

More on Lozenge Stones: A Record from the Cogged Stone Site

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Abstract

Following background discussions regarding the Southern Lozenge stone, a talisman type identified by its lozenge shape (plan view) and lenticular cross section, this study documents 29 such specimens recovered from the Cogged Stone site at upper Bolsa Chica Mesa, Huntington Beach. Distinctions are drawn between lozenges and locally recovered elongate, plummet-like charmstones whose cultural floruit also occurred within the middle Holocene of south central coastal California. Considerations of several other kinds of sex-based symbols in the regional portable cosmos abet the proposition that the Southern Lozenge stone had been crafted to project vulvar imagery in communications revolving on themes of fertility, fecundity, and nature's bounty.

Introduction

Building on previous studies (e.g., Howard and Raab 1993; Macko et al. 2005), Sutton and Koerper (2009) sought to further characterize an interaction sphere linking southern California and the northwestern Great Basin. This phenomenon, which they labeled the "Middle Holocene Western Nexus," included exchanges of material objects and ideas relating to ritual/belief systems. It was proposed (Sutton and Koerper 2009) that these long distance connections occurred between Penutian and Hokan groups during a time of Penutian population movements, events that preceded by many centuries any occupation of southern California by Northern Uto-Aztecan (NUA) groups and that preceded by several millennia any NUA occupation of the northwestern Great Basin.

Among the several material traits were certain objects which in plan view exhibited a lozenge shape and which in cross section showed a lenticular aspect. The identification of this type of artifact with the Western Nexus (Sutton and Koerper 2009) added to a small constellation of artifact types—*Olivella* Grooved Rectangular (OGR) beads (e.g., Howard and Raab 1993); stone spheres ("ball stones," or "stone balls"); and large bifaces (ceremonial/ritual spear projectiles) (see Macko et al. 2005).

Comparisons were drawn between lozenges found in southern California (Sutton and Koerper 2009:12-16) and certain somewhat different lozenge-shaped objects sparingly recorded from northwest Nevada but far more common in northeastern California and southeastern Oregon. It was proposed that there had been a historic connection between what Sutton and Koerper called, respectively, the Southern Lozenge stone and the Northern Lozenge stone. Most specimens of the former style have been recovered in Orange County, several of which were noted and illustrated by Sutton and Koerper (2009).

At the time of the Western Nexus study, an issue of proprietary rights precluded detailed descriptions and illustrations of examples from the Cogged Stone site, or CA-ORA-83 (Figure 1), where the great majority of known Orange County lozenges had been recovered.

Following our Background section, this study provides descriptions of 24 ORA-83 Southern Lozenge stones directly examined by researchers at Scientific Resource Surveys, Inc. (SRS) (Figures 2-5, Table 1) as part of the Bolsa Chica Archaeological Project (BCAP). Also, some descriptive information is presented regarding five Southern Lozenges reported by Herring (1961, 1968) but whose whereabouts are presently unknown. The subsequent Discussion section then addresses chronology, typology, and symbolic meanings. Our essay closes with a summary accompanied by concluding remarks.

Background

The first published example of an ORA-83 Southern Lozenge stone was a specimen recovered by Alike Herring (1961:Figure 1, far right, see also 1968:33).

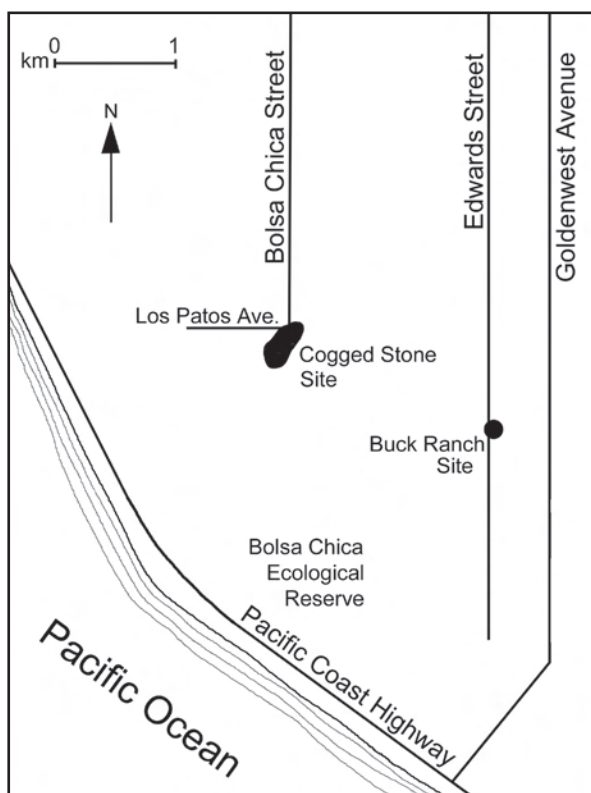


Figure 1. Location map. Huntington Beach area, Orange County.

Herring drew a careful distinction between this artifact (Catalog No. 593) and the normal run of charmstones, plummet-like and having generally round cross sections. He wrote that this well polished, “green dolerite” artifact had the shape “of a lozenge or an elongated diamond. The cross section is lenticular, tapering evenly to the ends, each of which has been slightly blunted” (1961:132). In a later publication on surface collected ORA-83 artifacts (Herring 1968), the amateur archaeologist/professional astronomer gave the dimensions of specimen No. 593 as well as those of two other artifacts he identified as lozenges (Cat. No. 9 and Cat. No. 653). Descriptions of all three appear in the following section (see Table 1) along with descriptions of two additional artifacts that Herring placed in a spindle-shape category but which are more properly placed among the lozenges. Parenthetically, Lester Ross (1970:53, Figure 12c, see also 1969) documented a dark schist lozenge (Catalog No. 242) found during his 1966-1967 excavations at CA-ORA-190 (Buck Gully #1 site). Since ORA-190 is regarded as Late Prehistoric (Ross 1970; Chace 1974), we take the lozenge to have probably been a scavenged and/or a curated piece.

Independently of Herring’s treatment of lozenges, one of us (HCK) attempted characterization of a much greater range of lozenge-shaped artifacts, most of which are of the category discussed herein. Abstracted from that characterization and presented immediately below is information relevant to the subject of Southern Lozenge stones:

...a varied grouping of artifacts whose overall outline is generally lozenge-shaped to ovate...a lenticular cross section as opposed to a round cross section.... The edges of the lenticular cross section are curvilinear, not sharply angled. When there is a longitudinally running design factor (usually on just one face), it is sometimes a thin line of asphaltum...at the interpretive level...an

artistic attempt to convey pudendum imagery.
[Koerper, Reitz et al. 2006:125]

This same information was repeated in Koerper (2007:94), and the sex-based interpretation had also been cursorily mentioned in Koerper, Macko, and Couch (2006:171).

As a signature trait of the Middle Holocene Western Nexus, the Southern Lozenge offers potentially significant insights into the imperfectly understood dynamics of culture change and past life-ways that played out prior to the arrival of Tadic peoples to the Los Angeles basin and thence onto the southern Channel Islands (see Sutton 2009). Orange County

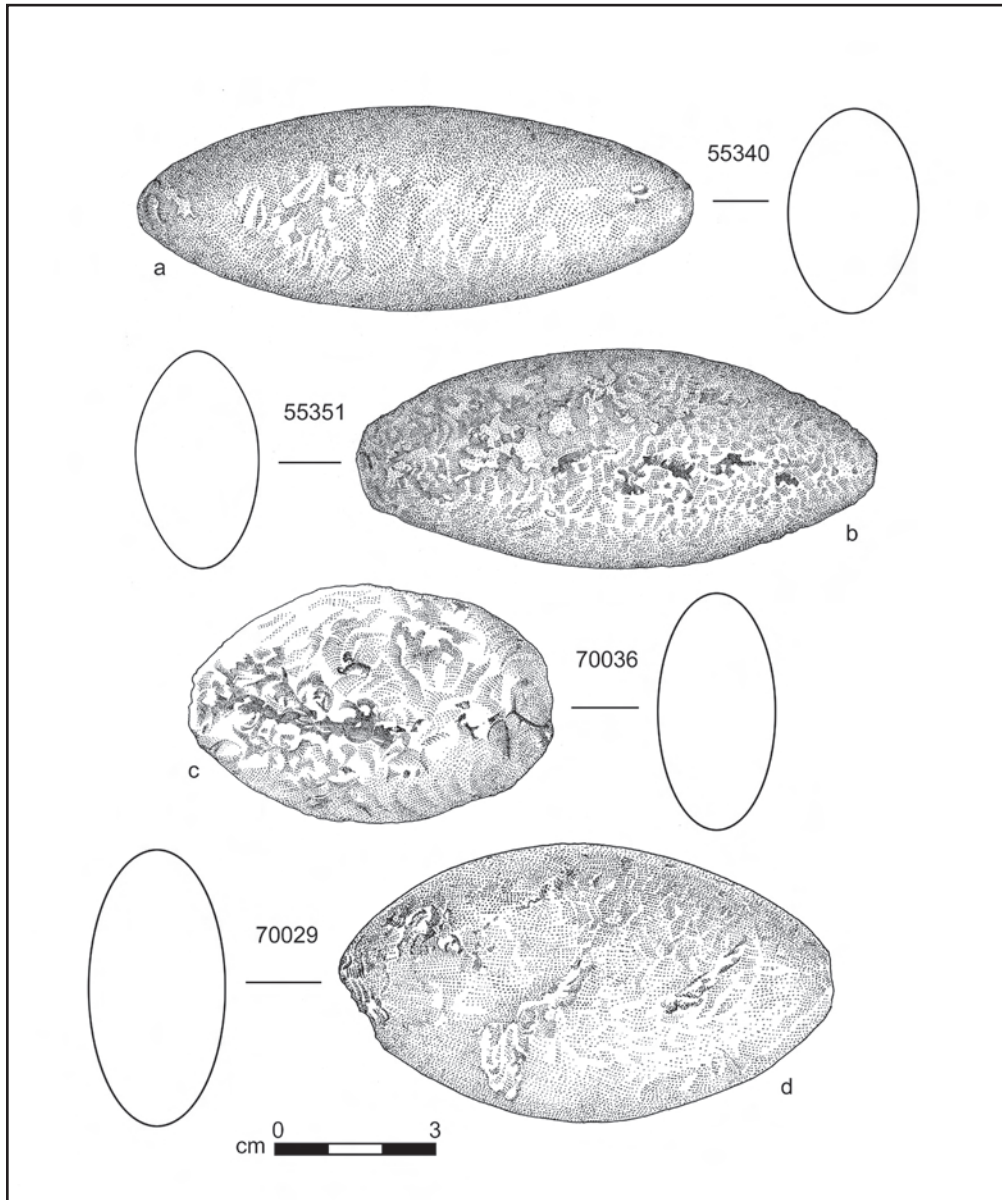


Figure 2. Southern Lozenge stones from CA-ORA-83: (a) quartzite; (b) glaucophane schist; (c) lithic undifferentiated; (d) lithic undifferentiated.

prehistorians are comparatively well positioned to contribute observations regarding the type since its greatest occurrence is at Bolsa Chica Mesa, Huntington Beach (Figure 1). We suppose that dozens of lozenges have been found at the Cogged Stone site (an unknown number by relic collectors), but we have directly handled only 24 ORA-83 specimens. We describe below those artifacts examined in the course of BCAP investigations as well as five others found by Alika Herring.

Descriptions and Comparisons

Table 1 provides descriptive information for all 29 pecked, ground, and sometimes polished lozenges attributed to ORA-83. Figures 2-5 illustrate 16 of the 29 lozenges listed in the table.

The first five specimens given in Table 1, each carrying Herring's catalog numbers, were recorded in the amateur archaeologist's 1968 article and also in

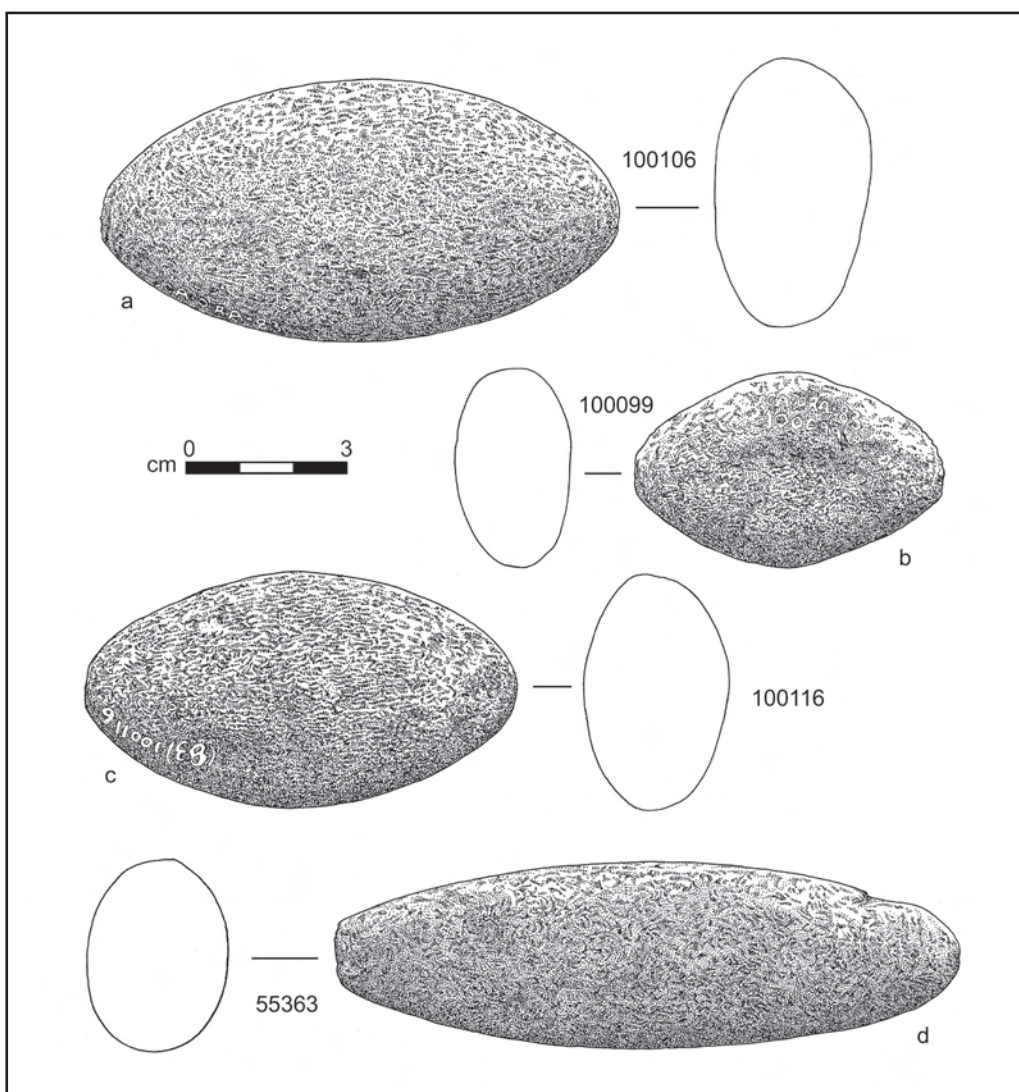


Figure 3. Southern Lozenge stones from CA-ORA-83: (a) micaceous schist; (b) magnetite sandstone; (c) hornblende schist; (d) schist.

a notebook with photographs of each specimen in both plan and lateral views. This notebook had been sequestered among a variety of Native American artifacts in a curation area at Bowers Museum of Cultural Art.

Artifact No. H-593 was the lozenge previously noted and shown in Herring (1961:132), and in both of his articles,

he gave the material type as green dolerite; this specimen was described as very highly polished. (We have added the prefix “H-” to Herring’s catalog numbers.). Artifacts H-9 and H-653 were recognized by Herring as lozenges, but H-7 and H-8 were not (1968:33, Table 6); however, the Bowers notebook descriptions and photographs make clear that all five Herring specimens listed in Table 1 belong to the Southern Lozenge stone type.

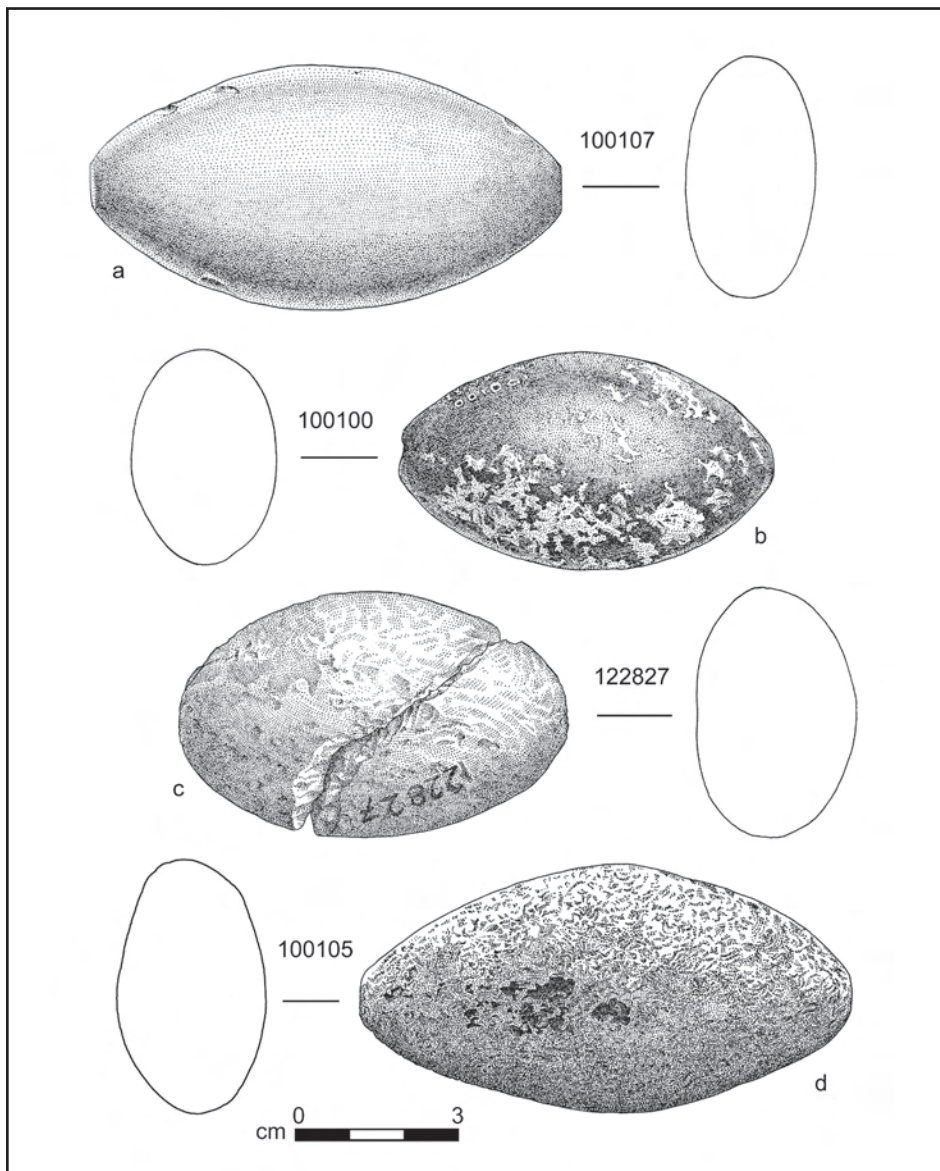


Figure 4. Southern Lozenge stones from CA-ORA-83: (a) rhyolite; (b) magnetite; (c) micaceous schist; (d) schist.

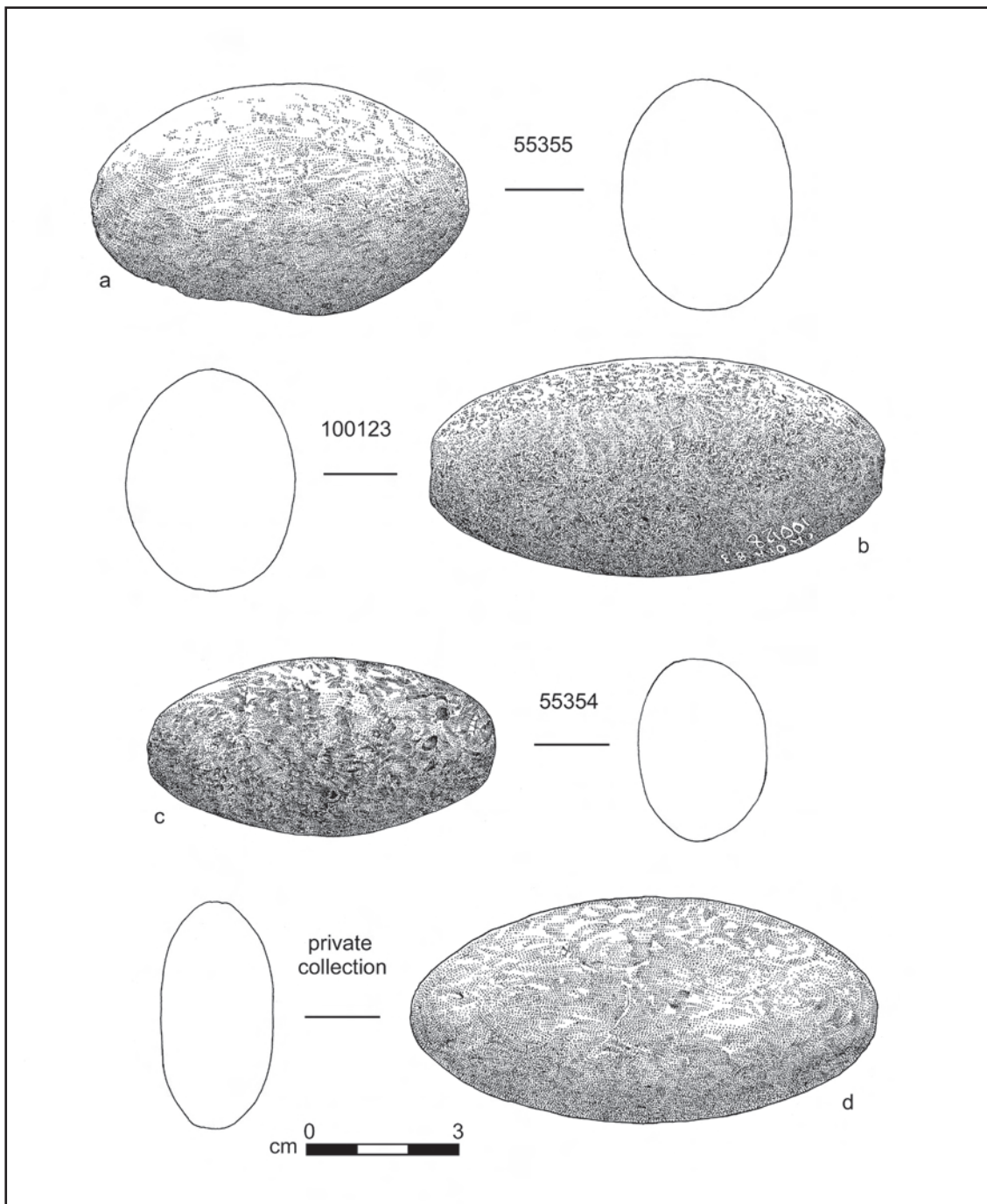


Figure 5. Southern Lozenge stones from CA-ORA-83: (a) quartzite; (b) metasedimentary lithic; (c) magnetite sandstone; (d) glaucophane schist.

Table 1. CA-ORA-83 Lozenge Stones.

Cat. No.	Provenience	Metrics				Ratios		Material	Figure
		Length (mm)	Width (mm)	Height (mm)	Weight (g)	Length/Width	Width/Thickness		
H-7	surface	94	40	25	unknown	2.4	1.6	schist	
H-8	surface	79	est. 47	25	unknown	1.7	1.9	basalt?	
H-9	surface	78	42	25	unknown	1.9	1.7	basalt?	
H-593	surface	101	50	27	unknown	2.0	1.9	fine grained green dolerite	
H-653	surface	79	41	26	unknown	1.9	1.6	basalt?	
55340	Ukulele7 (60-70cm)	104	40	25	129.6	2.6	1.6	quartzite	2a
55351	Trench	97	42	26	149.7	2.3	1.6	glauconite schist	2b
55354	B1 (40-50cm)	69	36	25	80.5	1.9	1.4	magnetite sandstone	5c
55355	surface	74	46	33	150.8	1.6	1.4	quartzite	5a
55356	FF (120-130cm)	–	34	25	[82.5]	–	1.4	granite	
55363	D40 (30-40cm)	118	36	26	161.7	3.3	1.4	schist	3d
56791	Mac1 (0-15cm)	67	41	29	117.0	1.6	1.4	talc schist	
70029	surface	93	51	26	165.3	1.8	2.0	undifferentiated	2d
70030	surface	76	40	26	113.9	1.9	1.5	glauconite schist	
70035	surface	70	45	27	118.7	1.6	1.7	granite	
70036	surface	67	45	22	102.4	1.5	2.0	undifferentiated	2c
100099	monitoring item 1035	59	37	22	70.1	1.6	1.7	magnetite sandstone	3b
100100	monitoring item 1565	69	40	27	173.6	1.7	1.5	magnetite	4b
100104	monitoring item 2617	–	48	24	[84.2]	–	2.0	glauconite schist	
100105	monitoring item 3004	92	46	27	147.0	2.0	1.7	schist	4d
100106	monitoring item 1356	98	50	29	197.0	2.0	1.7	micaceous schist	3a
100107	monitoring item 994	87	45	24	149.6	1.9	1.9	rhyolite	4a
100116	monitoring item 749	81	44	27	153.4	1.8	1.6	hornblende schist	3c
100121	monitoring item 1865	–	45	25	[96.7]	–	1.8	glauconite schist	
100123	monitoring item 1917	90	43	33	184.7	2.1	1.3	metasedimentary	5b
109449	monitoring item 1952	–	48	28	[73.0]	–	1.7	undifferentiated	
171177	monitoring item 100	–	43	25	[150.6]	–	1.7	schist	
122827	unknown	72	45	29	125.3	1.6	1.6	micaceous schist	4c
Anon. Coll.	surface	92	45	23	138.0	2.0	2.0	glauconite schist	5d

Herring identified schist as the material of specimen H-7 but basalt as the material for the other four. The basalt assignments are arguable, as Herring seems to have adopted “basalt” as a catchall category. Specimen H-593 was said to have been fashioned of dolerite, also known as diabase, which is an igneous-plutonic rock (see Chesterman 1978:708); thus it can not also be basalt because basalt is an igneous-volcanic rock (see Chesterman 1978:688). Parenthetically, another one of the University of Arizona astronomer’s identifications, one applying to a “tapering spindle” charmstone (Cat. No. H-5) (Herring 1968:33, Table 6), was “meteoric iron.” Our experience regarding lithic characterizations for the combined ORA-83 inventory of plummet-like charmstones and lozenges convinces us that the correct designation is magnetite. Interestingly, Rozaire (1960:317-318) also gave “meteoric iron” as the material for a ritual artifact, almost certainly a Southern Lozenge stone, that was recovered at the Encino site (CA-LAN-111) in the San Fernando Valley. It measured 90 mm by 40 mm; Rozaire (1960:319) gave thickness as 30 mm.

Lithic material is known for the majority of the remaining 24 lozenges, that is, those that were physically handled by the authors. Five artifacts in Table 1 were missing significant mass from one end or the other, and thus their lengths are not given; in these five cases, the weight of what remains of each is presented within brackets. Herring provided no weights for the five lozenges he collected.

In most instances, length/width ratios are significantly less than what is observed for most plummet-like charmstones (Table 1); in other words, on average, the lozenges appear more squat in plan view than those charmstones that are elongates (Figures 6a-c, f-h). For the ORA-83 lozenges, there is a greater range of variability in length/width ratio compared to width/thickness ratio. The width/thickness ratios are quite distinct from those of plummet-like charmstones (or simply “charmstones”) (Figure 6), since with lenticular

cross sections, ratio values are well away from ≈ 1.0 , the value that most often applies to any regionally encountered charmstone whose maker envisioned a symmetrical template (almost all cases, we believe). Another notable difference between lozenges and coastal southern California charmstones is that no scientifically recorded lozenge exhibits a perforation, whereas the majority of the plummet-like charmstones are either biconically holed or exhibit an artisan’s attempt to drill the artifact at one end (Figures 6a-e). In our experience, many of the charmstones exhibiting no evidence of efforts to perforate the artifact at one end are those of materials resistant to drilling; witness the object of Figure 6f crafted of granite and those of Figures 6g and 6h, both fashioned of dense magnetite.

Among the notable observations regarding material, schists, especially the glaucophane variety, offered a popular medium (Table 1; Figures 2b, 3a, 3c, 3d, 4c, 4d, 5c, 5d). The lozenge of Figure 2a is a high grade milky quartz (Mohs 7) that appears nearly identical to the Crystal Cove specimen shown in Sutton and Koerper (2009:Figure 10b); also, the two objects are so close in craftsmanship (eye pleasing symmetry and finish) that one suspects they may have come out of the same workshop. The lozenge seen in Figure 4b was fashioned of a high grade magnetite, that is, having a particularly strong attraction to a magnet, far more so than any other ORA-83 magnetite artifact (see Figures 3b and 6g, h). The specimen itself is not naturally magnetic in the sense of drawing iron to itself. Clearly, the surfaces had once been highly polished, testimony to progressively finer abrasives and polishers. The last finishing step possibly involved the employment of ash. Caliche, somewhat thick in places, now obscures much of what must have once been a reflective surface.

There is one other ORA-83 lozenge that stands out for its very highly polished surfaces (Figure 4a), the look owing in no small part to its very dense, hard reddish rhyolite. The symmetry of this specimen (Cat.

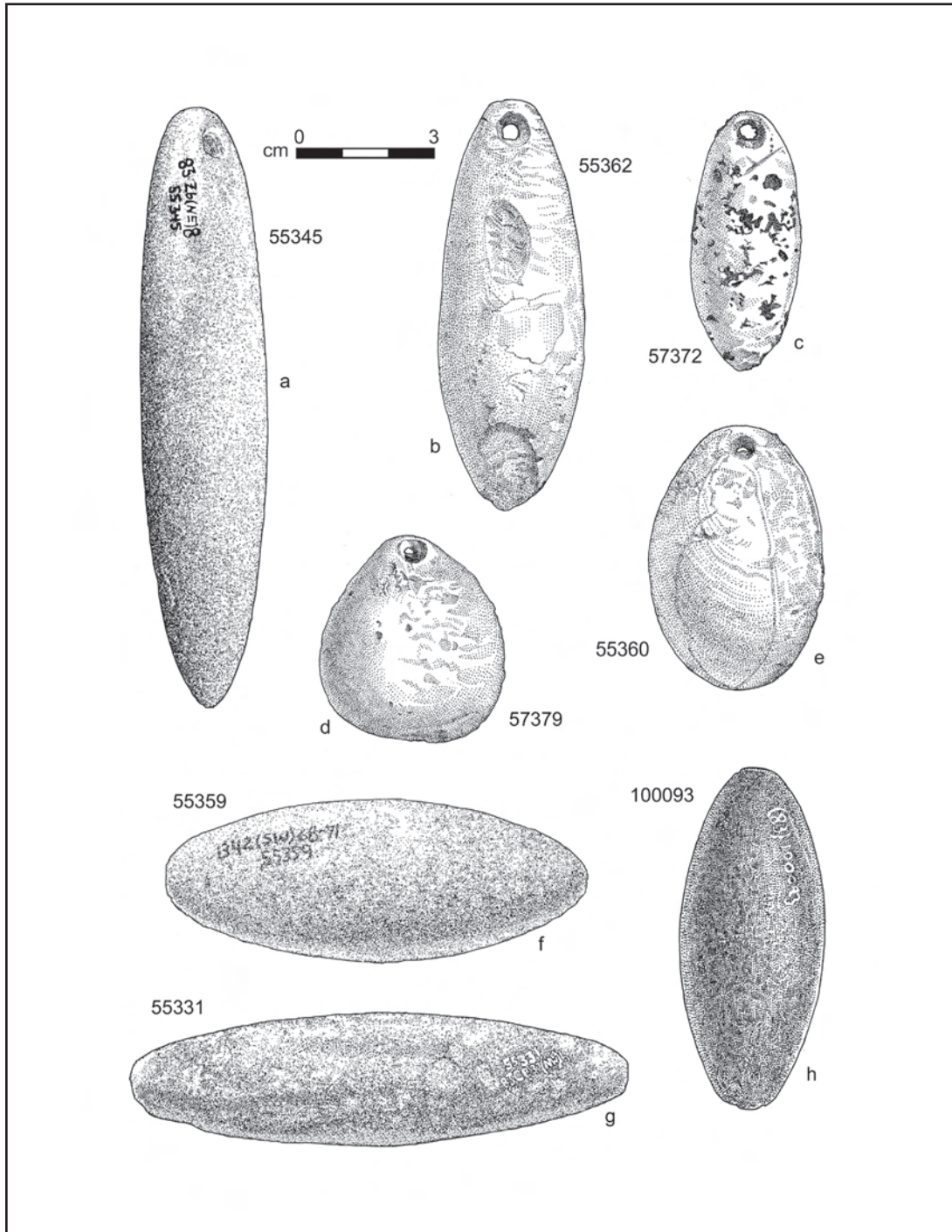


Figure 6. Plummet-like charmstones from CA-ORA-83: (a-c) perforated elongates; (d, e) Type O specimens; (f-h) non-perforated elongates. Specimens g and h were fashioned of magnetite.

No. 100107) is exquisite, and the piece is unusual in that each end had been carefully blunted and polished to produce small flat surfaces.

Among the lozenges studied from ORA-83 and elsewhere, one frequently observes applications of a black substance, presumably asphaltum, especially at or near the longitudinal midline of the artifact, on one face or even both faces. Sutton and Koerper (2009: Figure 10c) illustrated one such object from CA-ORA-64 that had mastic/colorant on both faces. They also illustrated a schist lozenge lacking any mastic from the Christ College site, Irvine (CA-ORA-378) (2009: Figure 10a). A milky quartz example (Sutton and Koerper 2009: Figure 10b) from Crystal Cove State Park, southern Orange County, exhibited slight asphaltum on one face.¹

Five ORA-83 lozenges examined by SRS archaeologists show varying amounts of asphaltum along the longitudinal midlines of both faces (Cat. Nos. 55355 [Figure 5a], 100103, 100105 [Figure 4d], 100116 [Figure 3c], and 100123 (Figure 5b). Another (Cat. No. 70036 [Figure 2c]) has the substance forming a longitudinal element on one face but not on the midline; there is less asphaltum along the center line of the opposite face. On Artifact No. 55340 (Figure 2a) there is some asphaltum running longitudinally on one face but offset from the midline; this face with colorant is opposite the face shown in Figure 2a. A linear streak of asphaltum runs longitudinally at the midline on one face of specimen No. 55351. Artifact No. 100104 shows asphaltum on the center line on one face.

Discussions

Lozenges versus Regional Plummet-like Charmstones: Morphological Distinctions

Descriptions of 29 ORA-83 Southern Lozenge stones (Table 1, Figures 2-5) attest to a regularity of design

that sets the type apart from those charmstones whose varied morphologies have been characterized using such terms as “plummet,” “spindle,” “cigar,” “bullet,” “oval,” “egg,” and so on (see Figure 6). The differences are such that we are chary of considering Southern Lozenge stones as a subset of any larger “charmstone” category.

Lozenges nearly always have smaller length/width ratios than the regional elongate charmstones. Consequently, in plan view, lozenges are more elliptical, or a small percentage might even be characterized as “diamond-shaped.” Lozenges almost invariably have greater length/width ratios than regional “egg-shaped” (c.f., Type O [Elsasser and Rhode 1996:65-67]) charmstones. The most telling design factor setting off lozenges from all coastal southern California plummet-like charmstones is not plan view outline but, rather, shape of cross section.

Again, lozenge cross section is more or less lenticular. The quantifiable expression of such is width/thickness ratio observed at the artifact’s greatest girth, which is most often near midsection. The range of such values for the 29 ORA-83 lozenges runs from 1.3 to 2.0 (Table 1), the mean being 1.67 (see also Figure 7). As previously noted, no published lozenges (to the best of our knowledge) have ever been described as either possessing a perforation or giving evidence of an attempt at perforation, whereas the majority of regional plummet-like charmstones either exhibit biconically drilled holes or show evidence of efforts to either mimic or produce such holes.

On a parenthetical note, we reflect on the stone working skills of middle Holocene artisans. Often lozenges and charmstones project remarkable symmetry and were finalized with exquisite surface smoothness. We submit that if stone hardness, symmetry, and level of finish be considered, the highest achievement of such art might be epitomized by the creations illustrated

in Figures 4a and 4b, rhyolite and magnetite objects, respectively, found at ORA-83. Also, regarding lithic medium, the observation that magnetite was employed for some lozenges and some charmstones (see Figures 6g and 6h) perhaps bespeaks some amount of contemporaneity of manufacture for these two categories of magico-religious objects.

On Symboly and Lozenges

The basis of fertility as a religious theme is not mystical but practical [Catherine Johns 1982:39].

It is reasonably speculated that elongate plummet-like charmstones had projected phallic symbolism that communicated fertility/fecundity or a related theme (see Koerper and Desautels-Wiley 2010:71-74). El-sasser and Rhode considered the issue:

A Freudian analyst would perhaps maintain that *all* charmstones are simply various representations of the human phallus. This could be followed with the supposition that in prehistoric California they were symbols of animal/human species' increase or fecundity wishes. In this vein we may observe that the fish,

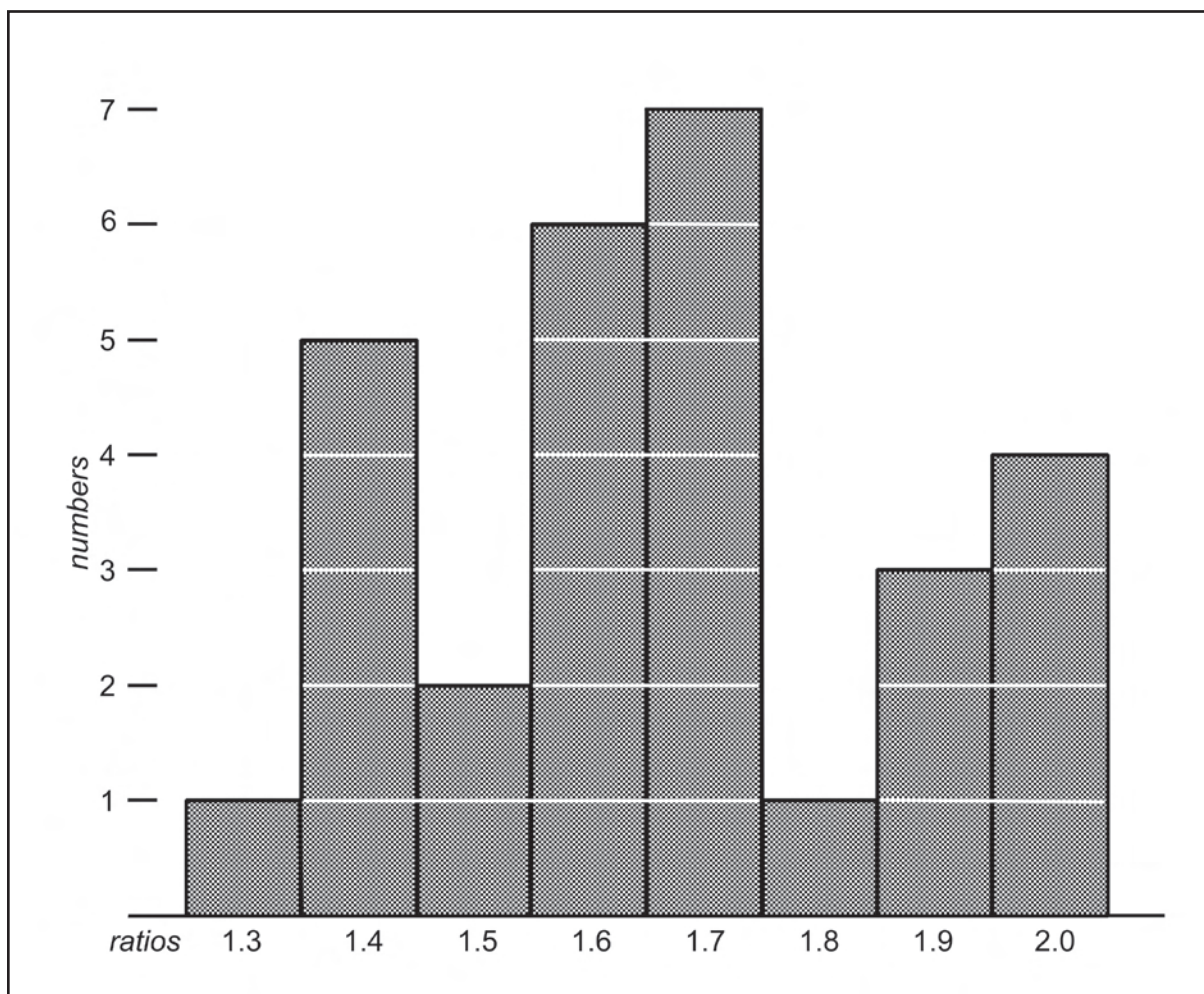


Figure 7. Frequency distribution of cross-section ratios (width/thickness) for the CA-ORA-83 lozenges.

which many perforated/grooved plummets, and of course “Fish Form” (Type V) charmstones clearly resemble, is known among some people of the world as a specific phallic motif (Cirlot 1971:106) [Elsasser and Rhode 1996:37].

It was recently hypothesized that the lozenge type had served as a vulvar symbol (Koerper, Reitz et al. 2006:125; Koerper, Macko, and Couch 2006:171; Koerper 2007:94). Initial inspiration for this hypothesis is quickly explained. First, if plummet-like charmstones had in fact projected male-based symbolism, then the lozenge stone, a distinct but not altogether stylistically different kind of talisman, likewise carefully crafted and likely with some degree of contemporaneity, might reasonably be speculated as having been a complimentary motif, viz., one projecting female imagery. Further, plan view outline gives the lozenge stone its name. Yet, plan view also suggests comparison with eye shape; the eye and vulva are conflated in many cultures, for instance, those in which the “evil eye” is a salient motif (Gravel 1995). Also, considered in three dimensions, the generally soft curves of the lozenge evoke the *mons veneris*, just as the soft curves of certain mollusc shells have promoted their applications to fertility/fecundity symbolisms (see below). On another note, traces of asphaltum bisecting one or both faces of a lozenge offer the suggestion of attempts at rendering the look of a vaginal opening.

Offered below is food for thought that is relevant to contemplations of whether or not the lozenge had ever served as a vulvar symbol. The first discussion to follow focuses on considerations of artistry—the purported greater ease of representing the male genitalia versus the female genitalia. Following that, there is an overview of the crafted and natural objects from southern California prehistory that had projected or had possibly projected the imagery of the female anatomy. The last third order subject of this section addresses the fact of an absence of lozenge stones in either mortuary features or sacred caches.

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Depictions of Male Versus Female Genitalia

Cross-culturally, from simple societies to early states, graphic and plastic representations of the female genitalia have generally been more stylized/abstract, that is, less realistic/literal, compared to representations of male genitalia. This has been explained as a reflection of the female anatomy not lending itself to “artistic depiction” nearly as readily as the male anatomy (Johns 1982:72). Consider the following:

The vulva is rarely seen: its situation makes it invisible in any normal position even to its owner, and visible to another only in a consciously arranged and specifically sexual pose. In contrast, the male genitals are visible in most positions in a state of undress. The full complexity of the female genitals lies, of course, in their totally invisible internal structure, but even when revealed, the vulva is artistically an inconvenient and ill-defined shape, lacking the clear and characteristic outlines of the male organs which makes it possible to draw or model them as a completely detached unit... The structure of the labia and clitoris is difficult to produce in three dimensions, and exceptionally ambiguous when drawn in simple outline [Johns 1982:72].

Johns referred to the vulva as “amorphous,” and thus, she believed, it was infrequently represented “artistically” compared to the male anatomy. She asserts that the female genitals are rendered “symbolically rather than realistically.” A better choice of words would have been “stylistically versus graphically.”

Gravel’s critique of Johns is instructive. He writes:

...it is probably not exactly true to say that the female genitalia are “seldom represented

artistically” because “artistically” means something very different to us from what it could have meant to the people who might have wanted to epitomize the *kteis* [vulva] by drawing an almond shape (i.e., an eye), or a triangle on its point, a fig shape, an apricot, a comb, a lotus petal, the leaves of certain trees, a grain of wheat, rice or rye, a cowrie or a scallop shell, all of which symbolize the female genitals because of their perfunctory resemblance to the vulva. It may be that female symbolism, in fact, occurs *more* frequently (not less) than male precisely because of the “amorphous” nature of the female external genitals. Anything that resembles the soft curves of the *mons veneris* becomes a *kteis*, whereas a phallos is a phallos and is generally depicted as such because it is more easily identifiable. The question of “art” is a convention just as writing is a convention [Gravel 1995:59-60].

Vulvar and Phallic Symbolism in Various Southern California Cultural Traditions

[For people living close to nature]...sacralization of and collective obsession with fertility has made it so that *anything and everything that in the most remote way can be said to be perceived morphologically as phallos, kteis, or intercourse has been understood at one place and at one time or another as a symbol of fertility* [Gravel 1995:56-57, emphasis in the original].

Crafted representations of vulvas that are readily recognizable as such are comparatively infrequent in the portable cosmos of southern California. Exceptions of varying degrees of recognition might be vulvaform elements gracing certain dimorphic sexual symbols falling to the hook/bird effigy genre (see

e.g., Koerper and Labbé 1987, 1989; Koerper and Mason 2010). Easily the most realistic vulvate design factor carved onto a regional stone effigy is that example gracing a birdstone recovered on Catalina Island (Hoover 1974:Figure 1; Koerper and Labbé 1987:Figure 5, 1989:Figure 2; Elsasser and Rhode 1996:74, 75F); it is unmistakably a *mons veneris* with an inferior placed pudendal cleft (Figure 8a). In contrast, the specimen of Figure 9 possesses a comparatively stylized pudendum, the referent somewhat obvious from placement of the cleft flanked by rectangular outer labia at the end below the ascending shaft-like projection; this was found by David Banks Rogers on San Miguel Island, one of the Northern Channel Islands, where very few hook/bird effigies have ever been documented (see Cameron 2000: Figure 12.21, 49).

Either side of the base of the object shown in Figure 8b might have been intended as a vulvar element, and the projecting shaft with its head has an obvious male referent. Koerper and Labbé (1987) suggested that one side (Figure 8b - left) of this San Diego County specimen could have projected both vulvar and testicular imagery. Another possible example in which vulvar and testicular symbology are projected at the same time is pictured in William Wallace’s (1987) Pacific Palisades cache paper; we refer the reader to his Figure 5 - left. Additional interpretive analyses regarding hook/bird effigies are to be found in Koerper and Mason (2010).

It is instructive to point to that crescent-shaped, Warner’s Ranch *atulku* collected by Horatio Rust (Figure 10) as an example of an ethnographically documented symbol of the “female organ of regeneration” whose shape alone offers little to correctly identify the emic referent (Koerper 2007; see Rust 1893, 1899, 1906; Militello 2009:16-17, Figure 3). Other crescent-shaped objects illustrated and discussed in Koerper (2007; see also Gerow 1968:71-73, 188-189) may similarly have been vulvar symbols used in female puberty rites, but

if so, their shapes would likewise be considered highly stylized.

Another vulvar symbol involves certain mortars/bowls. Their unadorned circular opening offers little to suggest anatomical likeness. However, vulvar imagery might be abetted in part by the complementarity of a pestle or ceremonial pestle. The best illustration of this in coastal southern California involves a graphically phallic ceremonial pestle unearthed by an EDAW, Inc. crew at CA-ORA-263 in Seal Beach,

Orange County (Koerper 2006a). Each end of this “pestle” represented a glans penis, and so it was characterized as “Janus-headed.” The more realistic glans with its frenulum-like device was discovered in *flagrante delicto* with a micaceous steatite mortar/bowl. Incidentally, the imagery of a penis inside a mortar is encountered in the mythology of several California Indian groups. For instance, Kroeber (1925:528) reported that the Chuckchansi had stories explaining how Coyote brought bedrock mortars and portable mortars into existence. Coyote “employed

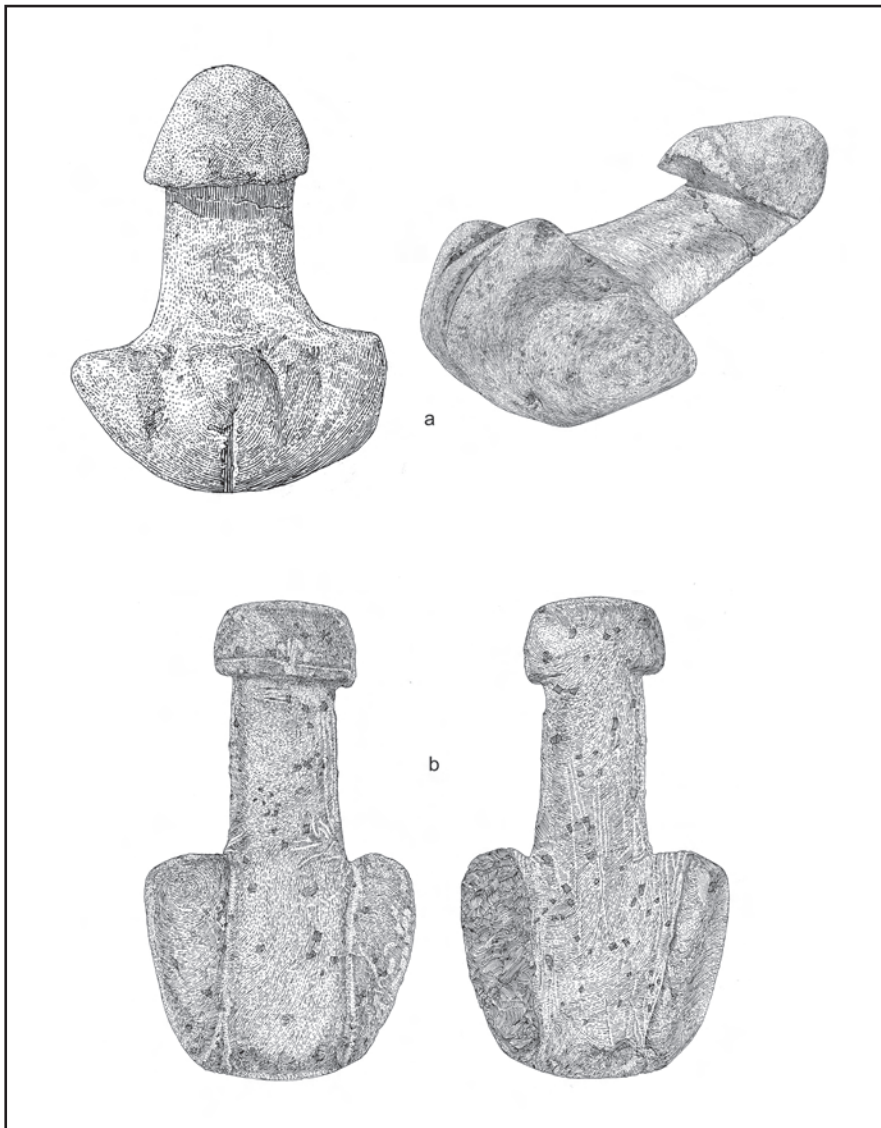


Figure 8. Dimorphic sexual symbols (hook/bird effigy genre): (a) Catalina Island. After Hoover (1974:Figure 1) and after a photograph provided courtesy Catalina Island Museum. Length about 25 cm; (b) San Luis Rey River, San Diego County. Allan O. Kelly collection. Length is 14.6 cm.

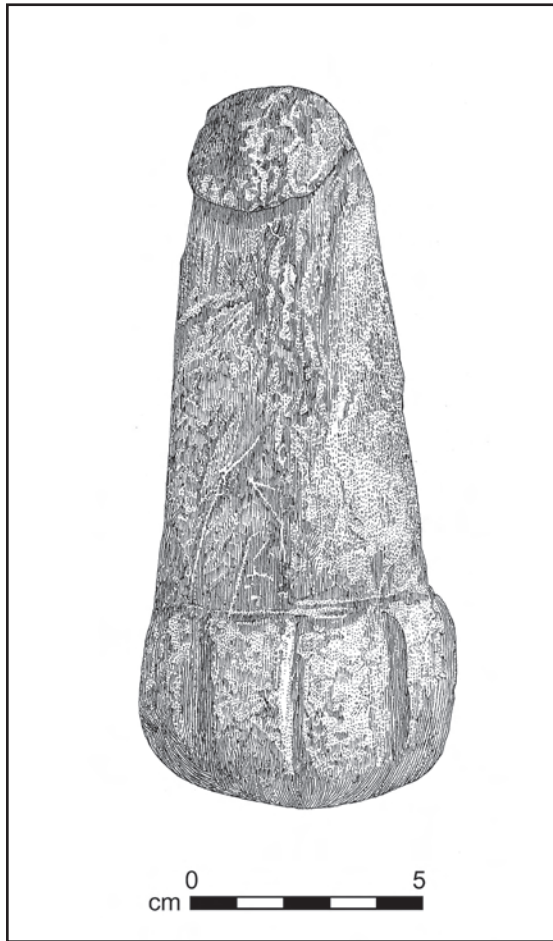


Figure 9. Steatite hook/bird effigy from San Miguel Island, Northern Channel Islands. Note geometric vulvar motif at base. After Cameron (2000:Figure12.21).

an agency of manufacture that decency debars from mention”—enough said. It should be noted that some bowls in coastal southern California received feminizing enhancements through crafted cowrie shell outer lip insets appended to their rims (Koerper 2001) (see Figure 11c).

Time and space limitations preclude useful discussions of other proposed female fertility symbols such as coastal southern California donut stones and canoe charms, and certain transversely grooved artifacts (e.g., arrow shaft straighteners). The interested reader might wish to consult Koerper (2006b; also Koerper et

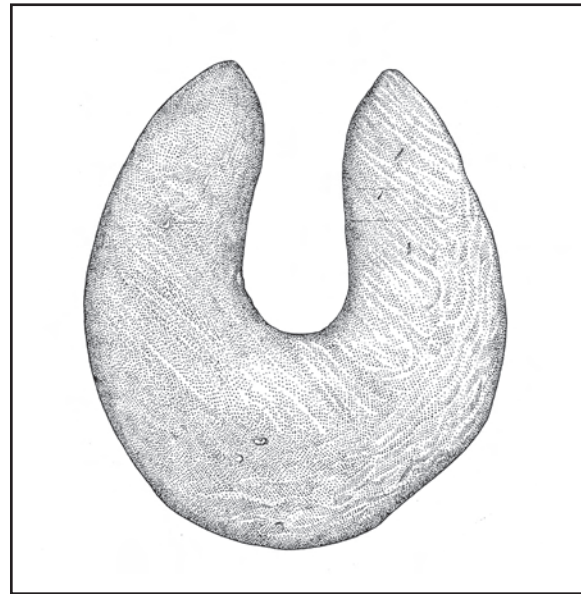


Figure 10. *Atulku* acquired by Horatio Rust and ethnographically recorded as a symbol of the “female organ of regeneration” used in Luiseño girls’ puberty rites. Horatio N. Rust (1906:30) gave its dimensions (13x15 inches) and weight (35 lbs.). Held by the Logan Museum of Anthropology (Catalog No. 17924), Beloit College, Beloit, Wisconsin.

al. 2008) for discussions recommending these artifacts to the sex-based regional portable cosmos.

In addition to the above noted crafted, portable vulvar symbols, regional peoples regarded certain portable, natural objects as possessing pudendum imagery. Heading the list were molluscan shells of *Cypreaea* (Figure 11a, b, d), a genus whose orifice readily evokes the vaginal entrance and whose gently rounded prominence defining the opposite side might more subtly evoke the soft curves of the *mons veneris*. Koerper (2001:33) pointed to the local ethnographic record to demonstrate that cowrie shells had been equated with the vulva. There is no surprise in this since *Cyprea* species across vast areas of especially the tropical and sub-tropical worlds have served and continue to serve as communicators of life-force symbolism (see Koerper 2001).

Cross-culturally, soft parts of certain molluscs, such as oysters, are frequently seen as having perfunctory

resemblances to, especially, the labia minora. Classen (1998:203-204) observed that genital imagery is reflected in species names of numerous shellfish. He also noted that the metaphorical role of shells in fertility includes the births of important religious personages as well as ethnic groups.

In the mythology of Western civilization, the birth of Aphrodite (Goddess of Love, among other things—the Roman Venus), who emerges from the sea on a giant cockle has attained iconic status. Explaining the fit of a cockle shell to a birth scene is an exercise in the obvious, turning of course on the shells' resemblance to the *mons veneris* (mount of Venus, *mons pubis*, and

mons venus). With this in mind, we suggest that the occasional presence of the Giant Egg Cockle (*Laevicardium elatum*) in regional graves (e.g., Anonymous 1938:44, Plate 8, 49, 104, 127; Koerper et al. 1988:262, Figure 75; Koerper and Gundlach 2006:137, Figure 3) is not just as a container but as a life-force symbol. Figure 12b shows one *L. elatum* shell found in association with a Late Prehistoric child burial at CA-ORA-1587 in Shady Canyon (see Koerper and Gundlach 2006:136-143). At CA-ORA-111, the San Joaquin Home Ranch site, Works Progress Administration (WPA) archaeologists recovered a *L. elatum* valve (Cat. No. 2123) near the pelvic/abdominal area of a child (Burial A, Plot No. 10) (Anonymous 1938:44,

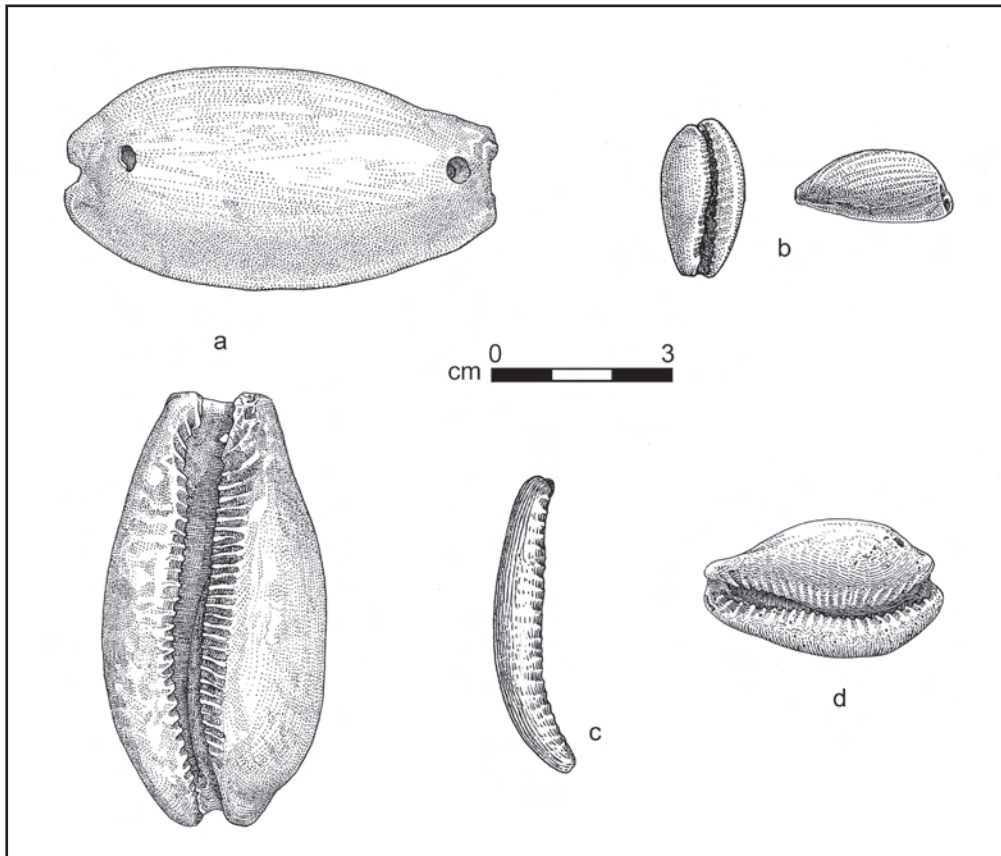


Figure 11. Cyprea shells: (a) Little Deer cowrie (*C. cervinetta*) shell found at CA-ORA-83. Exotic trade good from the Gulf of California; (b) Annette's cowrie (*C. annettae*) found in the San Juan Capistrano Valley. Exotic trade good likely from the Gulf of California; (c) Artifact crafted from the outer lip of a Chestnut cowrie (*C. spadica*) shell. Possibly an inset or an amulet. Found by WPA archaeologists at the San Joaquin Home Ranch site, CA-ORA-111, Irvine. (d) Chestnut cowrie shell from CA-ORA-378, the Christ College site, Irvine.

Plate 8, 104). Also recovered from Plot No. 10 was a cremation, likely that of a child, contained within an abalone shell covered by a *L. elatum* shell (Cat. No. 2165). The cockle is especially notable for an incised decoration on its outer surface—criss-crossing curved lines that define somewhat squarish to rectangular design elements (Anonymous 1938:49, 104, 127).

Interestingly, a Giant Egg Cockle found at CA-LAN-270, the Los Altos site in Long Beach, contained a multi-holed tablet (Bates 1972:20; see also Koerper 2009). Bates did not record it as being associated with a burial, but given that the site had numerous interments and given that Simpson (1953) considered the site as mainly a burial ground, we think it highly likely that the shell and tablet had connected with some kind of mortuary behavior. Chace (2008:42) offers that the Buck Ranch burial ground probably contained *L. elatum* shells (also Chace, personal communication 2010).

The Giant Pacific Cockle (*Trachycardium quadragenarium*) seems likewise to have been a life-force symbol of the *mons veneris* kind. Bates' often confusing, error laden report (1972:44-50) records that as

few as three or as many as five of the 21 burials had an associated single valve of the species.

The pecten shell artifact from CA-ORA-226 shown in Figure 12a may have been a sex-based symbol. The sculpted surface is a natural *mons pubis* mimic, but what seems especially telling is the linear element of asphaltum and shell beads that possibly represent a cleft.

With the variety of manmade and natural portable female symbols, we are reminded of a note from Gravel (1995:59-60). He stated that such symbolism may actually occur more frequently than male symbolism “because of the ‘amorphous’ nature of the female external genitals.”

We now shift our attention away from the portable cosmos to a phenomenon of the nonportable cosmos. In southern California and in Baja California, there are large vulvar symbols known as yonis. Yonis begin their cultural lives as natural clefts in weathered boulders that have drawn interest owing to their resemblance to the female anatomy. In many cases these natural features are enhanced through lithic reduction

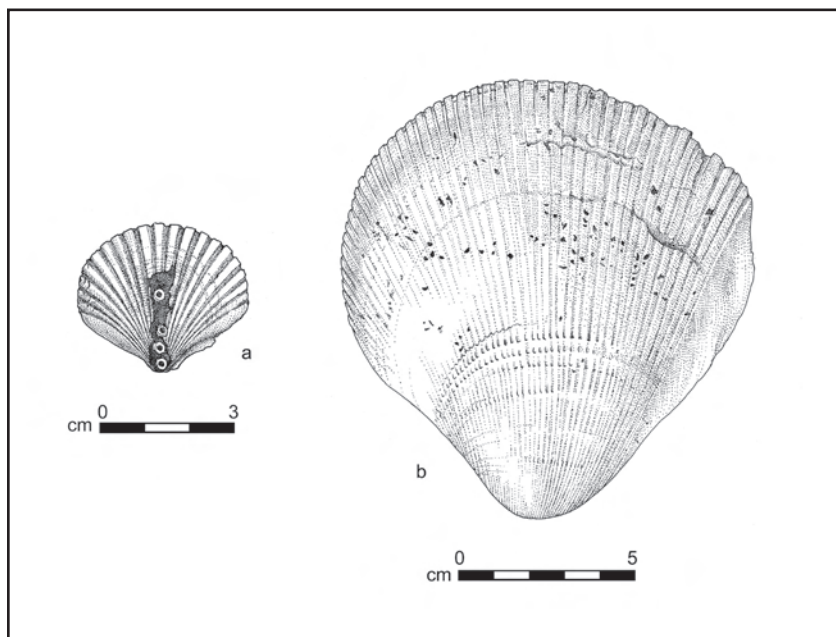


Figure 12. Bivalve shells: (a) Pecten (*Argopecten aequisulcatus*) shell artifact with shell bead inlays. From CA-ORA-226; (b) Giant Egg Cockle (*Laevicardium elatum*) valve from a child burial at CA-ORA-1587.

to better effect the look of labia surrounding the pudendal orifice; with these there can be notable realism and little ambiguity of basic meaning (see McGowan 1982, also 1978, 1979; Begole 1984) (Figures 13-15). Our readers should understand that Figures 13, 14, and 15, each depicting a yoni, lack metric scales since they were rendered after line drawings and photographic illustrations in McGowan (1982), and McGowan provided no metric scales in her book. Rather, she occasionally placed a sketched human figure to indicate sizes of yonis in drawings. We estimate that the largest yoni shown (see Figure 14) is no more than around 2 m in height and that the smallest (Figure 15) is somewhat over 1 m in horizontal dimension.

Begole (1984:22) reported that in some instances pebbles were inserted into the yoni cleft presumably to represent the clitoris. Not surprisingly, it has been speculated that yonis had been folded into a magico-religious prescription to help women conceive (Hedges 1976:134; McGowan 1982:vi-1; Begole 1984:26). Few yonis lie horizontally; those that do are referred to by McGowan as “eye formations” (1978, 1979, 1982:2, 6, 8, Figures 11, 12, Plate 13). One especially noteworthy “eye formation” shows the addition of linear design elements that radiate out from the upper border of the central element, thereby rendering the look of eyelashes (McGowan Figure 11, Plate 13), altogether a very credible “eye” sculpted in low relief (Figure 15).

Cache and Mortuary Associations?

Southern Lozenge stones have never been recovered from a cache containing the kinds of ceremonial items that are known or reasonably inferred to have carried sex-based communications. This is not the case for southern California elongate, plummet-like charmstones (e.g., Rogers 1929:213-214, 388; Macko et al. 2005; Koerper 2006b; see also Koerper and Desautels-Wiley 2010). This is one reason why the hypothesis of lozenge-as-fertility/fecundity symbol does not enjoy the same support that attaches to the idea that

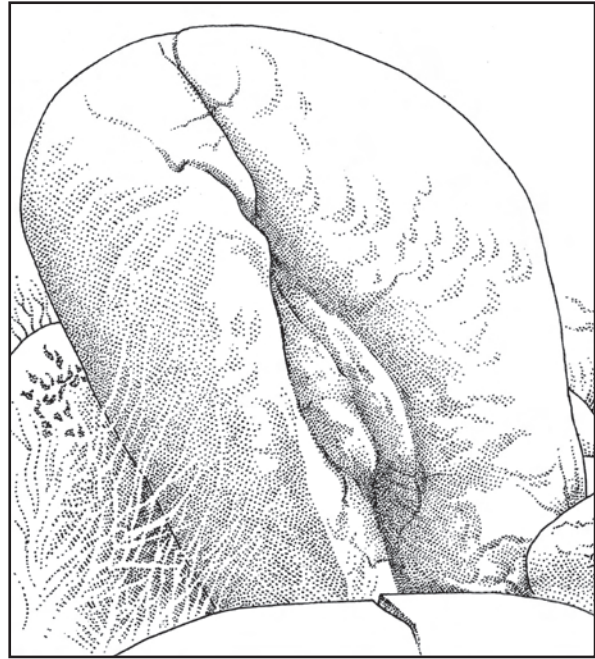


Figure 13. Yoni; Kumeyaay territory, Site C-224, San Diego County. After McGowan (1982:Plate 1 and Figure 3).

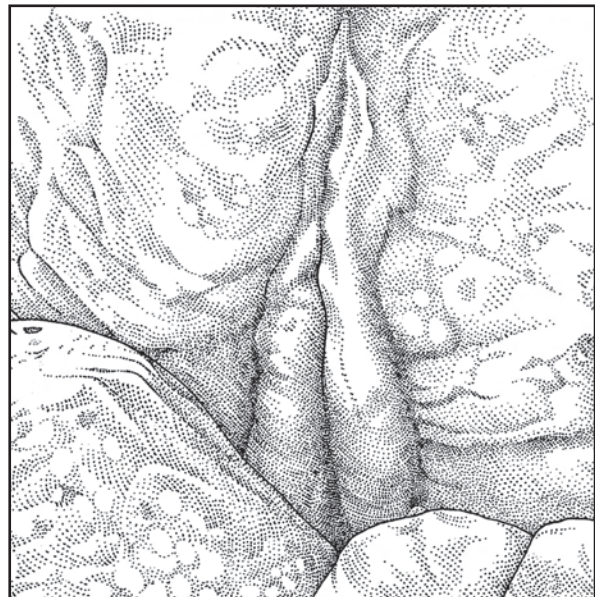


Figure 14. Yoni; Kumeyaay territory, Site W-1133, the Jamul site. After McGowan (1982:Plate 12 and Figure 8).

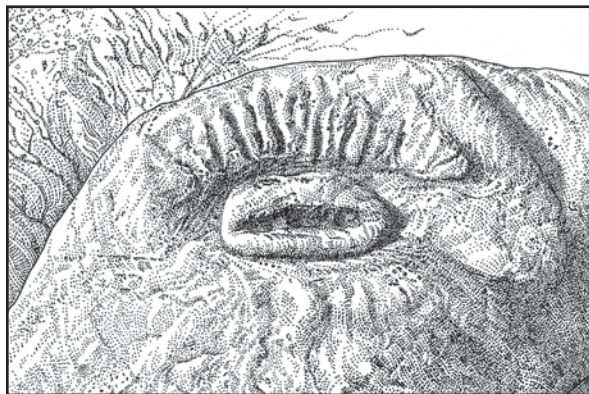


Figure 15. “Eye formation” yoni; Kumeyaay territory, Site W-1133, the Jamul site. After McGowan (1982:Plate 13 and Figure 11).

elongate, plummet-like charmstones had likely functioned as sex-based symbols.

The final dispositions of many kinds of life-force symbols are mortuary features (e.g., Koerper 2006b). Southern Lozenge stones have not as yet been discovered associated with manifestations of death rites, unlike charmstones in coastal southern California (see e.g., Olson 1930:14, Table 4, 15, Table 5) and elsewhere in the state (e.g., Lillard et al. 1939; Gerow 1968:43; Ragir 1972; Elsasser and Rhode 1996:3). This is another reason why the notion of lozenge as female symbol finds less support than the idea that plummet-like charmstones had represented the phallus (see Koerper and Desautels-Wiley 2010). Yet, bear in mind that absence of proof is not proof of absence. Incidentally, two ORA-83 “egg-shaped” charmstones (see Figure 6d) accompanied a burial in Unit X-ray 14.

Summary and Conclusions

Symbols are objects, graphic signs, gestures, sounds or beings, that conventionally stand for something else, usually a complex abstraction, *and sometimes their meanings are lost in the history of times unremembered* [Gravel 1995:53; emphasis ours].

The iconology of prehistoric southern California documents a rich and varied fare of symbol bearing objects; many were crafted of stone, some were manuports provided by nature, and most were portable. Among them were objects whose shapes would seem to indicate that the makers, finders, and/or owners intended them to carry sex-based communications, presumably to address a “practical” religious theme—fertility/fecundity.

The Southern Lozenge stone offers the very reasonable possibility of an addition to the regional listing of sex-based stone talismans. In this article, 16 lozenges have been both illustrated (Figures 2-5) and described (Table 1), and thirteen more have received descriptive attention (Table 1). All 29 were recovered from ORA-83, the Cogged Stone site. Not only has the Cogged Stone site yielded by far the largest number of cogged stones known to archaeological science, but it has also yielded by far the greatest number of lozenges.

Previously, Sutton and Koerper (2009) had proposed that the Southern Lozenge stone was one of the salient material traits of the Middle Holocene Western Nexus; they also proposed a homologous connection between the Southern Lozenge stone and the Northern Lozenge stone. In that article, three lozenge specimens were illustrated (Sutton and Koerper 2009:Figure 10), none of them from ORA-83.

Our comparison of lozenges against plummet-like, elongate charmstones observed that the lozenge is an artifact distinct from the charmstone. On the other hand, we do not regard the lozenge as altogether different; indeed, earlier scholars implicitly treated lozenges as falling within the morphological range of regional charmstones (e.g., Herring 1968:9, Table 6). If the charmstone and lozenge had shared some amount of contemporaneity and if the elongate charmstones had carried phallic imagery, then we wondered whether lozenges had been complimentary in projecting vulvar imagery. The eye/almond

outline of the plan view artifact and the lozenge's softly curving surfaces, we believe, strongly suggest an abstract vulva. Should the type ever appear in association with mortuary remains, the case would be strengthened, this based on many documentations of life-force symbols in regional death rites. Should lozenges ever be documented in association with caches containing artifacts with demonstrated or strongly presumed sex-based artifacts, the case likewise would be strengthened.

It is inconceivable to us that the Southern Lozenge stone is not representational art. If it had not stood for a *kteis*, or vulva, then what possibly would it have represented?

Acknowledgments

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End Note

1. Width/thickness ratios are available for four lozenges from four additional sites that were noted in

Sutton and Koerper (2009): 1.21 (Encino site, or CA-LAN-111 [see Rozaire 1960:319]); 1.51 (Christ College site, or CA-ORA-378 [see Koerper 1995:6-230, 6-231]); 1.81 (Buck Gully site, or CA-ORA-190 [see Ross 1970:53]); 1.25 (Crystal Cove area [Anonymous, personal communication, 2009]). Against the findings presented in Figure 7, the LAN-111 and Crystal Cove artifacts are outliers, but only barely so.

References Cited

- Anonymous
1938 *Report of the San Joaquin Home Ranch Site Excavation, Mar. 28-July 25-1938*. WPA Anthropological Project #7680. Report on file at UCI Langson Library, Special Collections.
- Bates, Eleanor H.
1972 Los Altos (LAn-270): A Late Horizon Site in Long Beach, California. *Pacific Coast Archaeological Society Quarterly* 8(2):1-56.
- Begole, Robert S.
1984 Fertility Symbols in the Anza-Borrego Desert. *Pacific Coast Archaeological Society Quarterly* 20(4):13-28.
- Cameron, Constance
2000 Animal Effigies from Coastal Southern California. *Pacific Coast Archaeological Society Quarterly* 36(2):30-52.
- Chace, Paul G.
1974 Redating the Buck Gully Site, with Implications for Settlement Patterns. *Pacific Coast Archaeological Society Quarterly* 10(3&4):99-113.
2008 Locating the Buck Ranch Prehistoric Burial Ground, Huntington Beach, California. *Pacific Coast Archaeological Society Quarterly* 40(2):41-49.

- Chesterman, Charles
1978 *The Audubon Society Field Guide to North American Rocks and Minerals*. Alfred A. Knopf, New York.
- Cirlot, J. E.
1971 *A Dictionary of Symbols*. 2nd ed. Philosophical Library, New York.
- Classen, Cheryl
1998 *Shells*. Cambridge University Press, England.
- Elsasser, Albert A., and Peter T. Rhode
1996 *Further Notes on California Charmstones*. Coyote Press Archives of California Prehistory No. 38. Salinas, California.
- Gerow, Bert A. (with Roland W. Force)
1968 *An Analysis of the University Village Complex: With a Reappraisal of Central California Archaeology*. Stanford University, Palo Alto.
- Gravel, Pierre Bettez
1995 *The Malevolent Eye: An Essay on the Evil Eye, Fertility and the Concept of Mana*. American University Studies Series XI, Anthropology and Sociology Vol. 64. Peter Lang, New York.
- Hedges, Ken
1976 Southern California Rock Art as Shamanic Art. In *American Indian Rock Art Vol. 2: Papers presented at the Second Annual Rock Art Symposium*, edited by Kay Sutherland, pp. 126-138. El Paso Archaeological Society, El Paso, Texas.
- Herring, Alikea K.
1961 Three Unusual Artifacts from Orange County, California. *Science of Man* 1(June):132.
1968 Surface Collections from ORA-83, A Cogged Stone Site at Bolsa Chica, Orange County, California. *Pacific Coast Archaeological Society Quarterly* 4(3):3-37.
- Hoover, Robert L.
1974 An Unusual Stone Effigy from Southern California. *The Masterkey* 48(1):32-34.
- Howard, William J., and L. Mark Raab
1993 *Olivella* Grooved Rectangle Beads as Evidence of an Early-Period Southern Channel Islands Interaction Sphere. *Pacific Coast Archaeological Society Quarterly* 29(3):1-11.
- Johns, Catherine
1952 *Sex or Symbol?: Erotic Images of Greece and Rome*. British Museum Press, London.
- Koerper, Henry C.
1995 *The Christ College Project: Archaeological Investigations at CA-ORA-378, Turtle Rock, Irvine, California* (5 vols.). Report on file at the South Central Coastal Information Center, California State University, Fullerton.
2001 Cowry Shells: Fertility/Fecundity Symbols in Southern California Iconography. *Journal of California and Great Basin Anthropology* 23(1):27-37.
2006a An Unusual Ritual Cache from CA-ORA-263, Seal Beach, California. *Proceedings of the Society for California Archaeology* 19:138-144. Chico.
2006b The Aetiology of the Donut Stone and Its Symbology: A Case Study of "Sexualization-Sacralization." In *Contributions from Orange County Presented in Remembrance of John Peabody Harrington*, edited by H. C. Koerper, pp.87-125. Coyote Press Archives of California Prehistory No. 53. Coyote Press, Salinas.
2007 On the Aetiology of the Atulku. In *Proceedings of the Society for California Archaeology* 20:84-97. Chico.

- 2009 The Case of the Missing Buck Ranch Mortuary Remains: A Mystery Partly Solved. *Pacific Coast Archaeological Society Quarterly* 41(2 and 3):95-111.
- Koerper, Henry C., and Nancy Anastasia Desautels-Wiley
- 2010 Glans Penis Effigies from the Cogged Stone Site, Orange County. *Pacific Coast Archaeological Society Quarterly* 42(4):65-81.
- Koerper, Henry C., and Terry Gundlach
- 2006 Observations of Dental Health in Three Late Prehistoric Orange County Individuals. In *Contributions from Orange County Presented in Remembrance of John Peabody Harrington*, edited by H. C. Koerper, pp.133-165. Coyote Press Archives of California Prehistory No. 53. Coyote Press, Salinas.
- Koerper, Henry C., and Armand Labbé
- 1987 A Birdstone from San Diego County, California: A Possible Example of Dimorphic Sexual Symbolism in Luiseño Iconography. *Journal of California and Great Basin Anthropology* 9(1):110-120.
- 1987 "Libidinal Symbolism," Etcetera... Rejoinder to Cameron. *Pacific Coast Archaeological Society Quarterly* 25(3):46-52.
- Koerper, Henry C., Paul E. Langenwaller II, and Adella Schroth
- 1988 *The Putuidem Project: Archaeological Investigations at CA-ORA-855*. Report prepared for Enterprise Construction, Inc., Irvine, California. Report on file at South Central Coastal Information Center, California State University, Fullerton.
- Koerper, Henry C., Michael E. Macko, and Jeffrey S. Couch
- 2006 The 1953 National Boy Scout Jamboree: An American Self-Celebration on the Irvine Ranch, Orange County. In *Contributions from Orange County Presented in Remembrance of John Peabody Harrington*, edited by H. C. Koerper, pp.167-196. Coyote Press Archives of California Prehistory No. 53. Coyote Press, Salinas.
- Koerper, Henry C., and Roger D. Mason
- 2010 An AMS Radiocarbon Dated Steatite Hook/Bird Effigy from CA-ORA-340. *Pacific Coast Archaeological Society Quarterly* 43(3):1-17.
- Koerper, Henry C., Polly A. Peterson, Benjamin R. Vargas, Donn R. Grenda, and Patrick B. Stanton
- 2008 Mortuary/Mourning Associated, Transversely Grooved Stone Artifacts from CA-LAN-62: Another Case of Sexualization-Sacralization? *Pacific Coast Archaeological Society Quarterly* 40(2):51-79.
- Koerper, Henry C., Karl Reitz, Sherri Gust, and Steven Iverson
- 2006 A Pattern Recognition Study of Cogged Stone Ritual Behavior. *Proceedings of the Society for California Archeology* 19:120-127. Chico.
- Koerper, Henry C., and Nancy Whitney-Desautels
- 1999 A Cowry Shell Artifact from Bolsa Chica: An Example of Prehistoric Exchange. *Pacific Coast Archaeological Society Quarterly* 35(2 and 3):81-95.
- Kroeber, Alfred L.
- 1925 *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78. Washington, D.C.

- Lillard, J. B., Robert F. Heizer, and Franklin Fenenga
1939 *An Introduction to the Archaeology of Central California*. Sacramento Junior College, Department of Anthropology Bulletin 2. Sacramento.
- McGowan, Charlotte
1978 Female Fertility Themes in Rock Art. *Journal of New World Archaeology* 2(4):15-27.
1979 Using Ethnology to Identify and Interpret a Ceremonial Fertility Site in San Diego County. Paper presented at the 44th Annual Meeting of the Society for American Archaeology, Santa Barbara.
1982 *Ceremonial Fertility Sites in Southern California*. San Diego Museum Papers No. 14. San Diego Museum of Man, San Diego.
- Macko, Michael E., Jeffrey S. Couch, and Henry C. Koerper
2005 Implications of Ritual Biface Caches from the Irvine Site. *Journal of California and Great Basin Anthropology* 25(1):93-107.
- Militello, Teresa
2009 Horatio Nelson Rust and His Contributions to the Development of American Archaeology. *Pacific Coast Archaeological Society Quarterly* 41(1).
- Olson, Ronald L.
1930 Chumash Prehistory. *University of California Publications in American Archaeology and Ethnology* 28(1):1-21. Berkeley.
- Ragir, Sonia
1972 The Early Horizon in Central California Prehistory. *Contributions of the University of California Archaeological Research Facility* No. 15. Berkeley.
- Rogers, David Banks
1929 *Prehistoric Man of the Santa Barbara Coast*. Santa Barbara Museum of Natural History, Santa Barbara.
- Ross, Lester A.
1969 *The Irvine Complex: A Late Prehistoric Horizon Archaeological Complex for the Newport Bay Area, California*. Master's thesis, Department of Anthropology, Washington State University, Pullman.
1970 4-ORA-190: A Descriptive Site Report of a Late Prehistoric Horizon Site in Orange County, California. *Pacific Coast Archaeological Society Quarterly* 6(2 and 3):iii-135.
- Rozaire, Charles E.
1960 The Archaeology at Encino, California. *Archaeological Survey Annual Report 1959-1960* 2:307-355. University of California, Los Angeles.
- Rust, Horatio Nelson
1893 Mission Indian Maturity Ceremonial. *American Anthropologist* 6(2):221-222.
1899 A Fiesta at Warners Ranch. *Land of Sunshine* 10(5):230-239.
1906 A Puberty Ceremony of the Mission Indians. *American Anthropologist* 8(1):28-32.
- Simpson, Ruth D.
1953 Shoshonean Burial Ground Excavated. *The Masterkey* 27(2):69.
- Sutton, Mark Q.
2009 People and Language: Defining the Takic Expansion into Southern California. *Pacific Coast Archaeological Society Quarterly* 41(2 and 3):31-93.

Sutton, Mark Q., and Henry C. Koerper

2009 The Middle Holocene Western Nexus: An Interaction Sphere between Southern California and the Northwestern Great Basin. *Pacific Coast Archaeological Society Quarterly* 41(2 and 3):1-29.

Wallace, William J.

1987 A Remarkable Group of Carved Stone Objects from Pacific Palisades. *Pacific Coast Archaeological Society Quarterly* 23(1):47-58.

Winterbourne, John W.

1967 Report of the Goff's Island Site Excavations: May 1, 1939 to January 22, 1940. *Pacific Coast Archaeological Society Quarterly* 3(2 and 3).