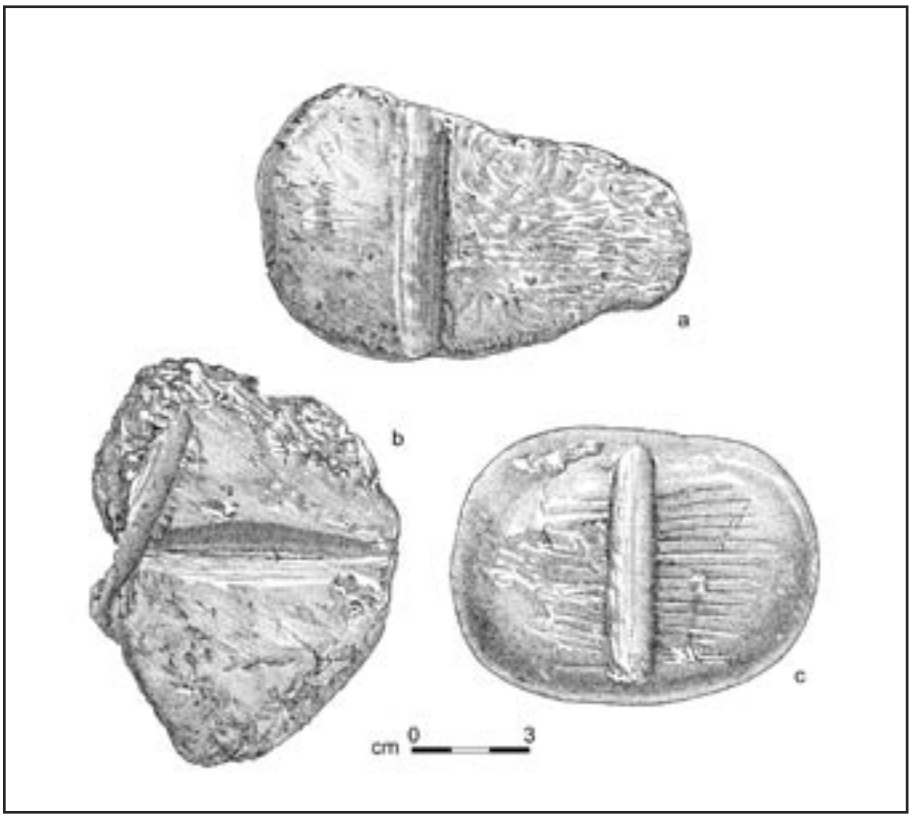


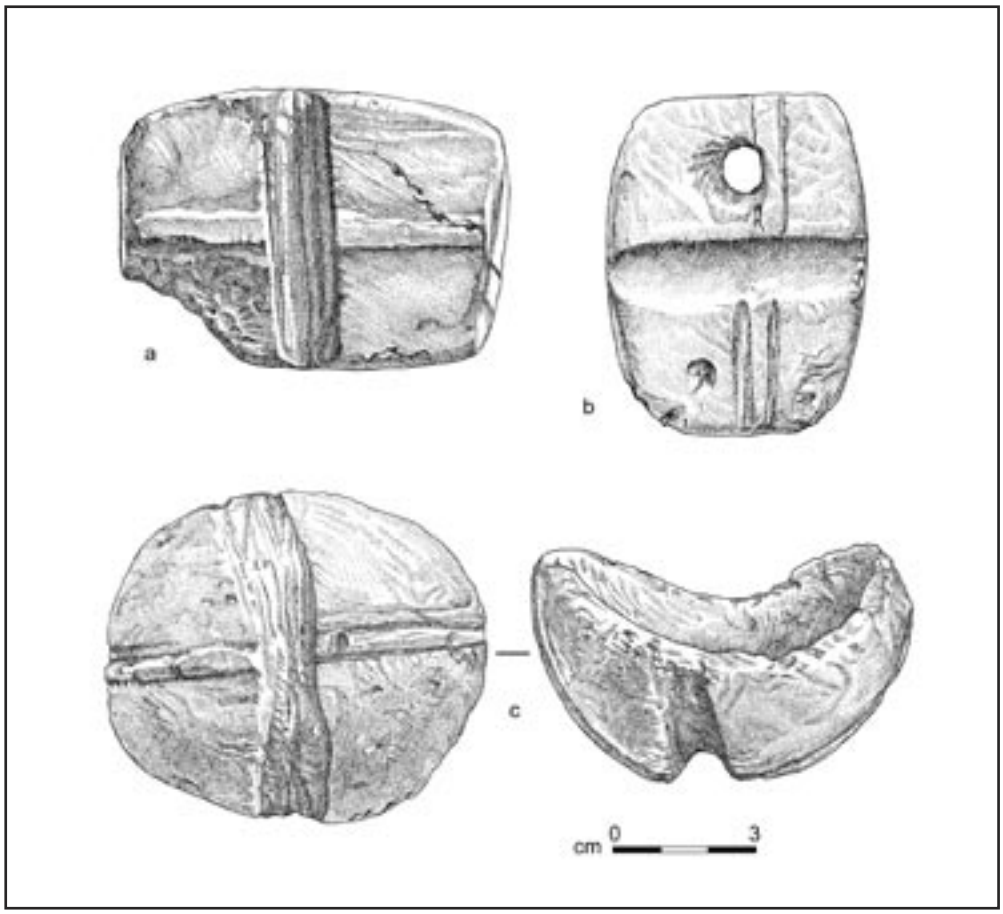
Figure 2. LAN-62 steatite and gneiss grooved artifacts. (a) Inv. No. 0300085DA, steatite; (b) Inv. No. 030008583, steatite; (c) Inv. No. 0300085F6, gneiss.

favorable heat expansion-contraction ratio, and thus fire spalling does not occur even when the tool is heated red-hot. The larger shaft straighteners retain heat longer. Of the eight illustrated LAN-62 examples, seven are steatite and one is gneiss. The LAN-211 specimen is steatite.

The dorsal faces of these kinds of artifacts often had but a single polished groove, but two-grooved and three-grooved specimens are occasionally encountered (Figures 2b, 6a, 6b, 6d) (see also Kroeber 1925:Plate 49; Hudson and Blackburn 1987:109-110). Four-grooved straighteners are purported to exist (Treganza 1942:157; Polk 1972:10), but we are not familiar with any photograph or illustration of such. Incidentally, regarding the two-grooved LAN-62 examples (Figure 2b), the smaller of the two grooves was perhaps not finished, and thus it may never have functioned to straighten an arrow shaft.

Rarely are grooves longitudinal, but when they are (Figures 7, 8a), in most cases, the groove is not much longer than would have been the case had the groove been placed transversely on the artifact. The ventral faces of straighteners tend to be flattish.

It is unusual but not rare for a specimen to be perforated at one end. When the perforation is comparatively large (Figure 3b), one suspects the hole facilitated placement and subsequent removal of the heated straightener from hot coals, in much the same manner as a holed comal is lifted from a cooking pit. Again, the LAN-62 steatite straightener illustrated in Figure 3b was not found in a burial feature. When a



Figurre 3. Steatite, transversely grooved artifacts from LAN-62. (a) Inv. No. 0300082E1; (b) Inv. No. 03000858E; (c) two views of specimen Inv. No. 0300085F2.

perforation is relatively small (Figures 6b, 6c, 7a, 7c), the artifact may have been suspended on a cord, and possibly worn as a pendant (see Treganza 1942:157). Regarding the object of Figure 6c, Abbott (1879:200) made note of its unusually small hole, but he also called attention to the groove which is noticeably shallower than various other specimens with which he was familiar. Perhaps the piece was intended as a talisman, its referent, at one level, being a shaft straightener. The artifact of Figure 7a exhibits a tiny perforation, presumably for suspension. Its shape might have evoked pubic triangle imagery. The specimen of Figure 7d is of a shape that draws similar curiosity. The small "straighteners" of Figures 7b, 8a, 8b illustrate what were perhaps toys, amulets, or ceremonial objects.

Descriptions of the LAN-62 Specimens

Eight shaft straighteners were recovered in and around the burial ground at LAN-62. Five were directly associated with interments. Another was deposited as part of a probable mourning ceremony. The small sample reflects the diversity of shapes and sizes inherent in this artifact class.

Burial Feature 271 contained a steatite shaft straightener made on a recycled vessel sherd (Figure 2a). A

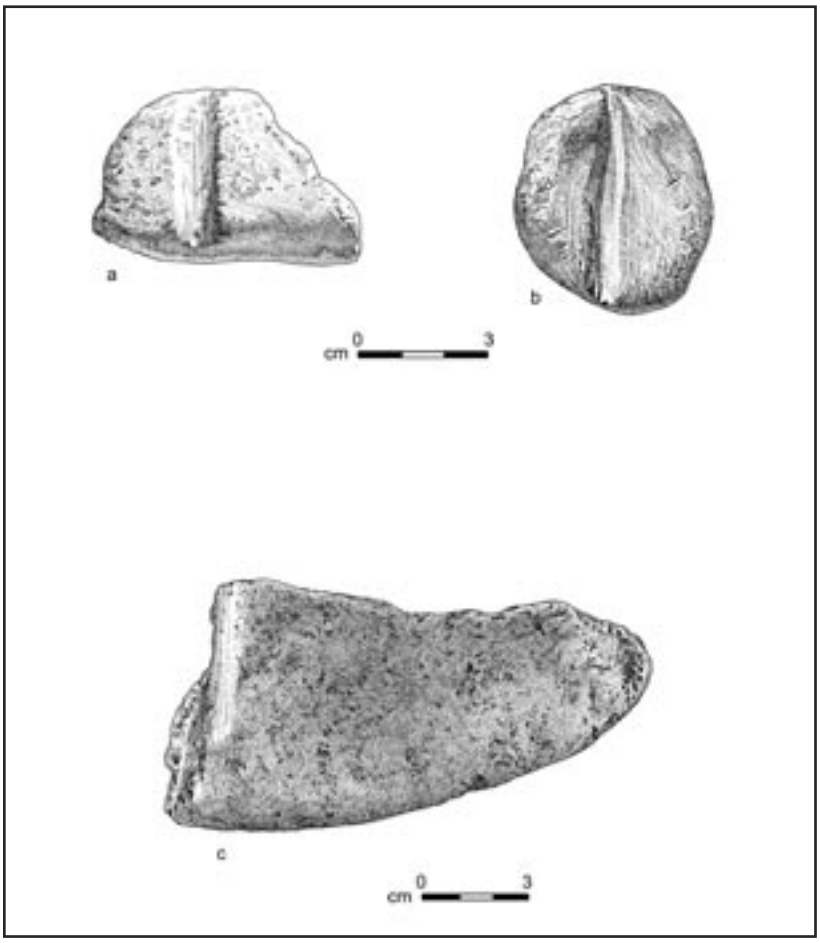


Figure 4. Mortuary/mourning area associated artifacts. (a) Inv. No. 03000B67A, single groove, micaceous steatite shaft straightener; (b) Inv. No. 03000C2B5, serpentine artifact possibly used to abrade and/or polish bone tools, "dorsal" face shown; (c) Inv. No. 030005D45,single groove, micaceous steatite shaft straightener.

U-shaped groove with moderate use-wear, 6.4 mm deep, was worn on the convex surface of the vessel exterior. The post-depositional dulling on the sherd's edges suggest that the object was lost or discarded long before it was picked up and employed as a straightener.

Burial Feature 271 consisted of a single primary inhumation (semi-flexed) and isolated skeletal remains of at least four additional individuals all within disturbed matrix. The primary burial was that of a young adult, about 20-24 years old; sex was indeterminate. The straightener (Figure 2a) was found within a concentration of burned seeds just 7.5 cm from the splanchnocranium, and a large steatite *olla* sat just above the neurocranium. For the Gabrielino, seeds were symbols for fertility/fecundity (e.g., Heizer 1968:26; see also Koerper 2006a:116).

On the northwestern periphery of the site in excavation unit 324, which was far away from any burial, a fragment of a steatite shaft straightener (Figure 2b) with two grooves was recovered. The piece was fractured across the U-shaped groove which was carved perpendicular to a V-shaped groove. Fire blackening

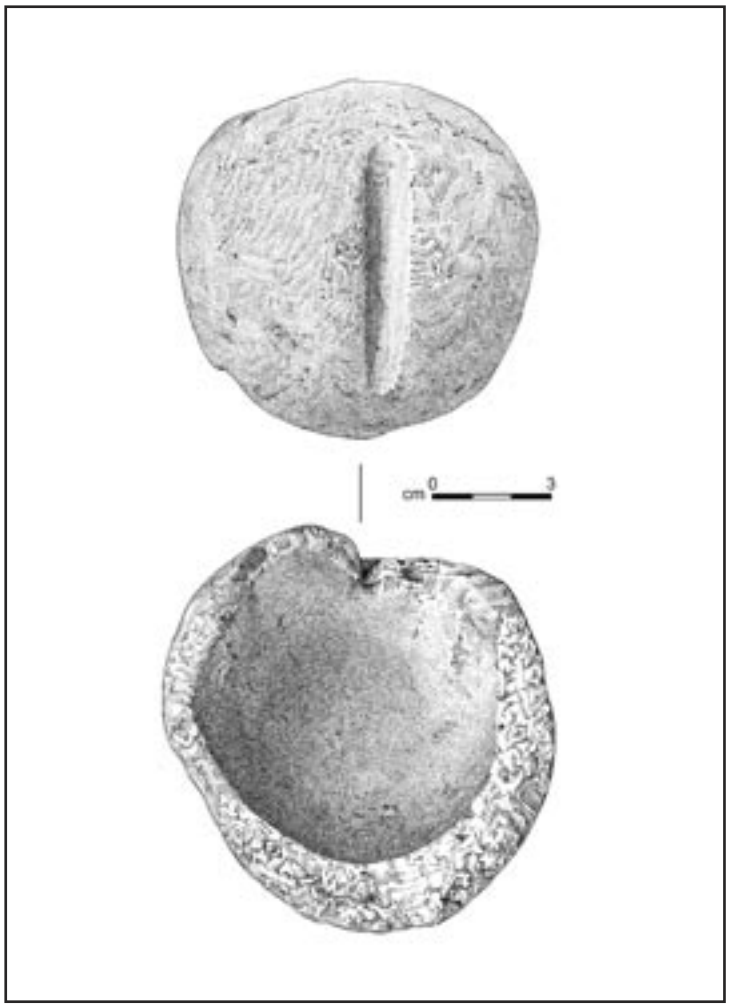


Figure 5. Micaceous steatite cup (tamya-mal?) with straightener-like groove on its base; Inv. No. 030026BC3, from CA-LAN-211.

was observed in the U-shaped groove indicating that it was probably used as a straightener.

A plano-convex gneiss shaft straightener was among the objects found in Burial Feature 60 (Figure 2c). On the dorsal face of this gneiss straightener, there are multiple parallel V-shaped incisions running perpendicular to and terminating at the central U-shaped groove. The object exhibits a black luster and fire spalls from repeated heating.

Burial Feature 60 consisted of a single primary inhumation (semi-flexed) and isolated bone of at least one additional individual. The primary burial was that of a 20-30 year old person, more likely male than female. The straightener (Figure 2c) was discovered partially beneath the proximal right femur and right foot. A red rhyolite tubular pipe was located directly anterior to the abdominal area with one end above the left hip. Ten *Olivella* disk beads were found immediately over the right orbit, and many other beads, including 55 glass specimens, were recovered from the feature matrix.

Incised designs in a variety of patterns are not rare for grooved shaft straighteners (see also Figures 3b, 6b, 7c, 8c, 8d), and several explanations have been offered for the phenomenon. Some scholars have suggested

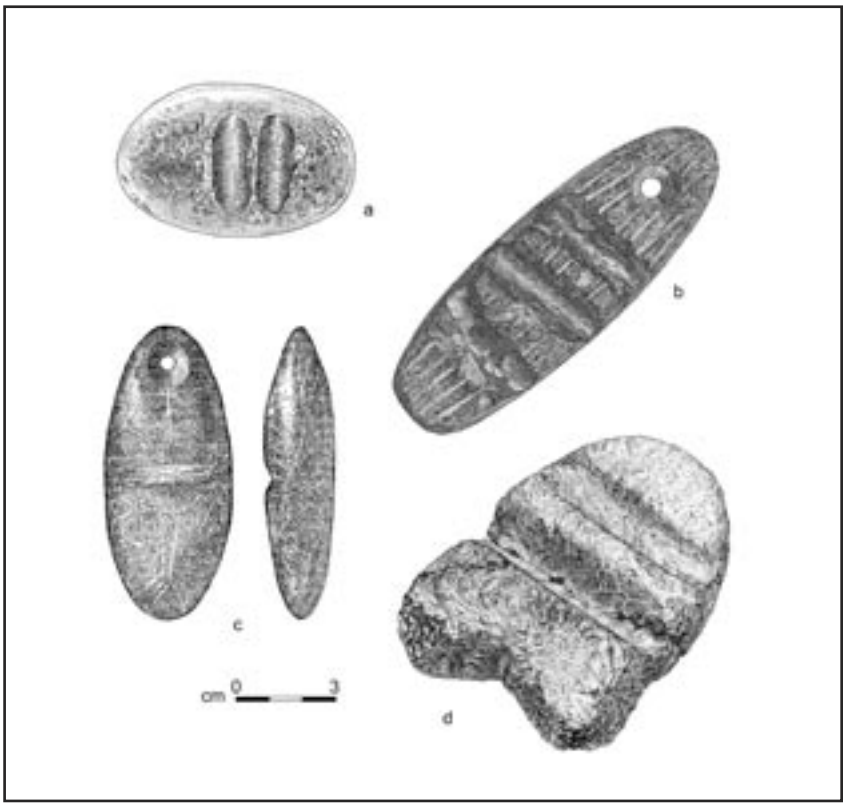


Figure 6. Transversely grooved artifacts. (a) Chumash, soap-stone; after Hudson and Blackburn (1987:110, Figure 416-7); (b) CA-ORA-244, soapstone; see Cottrell and Del Chario (1984:42, Figure 18, 44); (c) Chumash, soapstone; reproduced from Abbott (1879a:200, Figure 71, 72); (d) CA-ORA-855, steatite.

the designs were used for pyrography (e.g., Drucker 1937a:16; Driver 1937:71-72; Aginsky 1943:410). Gifford and Schenck (1926:67) offered the possibility that incised parallel lines gave a "file-like" look, and thus it was more likely that they had "been of service in abrading arrows during the straightening process," an interpretation they favored over decoration. For another specimen, which appeared to be an unfinished straightener, they noted its "roughening diagonal cross-hatching." Given that the vast majority of shaft straighteners were crafted of soft stone, an abrading function makes little sense.

Polk (1972:12) offered that the relatively flat surface of a shaft straightener invites incising, and that the designs perhaps had "religious significance," connecting possibly to hunting magic. Interestingly, hunting magic was alluded to by Koerper (1985:36) in connection with the micaceous steatite shaft straightener of Figure 6d, which apparently was fashioned to look like an arrow projectile point. Koerper writes, "The function of the object obviously supplied some inspiration for its arrow point shape, but perhaps an imitative principle was employed to guarantee success of the object's utilitarian purpose or to impart extranatural qualities to the finished shaft."

Bean (1978:579) entertains the idea that the incised lines atop a straightener indicated ownership and held magical connotations. Bean notes that he consulted Kroeber on these points, but a check of Kroeber (1908:53-54) reveals altogether different information

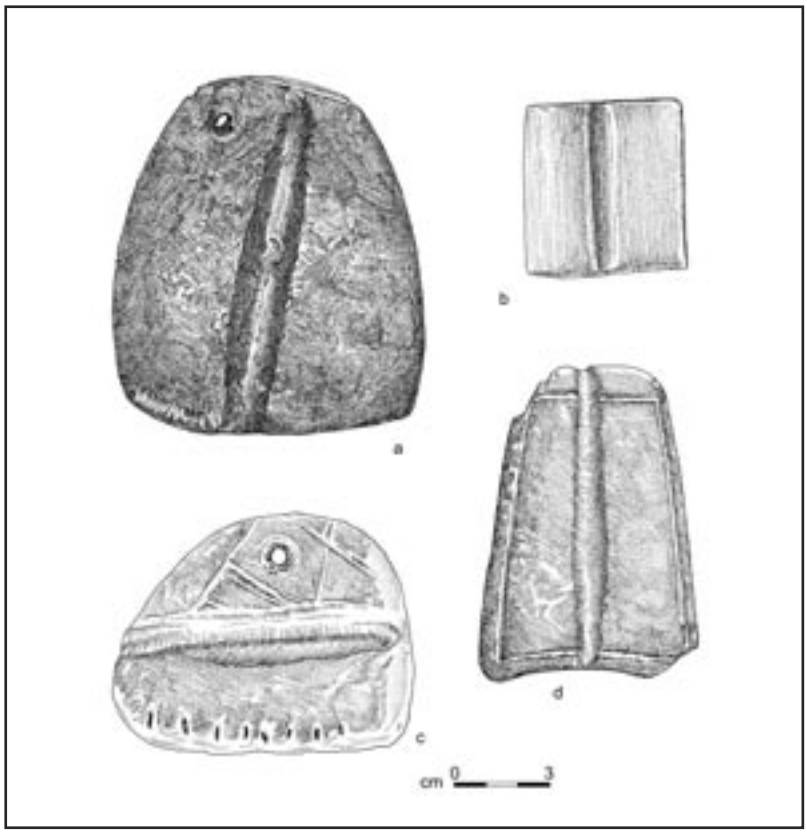


Figure 7. Unusual longitudinally grooved steatite artifacts. (a) Chumash, *muwu,* Wubben collection, after Hudson and Blackburn 1987:110, Figure 416-6); (b) coastal southern California, American Museum of Natural History; after Hudson and Blackburn (1987: 109, Figure 416-4); (c) Diegueño, after Polk (1972:11, Figure 4a); (d) San Nicolas Island, Musée de l'Homme, after Hudson and Blackburn (1987:109, Figure 416-2).

(see below). Parenthetically, Parkman (1985:36-37) stated that a crosshatch of lines on straighteners gives "hint at an ideological nature."

An almost complete steatite shaft straightener was associated with Burial Feature 38 (Figure 3a). The straightener is blackened and fire-cracked with a relict break in one corner. The edges and other three corners of the flat, rectangular object have been rounded.

Of special note here is the low longitudinal ridge (2.1 mm high) coursing at right angles to the transverse groove. Kroeber (1908:53-54) was told by an old Cahuilla man that this kind of ridge served to bend cane arrows at their joints. After the stone was heated, according to the informant, the joint was set directly on the ridge. Kroeber had noted similar straighteners but with the longitudinal ridge so rudimentary that he was doubtful that it had any real purpose. He further cited other grooved straighteners lacking a ridge but in its place only two narrow grooves or scratches "that mark its place and can have had little purpose other than ornamentation or the following of custom" (Kroeber 1908:54). The LAN-62 artifact of Figure 3b, which was not burial associated, is one such example.

Burial Feature 38 consisted of two primary individuals and isolated human remains of at least three

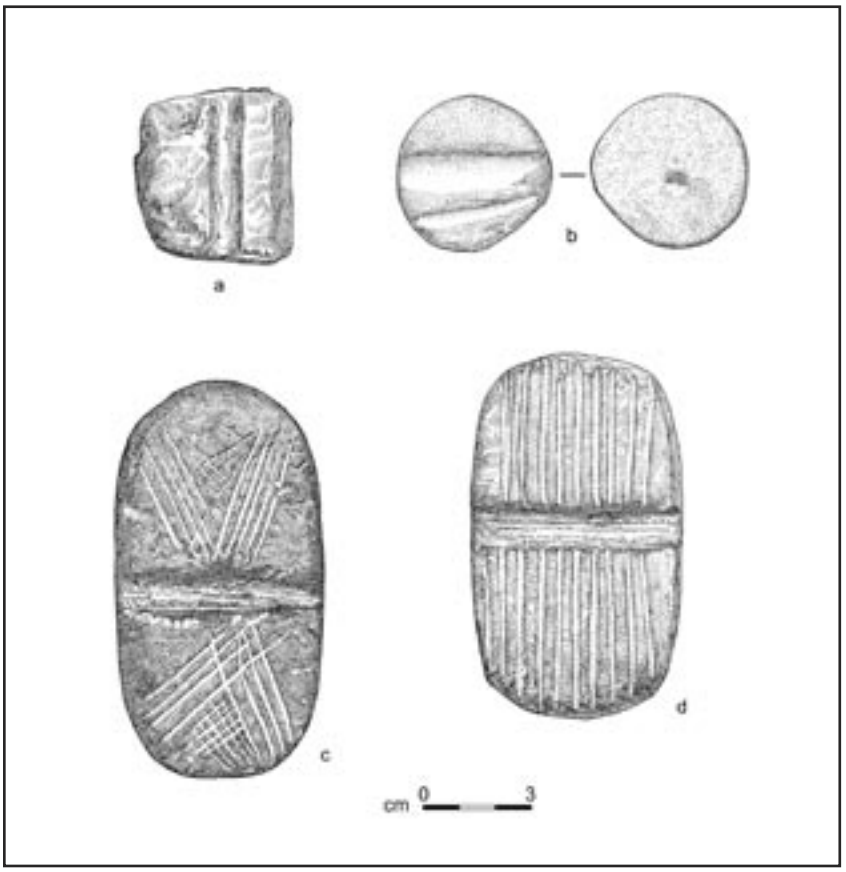


Figure 8. Grooved artifacts. (a) Chumash, *muwu,* Wubben collection, after Hudson and Blackburn (1987:110, 416-6); (b) CA-ORA-855, San Juan Capistrano; (c) Diegueño, after Polk (1972:11, Figure 4d); (d) Diegueño, after Polk (1972:11, Figure 4b).

additional deceased. The burial pits for the primary individuals were distinct, separated from one another by an upright flat piece of whale bone. Numerous and varied mortuary furniture accompanied each primary inhumation, a 20-30 year old, possibly female person, who was interred semi-flexed, and a 20-30 year old, fully-flexed person of indeterminate sex.

The artifact of Figure 3a was found with the fully-flexed skeletal remains. Other grave goods included shell beads, eight fragmented vessels, three ground stone pendants, a fragmented pestle, a lanceolate biface, a worked bone pin, and three fragments of unidentified metal.

A steatite shaft straightener was recovered from unit 174 in the southern portion of the burial ground (Figure 3b). It was not directly associated with a burial, but three burials were in this unit. A pair of 0.6 mm deep V-shaped longitudinal incisions runs parallel to each other and perpendicular to the central transverse groove. Likely made from a recycled comal fragment, a biconical hole is drilled near the midline of one end. The large size of the hole (9.8 to 16.5 mm in diameter) suggests that it was more than purely decorative. It is 17.2 mm long, drilled at an angle, and exhibits indentations on opposite edges of the perforation on the dorsal face suggesting possible use as a lever to bend shafts (Cosner 1956:300; Mason

1905:92) but more likely the means of lifting the heated straightener out of the fire.

Nearby, Burial Feature 112 yielded a palm-sized steatite object resembling a small mortar or cup with a carved U-shaped groove that intersects a raised ridge on its exterior surface (Figure 3c). It possibly served as a "little *tamyush*," or *tamya-mal*, an artifact type that reportedly served as a paint mortar (e.g., Sparkman 1908:207; Kroeber 1925:653; True 1954:70) or as a Datura cup (see DuBois 1905:623; Waterman 1910:344, Plate 21; Hudson and Blackburn 1986:291-292). The groove offers the possibility that this unusual object had a shaft straightener function. Perhaps the artifact had been strictly symbolic, communicating a life-force symbology through bringing together two kinds of female imagery.

Burial Feature 112 consisted of a cluster of skeletal elements representing at least six individuals. Three sub-adults and three young adults are reported. Mortuary offerings could not confidently be attributed to any single individual. In addition to the unusual artifact of Figure 3c, the feature matrix included nearly 2,350 glass beads, an edge modified flake, a Cottonwood Triangular projectile point, three abalone shells, a metal "skeleton" key, a copper fastener, a perforated steatite disk, a spatulate shaped sandstone object, a redrilled steatite comal fragment, and a variety of shell beads.

A find of similar design is illustrated in Figure 5. It was excavated from nearby LAN-211, but it apparently was not a grave good.

These kinds of oddities (vessel/cup-straightener-like combination), it would seem, had previously been documented. Abbott (1879:200-201) describes, but unfortunately does not illustrate, three specimens collected by Paul Schumacher from Santa Catalina Island. Two Peabody Museum specimens (P.M. 13332 and P.M. 14797), Abbott tells us, were fashioned by cutting a groove across the underside of "irregularly-shaped little vessels of steatite." He surmised each must have served a double purpose. Another specimen (P.M. 13414) reportedly exhibits a deep groove across one surface while at the opposite surface there is "roughly cut out" the form of a "small cup about 1 inch deep and 2 inches in diameter" (Abbott 1897:201).

Burial Feature 282 included a shaft straightener made from a recycled steatite vessel sherd (Figure 4a). The broken edges of the sherd are significantly dulled. A U-shaped groove in the top face is deep. Drops of asphaltum are concentrated mostly on the top face.

Three adult individuals were associated with Burial Feature 282. The primary inhumation was that of a fully flexed male between the ages of 20 and 30, who had been buried with a strand of glass beads beneath his head. The other two persons were represented only by isolated crania. The grooved straightener could not be associated with any of the three individuals. Other burial fill artifacts included shell beads, worked bone, a Cottonwood Triangular arrow point, a chopper, an anvil with asphaltum splatter, and a mano.

A shaft straightener made on a recycled steatite comal fragment (Figure 4c) was found in a non-burial feature, Feature 331, unit 717. A U-shaped groove 7.4 mm deep sits at one edge of the convex face, which is fire-blackened either from use as a comal or subsequently as a shaft straightener.

Feature 331 is located within what is probably a mourning ceremony enclosure, less than four meters away from several burials. The feature is characterized especially by the presence of metate and vessel fragments and many pieces of fire-affected rock. An ochre specimen was one of the many other artifacts.

Other Grooved Straighteners or Straightener-like Artifacts in Death Rite Settings

Abbott (1879:200-201), in discussing Schumacher's Santa Catalina collecting on behalf of the Peabody Museum, notes 16 mostly steatite grooved implements that derived from the island's shellheaps and graves. Most were arrow shaft straighteners, but unfortunately, there is no indication from Abbott regarding just which and how many specimens came out of burials.

Susan Haskell, Curatorial Associate at Harvard's Peabody Museum of Archaeology and Ethnology, reported to us (personal communication, 2007) that two of the Catalina specimens exhibiting the morphological attributes of transversely grooved shaft straighteners were from graves. The largest (P.M. 13288) is 20.2 cm long by 7.4 cm wide. Its extreme size raises the suspicion that this single grooved artifact had perhaps not been a utilitarian item, but rather had been crafted for another employment, perhaps ritual. Abbott (1879:200) noted that another similarly shaped example (P.M. 13388), only slightly smaller, had a hole for suspension. Yet another greatly oversized, grooved specimen (P.M. 13428) is perforated.

Abbott (1879:201) also reports an oval, water rounded pebble of hard sandstone with a rough-cut groove across its center from Catalina Island (P.M. 13170). Superficially, it is a passable mimic of a straightener, not just in shape but also size (12.1 cm x 5.0 cm). Abbott points out the inappropriateness of the material and groove shape for efficient heating of a shaft, and so proposes that its proper use may have been for rubbing articles of bone and shell. To this we would suggest the possible function of roughening a core along a striking platform to facilitate production of flakes or blades. Whatever the original intent, either an easy mimic of a shaft straightener for ritual or for some utilitarian purpose, the most important observation is that specimen 13170 is grooved and that its final disposition was in a grave.

Notes made by Ralph Glidden in 1920 and presently archived at the Catalina Island Museum document two burials discovered at Lorenzo Camp, Santa Catalina Island (Cameron 1990:120). One burial had a "smoother" on its breast, and the other had a "smoother" by the hips. These smoothers were possibly grooved shaft straighteners.

In 1883, Barnard collected a three-groove steatite shaft straightener, purportedly from a grave at Mission Santa Barbara (Hudson and Blackburn 1987:108, 109, Figure 416-3). There is a well-executed, cross-hatched design on part of the dorsal face of this object.

A steatite shaft straightener from Santa Rosa Island, while not directly associated with a burial, was recovered from dirt atop some graves (Jones 1956:228, 247, Plate 98a). The artifact had a single groove and was irregularly shaped. It also possessed a hole, presumably for fishing the object out of a fire pit.

Campbell Grant described a large collection of Chumash artifacts pot-hunted in the 1920s and 1930 from dry caves in the Sierra Madre Mountains, which are in Chumash territory. This collection is presently curated at the Santa Barbara Museum of Natural History. One of the artifacts is a greenish-black steatite shaft straightener recovered within a burial area (Grant 1964:16, 32, Plate 8b).

Edwin Walker's (1947) report on excavations at a Yokuts burial ground at Elk Hills in Kern County briefly noted two shaft straighteners recovered from graves. One specimen was from the eastern part of the cemetery that was devoid of historical material derived from whites, and the other was from the western part of the cemetery where the mortuary offerings included thousands of glass beads, European made chinaware, and many metal objects including "Phoenix" brass buttons from the reign of Emperor Henri Chistophe of Haiti.

In 1970, True reported on his investigations of a Late Prehistoric period complex at Cuyamaca Rancho State Park in San Diego County. He was struck by the contrast between the relative infrequency of finds of grooved arrow straighteners for most of southern California versus the abundant discoveries of the tool in Tipai territory, especially the area stretching from east of and through Cuyamaca territory and continuing coastward. Nearly 200 grooved straighteners are documented from the San Diego Museum of Man excavations at a main village (CA-SDI-913) in the Cuyamaca region (True 1970:49). True shared his intuition that some straighteners had possibly been manufactured "especially to be included as grave goods." He cites specimens that are "unusual," that is, appearing nonutilitarian, and also the recovery of miniature shaft straighteners (see True 1970:92, Plate 6, nos. 6 and 21). The grooved objects of True's field research, including the miniatures, were all fashioned from local steatite (Cuyamaca quarry).

True undoubtedly suspected that some kinds of miniaturizations were used in death rites. He reported a minimum of 25 miniature vessels (1970:42), and later in a discussion of tiny ceramic vessels (1970:51), True notes similar artifacts from cremation urns out of a cemetery near Vallecitos (San Diego County) (see Heye 1919:37). In the same discussion, True cites DuBois who observed that in the Diegueño Fiesta of the Images, two tiny decorated *ollas* (one containing food and the other water) were placed in a miniature carrying net and hung around the neck of the image representing the deceased person (DuBois 1905:626-627). This image would be burned on the last night of the ceremony, along with offerings of baskets, clothing, etc.[2]

A "Steatite Arrow Straightener" from Bowers Cave

Beyond mortuary evidence, there are additional data to indicate that grooved shaft straighteners or mimics of such had functioned in ritual activities. One case in point is a large fragment of a three-grooved, "loaf" shaped steatite straightener with decorative striations, including a crisscross pattern, which was retrieved from Bowers Cave, Los Angeles County.

Bowers Cave is one of the most remarkable sacred spaces in California in terms of the variety and preservation of portable objects relating to magico-religious practice. This repository was probably a Chumash site, although Aliklik affiliation is not ruled out (see Bowers 1885a, 1885b; van Valkenburgh 1952; Elsasser and Heizer 1963). When the cave was found by relic collectors searching the San Martin Mountains, its treasure trove included coiled baskets (9) of several types (Elsasser and Heizer 1963:4-13, Plates 1-4; see also Mason 1904: Plate 201). This aggregate of ceremonial items was referred to as the "basket cache," even though there were also 33 feathered bands, 45 deer tibia whistles, 12 complete and two fragmentary bull roarers (see also Heizer 1960), a *Haliotis* ring pendant, a wooden "dagger," four sun disks (see also Henshaw 1887:29), a large (21.4 cm long) wooden "hook," and the incomplete shaft straightener. Elsasser and Heizer (1963:29-31) also note five items (an abalone cup and four antler "wedges or gouges") that "were found during excavation of the infilling of the cave and are therefore probably not associated with the basket cache itself."

Among the varied items Elsasser and Heizer found four kinds of things to be problematic in terms of functional assessments. The wooden "dagger" (1963:28, Figure 4d) presents an enigma, but the two scholars temper their weapon interpretation by pointing out that the object was made of the same kind of wood as the bull-roarers and perhaps had originally been intended as a whirring board. However, it is far more likely to have been a sacred wand. While they refer to what are assuredly sun disks as "stone clubs," they at least correctly realize that their purpose had been ceremonial.

Elsasser and Heizer (1963:28-29) write that it was conceivable that the wooden "hook" served a ceremonial purpose. They note that if one views the specimen in the upside down position, it will be seen to bear a slight resemblance to the smaller steatite specimens which have been found in burial associations in the Santa Barbara region. Their reference is to the birdstones (a.k.a. pelican stones or hook stones) that are familiar to those who study the Chumash and Gabrielino cultures. Birdstones were ceremonial, and they were probably dimorphic sexual symbols (see Koerper and Labbé 1987, 1989). It is possible that birdstones, the majority crafted of steatite, had been modeled on hooks of some sort that functioned in food procurement activities in maritime environments.

The major enigma for Elsasser and Heizer was the single piece steatite arrow straightener. Against the varied "basket cache" objects that served ritual purposes, they opine that the grooved item "seems rather out of place...because one cannot easily assign it a ceremonial function" (1963:30). With the present study, it no longer seems "out of place."

Possible Use in Children's Naming Ceremonies

Citing True's (1970:59, Notes 2 and 3) personal communication (1968) from Shipek, Polk (1972:13) states that Shipek reported miniature straighteners being received by Diegueño children at their naming ceremonies. For the record, Shipek's communication as reported by True did not specifically mention the grooved straightener type, but it is obvious that True would have thought it possible that tiny straighteners might have been within the inventory of "miniatures of the implements they would later use as adults" (1970:59). Such kinds of miniaturizations are termed "toy implements" (see Hudson and Blackburn 1986:433-434). From information previously compiled on toy implements (Koerper and Gust 2008), it would not be surprising to learn that such were made for boys, but we are unaware of any definitive ethnographic statement to that effect.

A Chumash Mythological Reference to a Shaft Straightener

Narrative 15 in *December's Child* (Blackburn 1975:104-112) recounts some of the adventures of Chumash culture heroes Little Thunder and Little Fog. In one of their close calls with death, the pair encountered a malevolent species of supernatural animal, whose mouth, oddly enough, was positioned at the end of her tail. The mouth was capable of giving a poisonous sting, not unlike that of a rattlesnake. Little Thunder answered the threat by pulling an arrow shaft straightener from a feathered banner worn about his head, and thrusting it at the creature's mouth; he broke off her teeth, killing the monster. Feathered head bands were no ordinary decoration, but rather they and other sorts of feathered banners were ceremonial in nature (e.g., Henshaw 1887:31; Harrington 1942:17; Hewes 1952:151; Hudson and Blackburn 1985:169-173).

Odd porterage in feathered wraps, application toward slaying a supernatural being, and incident presentation in mythology together bespeak magical imagery for the grooved straightener. Clearly, then, a sacred dimension to the shaft straightener is reflected in the story involving Little Thunder and Little Fog. The association of these two kinds of artifacts in Narrative 15 recalls the shaft straightener found along with feathered head bands in the Bowers Cave "basket cache."

A Shaft Straightener in a Luiseño Mythological Account

An account of events in one version of Luiseño creation mythology (DuBois 1908:138-148) seems to cast a shaft straightener as a power object. The narrative

tells of Deer who was compelled to become a major source of food. Significantly, as will be explained later, Deer's fate followed closely on the world's first occurrence of two phenomena, death and cannibalism. Deer's story plays out within the period of crisis precipitated by the demise and resurrection of Wiyot as Moon (see also DuBois 1904:185, 1906:57-58, 60, 1908:136; White 1957:9, 1963:142). Unfortunately, the semi-divine culture hero Wiyot had neither passed on the knowledge-power that explained how he had made clay nourishing for the "first people," nor how he had managed to expand living space indefinitely. Since clay had been the only food known to the "first people," they anticipated mass starvation. Beyond this food challenge, there was the related problem of land now being a finite resource. How were the "first people" going to accommodate the ongoing reproduction of beings?

So the "first people" came together in a Great Conclave seeking solutions, ones that would forever entwine life forces (fertility/fecundity/increase) with death. There were new circumstances to consider, to wit, the recent establishment of death and resurrection (Wiyot's demise and subsequent transformation into Moon), and flesh eating that had also just appeared, specifically with Coyote's theft and consumption of Wiyot's heart, an act of cannibalism (e.g., DuBois 1906:57, 59-60, 1908:134,146; Kroeber 1906:313-314, 1925:637; White 1963:141-142; see also Boscana 1933:28 [flesh from stomach, not from heart], and Harrington 1934:13 [bone from shoulder blade and flesh from shoulder]).

Shipek offers a partial summary regarding the Great Conclave, writing:

> All of the first people gathered to determine spatial arrangements for living (in the air, on the ground, and under it) and how to feed themselves. They decided upon eating each other and debated which would be predator and which prey. The contests were determined in favor of those which had the most power, or knowledge, about the parts of the body or potential weapons. The creatures with more knowledge preyed upon those with less. [Shipek 1977:34]

Shipek neglects to mention that the knowledge-power contests involved not just naming of body parts and hunting weaponry but also of sacred things. These magico-religious items include sacred stones (*wiala*, crystals), headdress feathers, tobacco, and eagle feather skirts (DuBois 1908:136, 147). The shaft straightener, as will be explained below, probably belongs in this list.

The crisis solutions also included death for virtually all beings (Eagle excepted), not just the prey species, and resurrection was factored into the equation (White 1963:141-142). White was especially emphatic about cannibalism, "one of the most important solutions."

This brings us back to Deer, a central participant in the cosmological stories involving the aforementioned power struggles, the outcomes of which determined who would be the eaters and who would be the eaten. In White's (1957:8-10, 1963:140-142) version of cosmogony, he describes circumstances by which Deer became prey. He writes,

> 'Naming' things apparently constituted one form of sorcery, because this is the means used by Deer Fly in the cosmological power struggle. Each organ of Deer was named, and in each instance Deer 'knew' (*ayelkwi* [knowledge-power]) about it, except the gall bladder; and in this area of *ayelkwi* Deer was at the mercy of those who did 'know.' 'Naming' it [by Deer Fly] therefore defeated Deer, and to this day the Deer Fly will lead a Luiseño to his quarry. [White 1963:142]

DuBois provided four creation versions, each with some attention to Deer. One story is comparatively prosaic, specifically without any "naming," wherein lion simply fell upon and killed Deer (DuBois 1906:58). This made the immediate point that Deer was hereafter to be prey, not predator. In a another version (DuBois 1906:60), also sans "naming," Wiyot, just before he died, simply told the "people" that they could kill and eat Deer (see also DuBois 1904:185). Prior to this time they had killed nothing for sustenance. Parenthetically, Wiyot also directed the "first people" to take Deer's small leg bones to manufacture basketry awls, thus instituting basketry weaving, this to be the occupation of Spider.

Of the other two versions from DuBois (1908:136, 147), one involves naming and the other involves a functional equivalent of naming. The version elicited from Salvador Cuevas identifies Deer as a powerful shaman who balked at becoming a source of food energy. The "people" then engaged Deer in a sorcery contest, but instead of naming body parts, they set objects down on the ground. They informed Deer that he would be dispatched using a particular object. To begin, *wiala*, or sacred stones (e.g., large crystals) were put on the ground, but Deer responded that he too possessed crystals and so would not be killed. The "people" then laid down eagle feathered skirts, but this would not work, for as Deer informed them, he too had feathered skirts. The list goes on to include tobacco, cane for manufacturing arrows, and finally arrows with stone projectile points. When confronted with the projectile tipped arrows, Deer gave up, had nothing more to say, and ever since, deer are dispatched with bow and arrow. What is especially noteworthy here is that at least the first three things placed on the ground were not body parts or weapons, but rather were things regarded by regional peoples as objects important in ritual and ceremony.

In DuBois' final version (1908:138-148), elicited from Lucario Cuevish, when Deer objected to becoming a prey target, the "first people" proceeded to name things. When informed that he might be killed with sacred stones, Deer responded with the impossibility of such, for he too possessed sacred stones. Next, an arrow shaft straightener was named, and after, headdress feathers. The listing continues with the last named item being feathers used to fletch arrows, and it is here that Deer gave up, thus sealing his fate as prey.

Listing of the stone arrow shaft straightener between two definite power objects, *wiala* and headdress feathers (DuBois 1908:147) would seem to implicate the artifact among the inventory of power objects. Taking all three of these top of the list artifacts to be sacred, we see a close parallel to the Salvador Cuevas version, wherein the first three items are sacred paraphernalia – *wiala*, eagle feather skirts, and tobacco.

Power objects of the portable cosmos are shamanic items. Deer's possession of the straightener is not inconsistent with the idea that the artifact probably had a sacred dimension since Deer was explicitly stated to be "a powerful shaman," at least in the Cuevas version (DuBois 1908:136). Given that "naming" is the stuff of sorcery and that Deer held his own through the greater parts of the contests (DuBois 1908:136, 147; White 1963:142), it is reasonable to assume that Deer was generally accorded shamanic status. Parenthetically, in southern California and elsewhere, shamans contested one another to determine which practitioner controlled the more powerful medicine.

Discussion

Theoretical Orientation

"Sexualization-sacralization" is a descriptive label for a hypothesized process of culture change (Koerper 2006a, 2006b, 2007). The concept purports to help researchers identify cognitive, behavioral, and environmental factors that account for the evolvements of certain talismans or effigies. These effigies and their

meanings derive from particular types of mundane tools and their imageries. Such tools are ones mostly associated directly, but in fewer cases indirectly, with either food procurement or food processing activities. Such tools are easily sexualized owing to their morphologies and/or the actions of their employments.

The associative mind reconfigures these sexualizations to create symbologies reflecting thematics such as fertility/fecundity/increase and/or male-female dualism. Clearly, these life force communications become sacralized, as witnessed in the fact that their conveyances include effigies whose major roles play out in contexts of sacred thought and ritual behavior. Evidence for these roles is documented in the archaeological record as when the artifacts are recovered from magico-religious caches and/or mortuary settings, and the ethnological record also informs on their roles in magico-religious venues.

The effigies were normally crafted to mimic food energy procurement or processing equipment. A mundane tool may itself be converted to a sacred purpose. The effigies, then, are sacred alter-egos to the mundane tools. Application of the sexualization-sacralization concept to certain artifact types in the southern California portable cosmos indicates some shared patterning in their aetiologies (e.g., Koerper 2006a, 2006b, 2007).

To illustrate sexualization, consider the mortar/bowl and its mate, the pestle. Virtually all pestles are, *ipso facto*, phallic symbols, but as if the message were not clear, in coastal southern California, priapic enhancements were frequently crafted onto the tool. Also, regionally, if the round opening of a mortar/bowl is too subtle a vulvar symbol, feminine enhancement might be accomplished by gluing cowrie shell outer lip insets onto the rim of a bowl (Koerper 2001, 2007:89, 91). Beyond artifact design, the dynamics inherent in mortar and pestle in congress convey a sexual double entendre. Sexualization paves the way for transformation of mortars/bowls and pestles into ritual mortars/bowls and sacred pestles or pestle-like artifacts.

Now consider the morphology of the digging stick and its weight, that is, a straight, hard shaft penetrating a round object through its round hole. The digging stick also penetrates the ground, usually to extract food energy, wild plants such as tubers and roots. The rhythmic kinetics to retrieve nature's bounty also creates a sexual double entendre. The weight stone easily becomes a vulvar referent and is now poised to transmutate into the sacred donut stone (Koerper 2006a).

Furthermore, these tools are also positioned for transformations leading to sacred status since they offer an easy connect with food supply concerns and food stress anxiety, issues grounded in nature's bounty and the essential duality in nature. Gravel's words are instructive:

> ...we seem to have alienated ourselves so much from nature that when we look at the symbolism of yesteryear, we fail to understand how critically important the duality of fertility was to our predecessors...ancient fertility symbols are almost always dual representations, that is, they symbolize both the male and female principles. Even when one only is emphasized, the other is usually implied. Not only is the duality itself critical, but so is the fact that, for thousands of years, people have found it essential to express this duality in their fertility symbols....The sheer abundance of double symbols is overwhelming, but they must be understood for what they are: the union of the male and female principles, which in reproducing also produce the means whereby people survive. It will explain also the abysmal anxiety of people faced with non-production. Non-production

> means death and starvation. Hence the collective obsession with symbols of fertility. [Gravel 1995:63-64]

The aforementioned sexualization generates imagery that might easily and directly associate with life force thematics (i.e., fertility/fecundity and/or male/female dualism). It is fertility/fecundity and male/female duality that receive the imprimatur for sacralization. In a similar vain, Gravel is again informative:

> The most obvious and most universal symbol of fertility is still the fact of reproduction, whether manifested in coitus or parturition (childbirth). In turn, the most obvious symbols of coitus are the sexual organs....Given the fact that people living close to nature understand the double nature of fecundity, the two symbols generally appear together, because if one is to have "life," one has to have both components of fertility: male and female....it is fertility that is sacralized and not the sex act. [Gravel 1995:56]

As previously noted, the artifactual manifestations of many regional life-force communications are often modeled on the mundane tools that inspired the sexualization. Physical distinctions between the profane artifact type versus the sacred alter-ego are often witnessed, with reference to the sacred object, in one or more of the following: modified design elements; more careful attention to symmetry; special investment in surface finish; use of unusual and/or more expensive manufacturing materials. However, a mundane tool could be tapped to serve in a ritual capacity, the only outward clue to its now sacred status perhaps being the context into which it was discovered, such as a ritual cache or a grave. In some cases, the clue to sacred status could be evidence that the object had been "killed," that is, by punching a hole, say, through its base, or perhaps by purposeful breakage into many pieces.

The LAN-62 artifacts are fundamental to our understanding of the complex life-histories of shaft straighteners because they are from known archaeological contexts. Grave associations merit particular attention since five of the LAN-62 grooved straighteners or straightener-like artifacts were clearly mortuary furniture. One was deposited as part of a probable mourning ceremony. Of the remaining two, one was well within the burial/mourning area.

That death rites might embrace life force symbols is hardly surprising, for the associative mind easily connects the acts of procreating and dying. Burkert's analysis succinctly provides some of the mentalistic landscape underlying the sexualization of death. He observes:

> Sexual reproduction and death are the basic facts of life. Mutually determinant and interwoven, both are acted out in the sacrificial ritual, in the tension between renunciation and fulfillment, destruction and reparation.... Thus ritual itself serves in the process by which the group perpetuates its existence through death. [Burkert 1979:72]

As symbolic expressions of regeneration, cross-culturally, certain kinds of talismans or effigies in funerary ritual help cast death as generator of life (see Geertz 1973; Bloch and Perry 1982; Donovan 1985; Salomon 1991; Arriaza 1995). Juxtapositions of death symbols and life symbols sustain allusions of the awesomeness of supernatural presence, thereby reinforcing belief in eternal life and mitigating the angst occasioned by mortality (see Geertz 1973:110).[3]

For the region under discussion, the interweaving of procreation and death rings familiar, for begetting, dying, resurrection, and nature's food bounty are salient thematics embedded in Luiseño and Juaneño cosmogony. Luiseño creation is generally centered on Wiyot, who is often said to be the last born of

Earth-mother and her consort and brother, Sky; Boscana's versions of creation mythology give greater play to Chinigchinich (see DuBois 1904, 1906, 1908; Kroeber 1906, 1925:637-639; Harrington 1934:10-11; White 1953:569, 574, 1957:8-10, 1963:139-144; Shipek 1977:33-35; Boscana 1978:27-35; see also Waterman 1910). Some knowledge was exclusive to this semi-divine culture hero in certain Luiseño accounts, the most significant concerning how to make clay nourishing and how to expand living space indefinitely to accommodate increasing population (White 1963:141). Wiyot's death, soon followed by his resurrection as Moon in Luiseño belief, meant that clay could no longer be made nourishing and living space would cease to expand. White (1963:141) succinctly summarizes, writing that the Luiseño believed that as Wiyot died, so virtually all beings were required to die. Overcrowding had brought the necessity of death, and this, then, was the price for having offspring. White also noted that the culture hero's resurrection as the moon[4] implies the resurrection of other "people" as stars.

Does material covered in this section have relevance for understanding why any or all of the LAN-62 straightener or straightener-like artifacts found their final dispositions in burial rites, mourning ceremony, or otherwise in consecrated ground? Are there possible insights that might be gained by application of the sexualization-sacralization concept?

Interpretation

Some meanings attaching to burial, cremation, or mourning goods likely rested on associations that considered the deceased's status(es) in life (e.g., gender, occupational, leadership), and ownership of the death rite offerings (e.g., clothing, utensils, hair) (see e.g., Smith and Teggart 1909:29; Hemert-Engert and Teggart 1910:47; Kroeber 1925:860; Bolton 1927:38, 169, 1931:253-254; Strong 1929:passim; Priestly 1937:34; Simpson 1938:41-42, 1961:52; Harrington 1942:38, 1978:191-192; 1986:R106, F219-220, F240-241, cited in McCawley 1996:164; Merriam 1955:84-86; Heizer 1968:42; King 1969:51 1982; Brandes 1970:92; Geiger and Meighan 1976:97-98; Hudson and Underhay 1978:46-48; Martz 1984; Hudson and Blackburn 1986:77-79; Arnold 1987:235; Hollimon 2000; Gamble et al. 2001:194). One of Harrington's informants, incidentally, stated that an arrow shaft straightener might be hung on a grave pole according to the gender (male) of the dead person (Hudson and Blackburn 1986:79).

The associations noted above are not unimportant. Our interpretive efforts, however, are directed at deeper meanings, specifically, we allege, certain symbologies that Native peoples might have attached to the grooved, single piece arrow shaft straighteners and/or mimics of such. What process transmutated the utilitarian artifact type and its imagery, creating an alter-ego with symbologies to recommend dispositions in sacred venues, particularly death rites? Did the symbolism communicate life force imagery, specifically thematics of fertility/fecundity/increase and/or male/female dualism as were purportedly the cases with the bowl/mortar and pestle phenomenon (Koerper 2006b) and with the digging stick weight *qua* donut stone phenomenon (Koerper 2006a)? If so, this would help explain how the grooved shaft straightener or its mimic became candidate for inclusion in and among funerary features. Thus, here would be another case to support the sexualization-sacralization hypothesis. Or we might say "sub-case," since the connection of the grooved shaft straightener with food is only indirect. The tool was not used to procure animal products but rather to help fashion arrows directly involved in food energy captures.

It takes little imagination to understand how a transversely grooved shaft straightener might lend itself to sexualization. For its employment, the tool must first be heated up, after which a long cylindrical object, an arrow shaft, is moved about after insertion

into a groove (e.g., Abbott 1879; Bard 1894:4; Spier 1923:351-352; Gayton 1948a:74; Hudson and Blackburn 1982:114, 1987:106) whose shape is an altogether more convincing visual approximation of the vulvar opening than simply a round hole. The look is even more convincing when the grooves run longitudinally, however, in the vast majority of cases, straightener grooves run transversely. We tentatively suppose that a directional imperative (transverse rather than longitudinal) may follow from the physics of efficiency of heat transference. In the limited instances of longitudinally grooved single piece straighteners with which we are familiar, in plan view two are almost square (Figure 7b, 8a), and two are quasi-triangular (Figure 7a, d). The "triangular" specimens offer the vague suggestion of a pubic triangle. The specimen of Figure 7a exhibits a small hole, possibly for suspension. Of the two square specimens, one is so small (Figure 8a) that the artifact might have been an amulet, or perhaps some sort of toy implement.

To our knowledge, there is no published Native commentary indicating or even just hinting that sexual double entendre attached to the morphology or employment of grooved shaft straighteners. We would be amazed if such imagery had not developed among tribes who possessed the tool.

The archaeological evidence suggests a fit to sacralization. Most immediately, there are direct associations of five LAN-62 grooved stones with graves, and others were found within the funerary/mourning compound. Other mortuary evidence marshaled above indicates that the genre connected with magico-religious practices (e.g., Abbott 1879:200-201; Walker 1947; Jones 1956:228, 247, Plate 98a; Grant 1964:16, 32, Plate 8b; Hudson and Blackburn 1987:108, 109, Figure 416-3). While True (1970:49) offered no direct observation of straighteners in death rites, his observation that some grooved tools appeared unused caused him to suspect a grave good function. Some miniatures might have been fashioned specifically for death rites. The Bowers Cave find (Elsasser and Heizer 1963:29-31), a Chumash myth (Blackburn 1975:104-112), and a Luiseño creation story help argue a case for sacralization.

If the premise is correct, that sexualization-sacralization of the grooved shaft straightener helps account for its embedment in mortuary contexts, then one might anticipate burial associations for other grooved objects of vulvar look that involve a shaft moving through a groove or grooves. LAN-62 Burial Feature 403 offers an excellent example (Figure 4b), an irregularly ovoid, serpentine artifact whose curving longitudinal groove on the dorsal surface possesses the more convincing anatomical likeness when compared against any grooved shaft straightener.

This artifact was manufactured from a natural waterworn serpentine cobble, the majority of whose surfaces remain unmodified. The "dorsal" surface (Figure 4b) displays an ovate concavity that is 36 mm long and 29 mm wide. This concavity had been fashioned with a stone tool, which left many incised linear scrape marks that are about 0.5 mm deep. A V-shaped groove 48 mm long, 11 mm wide, and 8 mm deep longitudinally bisects the concavity and the "dorsal" face. There is some smoothing, even polish, within the groove, the result of running an object back and forth through it. An irregular, linear depression 42 mm long, 13 mm wide, 5 mm deep in the "ventral" face was formed by scraping with a tool, which left many shallow linear scars. Two 4.5 mm wide V-shaped grooves run within this depression and stand out from smaller incisions. Ochre staining was observed on this "ventral" face and adjacent edges.

This kind of tool is probably what is referred to in an observation recorded by Harrington from an anonymous informant. The observation is cited in Hudson and Blackburn (1987:71): "The already sharp tip [of a deer metacarpal] is touched up a little by rubbing it on

a stone to make a perfect needle." A so-called "needle" from a "deer metacarpal" is likely to have been the kind of awl used in basketry manufacture. "Bone shaft polisher" might be a proper taxon for this type.

Burial Feature 403 consists of isolated remains of at least three individuals, two sub-adults and one adult, all of indeterminate sex. Numerous artifacts were found with the feature matrix, but none could be associated with a single individual. In addition to the specimen of Figure 4b, the artifact inventory included a shell disk ornament, two fragments of bone pins, a deer tibia whistle, and 40 shell beads.

Other possible examples of burial associated grooved objects of vulvar look include the previously discussed hard sandstone specimen (P.M. 13170) from a Catalina grave (Abbott 1879:201). Smith and Weymouth (1952:14-15, 25-27) list 19 sandstone and 9 pumice shaft smoothers/abraders from "Site 20" in the Shasta Dam area, and the majority are grave related. All are longitudinally grooved, and thus they may have communicated vulvar imagery more easily than any artifact transversely grooved. The pumice specimen shown in Figure 9a (Smith and Weymouth 1952: Figure 1q) was one of those that had accompanied a burial (Bradshaw [Collections Division Manager, Hearst Museum of Anthropology] personal communication 2007). At the Rose Spring site, CA-INY-372, two shaft smoothers (Figure 9b, c) were unearthed from Burial A (Lanning 1963:248, Plate 5p,q).

Summary and Concluding Remarks

Decades ago, True suspected that some single piece, grooved steatite artifacts had been crafted as mimics

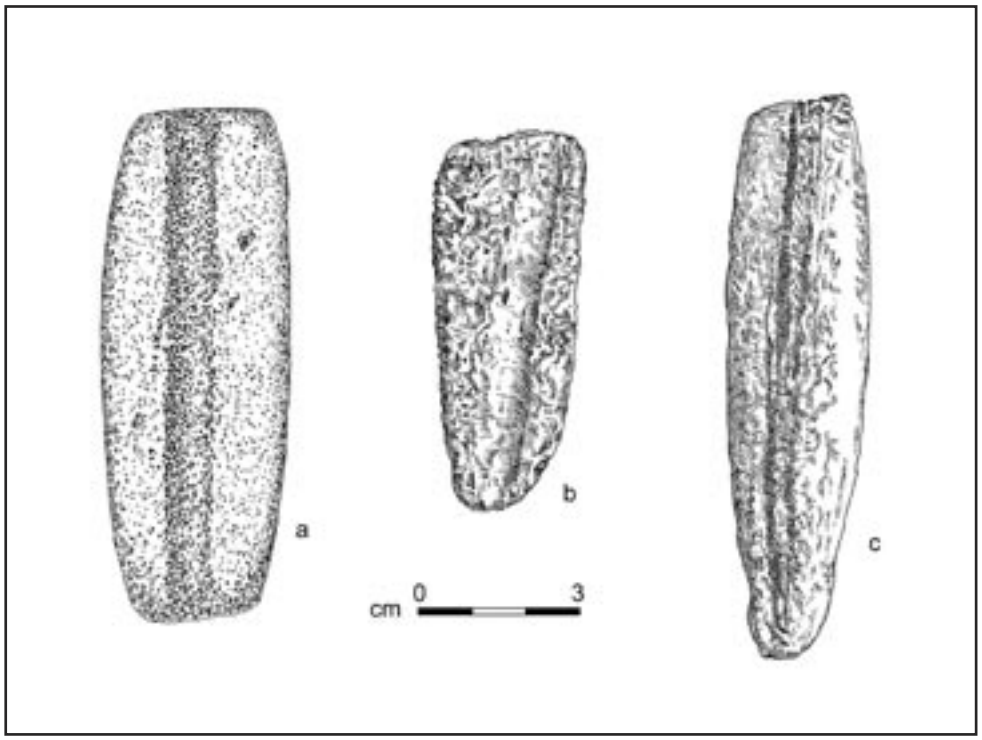


Figure 9. Grave associated pumice shaft smoothers. (a) Shasta Dam area, UCMA 1-62671, after Smith and Weymouth (1952:Figure 1q); (b) CA-INY-372, UCMA 1-187308, after Lanning (1963:319, Plate 5q); (c) CA-INY-372, UCMA 1-187309, after Lanning (1963:319, Plate 5p).

of arrow shaft straighteners for employment in death rites. It was not merely the elevated numbers of the straighteners and/or look-alikes from certain San Diego County sites that piqued his curiosity, for he had also noted "unusual" specimens that appeared never to have functioned in arrow making. Furthermore, there were those miniature versions, too small for utilitarian purpose.

From Yokuts, Chumash, and Gabrielino territories there are well documented cases of grooved steatite artifacts used as mortuary furniture. The most detailed published evidence of such is that contained herein, from the LAN-62 research.

Other information supports the notion that shaft straighteners and/or straightener effigies had been regarded as appropriate for magico-religious roles. From the aforementioned Chumash narrative (Blackburn 1975:Narrative 15, 104-112), recall the association of a shaft straightener with a feathered head band, a ritual object (Henshaw 1887:31; Harrington 1942:17; Hewes 1952:151; Hudson and Blackburn 1985:169-173). Also, in the mythological story, this "straightener" was used by Little Thunder to dispatch an evil monster. Mention of the shaft straightener in Luiseño creation mythology (DuBois 1908:147) also seems to cast the artifact as a power object.

Elsasser and Heizer (1963) had considered whether the incomplete shaft straightener found among the ritual paraphernalia at Bowers Cave had once had a nonutilitarian function. Drawing on their vast knowledge of California ethnology, ethnohistory, and prehistory, the two scholars could not think of any possible ceremonial function; the artifact seemed "rather out of place." We believe that the presence of the specimen among an array of ritual items in a cave setting is prima facie evidence for probable talismanic or otherwise sacred status. Whether or not it had even been part of an arrow manufacturing kit, this artifact was almost certainly *not* "out of place."

Our study offers some thoughts as to how the utilitarian grooved shaft straightener might have transformed, acquiring special meanings applicable to sacred venues, in particular, those having to do with death rituals. The proffered argument posits that out of the grooved straightener type there evolved a sacralized alter-ego, providing regional archaeology with yet another fit to the sexualization-sacralization model. The transformation proceeded from sex-based imagery born of the formal attributes of the shaft straightener coupled with the kinetics of its employments, and abetted by the association of the tool, albeit indirectly, with food procurement. With the achievement of some species of life-force symbology (e.g., fertility/fecundity/increase, male-female dualism, etc.), the artifact became suitable as offering/prop in funerary or possibly mourning ceremonies since life-force communications embedding in death contexts promote celebration of a basic fact of existence, the mutual determinacy of begetting and dying, with the corollary play to a thematic embracing transcendence of mortality. All of this provides comfort during times of loss when existential reflections are unavoidable.

Our interpretation of meanings is not necessarily incompatible with certain orthodox explanations, including that some artifacts in or near graves served to indicate the deceased's gender or other status, or that the deceased had formerly owned the object, or that the tool was intended for employment in the future life. Multivocality is, after all, a recurrent feature of communications in magic, religion, and expressive culture (e.g., Womack 2000:11).

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Notes

1. The common practice is to treat the terms "steatite" and "soapstone" as synonymous. We follow that practice, and our preferred term is "steatite." However, it is worth noting that Rosenthal and Williams (1992:221) draw a distinction; steatite is characterized as composed primarily of talc, but soapstone is "impure talcose" rock "with noticeable amounts of micaceous green chlorite, prismatic green actinolite, and prismatic white anthophyllite or tremolite."

2. True also cites Waterman (1910) in an effort to support his point about miniature things and their occasional associations with mortuary and mourning ceremonies. Here, however, True offers only a careless read of Waterman and undoubtedly a misinterpretation of the nature of certain objects in a particular kind of exchange. To explain, True (1970:51) writes that Waterman "describes a clothes burning wherein 'small jars, baskets, and other little things' are given to the family of the deceased." What Waterman actually wrote was that garments to be burned went together with numerous baskets and other property into the fire and after some singing and dancing and additional contributions of clothing to the burning, any stranger who wanted to make "a little money" would take a long stick to turn over the goods so that all burned better. Waterman (1910:307) wrote that for these efforts, the stranger was rewarded with "small jars, baskets, and other 'little things'" by the relatives of the dead person. References to "small" and "little" do not necessarily denote miniature objects but probably things of sizes that have less material worth than counterparts of larger size (viz., larger jars, larger baskets, and larger things).

3. Further, the apposition of life imagery and death imagery in mortuary ceremony reflects a contrastive association, specifically through opposition rather than inversion. This circumstance abets ease, economy, and clarity at symbolic communications, a desideratum for any venue so emotional as this kind of life crisis rite. As David Whitley (2000:73) succinctly explains, oppositions embrace diametrically opposed elements to foster organization and reduce ambiguity when dealing with a difficult world whose realities break into varied shades of gray. Oppositions allow people to circumnavigate the grays and to instead perceive some aspects of existence in user-friendly simplistic terms of black and white.

4. Boscana related how a resurrection thematic involving Moon played out in Juaneño ritual (Boscana 1978:62; Harrington 1934:12, 47; see also DuBois 1908:135, 148). The Franciscan priest does not connect Wiyot with Moon in his versions of creation mythology. He wrote:

> They also had the custom at the time of the new moon, the first day that the new moon appeared, [that] some old men began to shout, saying: boys, start your moon running! And immediately the youths began to run like crazy men without order or arrangement, and the old men to dance as a sign of joy, saying in their song that even as the moon died and lived again, even so, though they also were to die, they were to live again... [Harrington 1934:47]