A Proposed New Genre for the Portable Cosmos of South Central Coastal California: The Dorsal Fin Effigy

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Abstract

Among a range of south central coastal California lithic artifacts whose shapes appear to mimic dorsal fins of particular kinds of cetaceans and certain fish, there are enough specimens to suggest that some local peoples did indeed craft representations of the appendage. Such precipitates a proposal to recognize a new genre, the "dorsal fin effigy," within the regional portable cosmos, where it might join the company, for instance, of other carved stone objects that stood for animal body parts.

Advocacy for this proposal requires first that descriptions and illustrations of possible to probable representations of dorsal fins be presented, a desideratum that is addressed at the front end of this study. Other persuasions draw upon observations that demonstrate the importance of cetaceans in regional past lifeways. Such includes documentations of whole body effigies of finned animals, clear indicators of the importance of those animals' imageries in spiritual/aesthetic landscapes. Additional archaeological evidence, ethnographic notes, and ethnohistoric accounts further attest to the roles of particular sea creatures in both the nonmaterial as well as the material lives of Native coastal peoples. It is argued that a concatenation of data supports recognition of a new genre, the "dorsal fin effigy."

Introduction

The primary focus of this study is an assortment of south central coastal California stone artifacts, each of the specimens' varied shapes suggesting possible mimicry of some kind of cetacean and/or large fish dorsal fin. Evidence of usewear is unreported for any of these objects, the great majority recovered within territory occupied at contact by the Gabrielino (Figure 1), where archaeological studies have documented representations of animal body parts (e.g., snake rattles [Koerper 2006]; pinniped flippers and a sea otter appendage [Koerper 2011]; and even a baculum-shaped pestle [Koerper and Evans 2011; see also Douglass 2007]). Such effigies are presumed or inferred to have had applications to magico-religious practice.

The authors propose that representations of dorsal fins had indeed been crafted by regional artisans, the imageries inspired by the integumentary elevations characteristic of one or more categories of marine animal. The section following this introduction provides descriptions and illustrations of numerous fin-like artifacts (Figures 2-16); provenance information and associational data are included. Some specimens seen in plan view are more credible claimants to representing the dorsal appendage than others. Some amount of persuasion promoting a unity of genre follows from certain favorable comparisons involving surficial designs within subsets of the sample.

Beyond these observations of morphology and surficial decoration, our proposal builds on the fact that Native craftsmen also produced a variety of stone whole body effigies representing cetaceans and perhaps certain kinds of fish. A cautionary note observes that many whole body carvings are so conventionalized in execution that assignments to species or genus, or even assignments revolving on cetacean versus piscine categories, can be fraught with uncertainty. Another cautionary note observes that a great many effigies, particularly

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certain steatite whale figurines accepted as authentic have turned out to be bogus, merely fantasy pieces. Following the three sections that illustrate, describe, and otherwise address the phenomenon of whole body effigies, most good but some inauthentic, this article offers notes on the material contributions of cetaceans, "swordfish," and sharks to human sustenance and industry followed by a section on cetacean and "swordfish" imagery/symbology in ideational landscapes.

Our study will conclude with a discussion and summary section wherein the authors revisit their reasons for believing that dorsal fin symbols are represented among some number of the illustrated artifacts, most such mimics far more likely to have borne referent to the cetacean rather than any piscine category. Acceptance of the proposition begs recognition of a new category of object within the regional portable cosmos, viz., the "dorsal fin effigy."

Abstracting an Effigy Genre from Certain Tabularlike Artifacts

Introduction

Among the array of tabular and somewhat tabularlike artifacts from south central coastal California, the authors have selected for illustration and discussion specimens whose morphologies suggest conventionalized dorsal fins. As a convenience, these artifacts are separated into two groupings based on the absence or the presence of geometric design (whether incised or painted). Repeating rectilinear or curvilinear lines that easily evoke elements encountered in geometry rise to our standard of "geometric design." In cases where, say, merely two lines crisscross (see Figure 2) or where overly busy repeating lines leave the viewer initially with a sense of unstructured meanderings (see Figures 6 and 7), the standard for "geometric design" has not been attained.



Figure 1. Location map. Bolsa Chica Mesa and Huntington Mesa are opposite one another at Bolsa Chica Bay. CA-OR-190 lies just below a western extension of the San Joaquin Hills. Carson is about 7.5 km east of Redondo Beach.

A Selection of Fin-like Specimens Lacking Geometric Decorations

The CA-ORA-83 Artifacts

The "incised tablet" (Cat. No. 113310) from the Cogged Stone site (CA-ORA-83) at Bolsa Chica Mesa (Figure 1) illustrated in Figure 2 was fashioned of dense, hard, very fine sandstone. Caliche adheres to some surfaces of this light grayish-white slab. Length is 98 mm, width measures 64 mm, and maximum thickness is 19 mm. The artifact weighs 115 g. The incised designs adorning each face are a simple motif a transverse line intersecting a longitudinal line at more or less a right angle. When viewed with the artifact's rounded end up, the surficial motif is reminiscent of an inverted cross with its upright and arms.

Artifact #113310 is a monitoring find, picked up from a windrow laid aside by the action of mechanical surface scraping during a program of controlled destruction, the main goal of which was to identify and remove human remains for physical analysis and eventual reburial. The specimen appeared near B.C. XCIV (Bone Concentration 94) in Unit Zulu 55.

B.C. XCIV contained the very sparse remains of two persons—a child and a young adult. Chronological age at death for the child was determined as between 5 and 9 years, this on the evidence generated from four teeth. The young adult's remains were likewise very minimal, just adult dentition, a premolar and at least two but probably three molars. It is not possible to associate with high confidence either set of remains with Artifact #113310.

A second monitoring find (Cat. No. 112715) is shown in Figure 3. The roughly triangular slab had been fashioned of extremely fine sandstone (bordering on siltstone). Grayish-white in color, this 960 g, 2.2 cm thick artifact was not found in the proximity of human bone. It was devoid of any recognizable decoration, but its shape recalls a cetacean dorsal fin. There are no associated radiocarbon dates to report.



0 5 cm 5 Figure 2. Probable dorsal fin effigy from CA-ORA-83, or the Cogged Stone site. (Catalog No. 113310).

When Artifact #112715 was cataloged, it was labeled as a possible grave marker. Inspiration for this speculation followed from a number of documentations of stone slabs that had been markers or associated with graves. For instance, David Banks Rogers gave special note of two among "several stone slabs which had served as grave markers" on Santa Cruz Island. These he described and illustrated (1929:Plate 34, 292-293). Slab #1 measured 23 in. (58 cm) by 11 in. (30 cm) and appears to be made of sandstone. At least one surface shows an incised design which Rogers considered to be an "inscription." One senses the possibility of whole body whale imagery in plan view, albeit very crude (see Rogers 1929:Plate 34, lower photograph).

Slab #2 measured 19 in. (98 cm) by 13.5 in. (34 cm) (see Rogers 1929:Plate 34, upper photograph). Rogers (1929:292-293) drew attention to the designs on one surface, writing, "The most striking features... are repeated, cross-like figures in deep incisions, and many less pronounced scorings, which run parallel to



Figure 3. Possible mimic of a dorsal fin from CA-ORA-83. (Catalog No. 112715).

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the uprights and arms of the crosses." Unfortunately, Rogers' photograph does not capture the entire specimen, but reasonable extrapolation from what is shown allows the possibility that the plan view outline may have projected the look of a crudely formed dorsal fin.

Within his Federal Works Progress Administration (WPA) Goff's Island site (CA-ORA-8, -108, -110) report, John Winterbourne (1967:44) described in some detail a male shaman burial (Burial I-35) with its remarkable collection of grave furniture. Most notable with regard to the focus of this study was an arrangement of an abalone shell dish (19.7 cm x 15.0 cm), a slab of whale bone (rib 60 cm long, 6.2 cm wide, 2.9 cm thick), and "a stone crudely triangular in shape projected several inches above the [rib]." Winterbourne took the triangular object to possibly be a dorsal fin symbol. No measurements were provided. Later we will return to the subject of this remarkable find.

A larger and much better photographed grave marker also with some rough resemblance to a dorsal fin appears in Bruce Bryan's (1931:179) essay on excavations within the cemetery of *Mishopshno*, a Barbareño site at what is now Carpinteria, Santa Barbara County. Such monuments were reportedly stood upright above a grave, this positioning perhaps an effort to help project fin imagery. Parenthetically, Bryan noted the recovery of a "porpoise image" (not further described) from the burial ground.

Two CA-ORA-190 Artifacts

The Buck Gully site (CA-ORA-190) was located on the southwestern edge of the San Joaquin Hills at 100 m asl. It was about 1.6 km from the ocean and slightly more than twice that distance to the nearest extension of Newport Bay. In 1966 the Pacific Coast Archaeological Society (PCAS) excavated in an area of ORA-190 that was then called CA-ORA-189. In 1967 Lester Ross (1970) directed excavations to the northeast with the assistance of the PCAS. The evidence indicates that the site dated mainly to the Late Prehistoric period (see also Chace 1974).

Among the 436 artifacts catalogued, two look like dorsal fins. The siltstone specimen shown in Figure 4a (Cat. No. 132) measures 80 mm x 64 mm and is 10 mm thick. It weighs 58 g. The siltstone specimen illustrated in Figure 4b (Cat. No. 149) is 75 mm x 61 mm with a 13 mm maximum thickness, and it weighs 73 g. Ross called attention to the similarities between the two objects in shape and incising. He observed (Ross 1970:40) that, "Both have a heavily scored groove which bisects the length, and the incised lines are located in the same region on both stones." The opposite sides of each artifact are without any incised decorations.

A CA-ORA-236 Example

The object of Figure 5 was recovered from the Coyote Canyon Cave site (CA-ORA-236) at a sandstone outcrop in the San Joaquin Hills (see Mitchell 1991). This large rockshelter sits at \approx 185 m asl on the north side of Coyote Creek above a spring at the bottom of the canyon where animals would have come to water. A sage scrub microenvironment surrounds ORA-236 which is within easy walking distance of Newport Bay.

Between 1967 and 1972 PCAS volunteers excavated this "Late Prehistoric and possibly Intermediate Horizon" shelter and its midden apron. A broad array of artifacts and varied kinds of faunal remains reflect a multitude of activities at this habitation site. Included in the material inventory are ten incised stones. The morphology of one of the eight siltstone specimens



Figure 4. Two probable dorsal fin effigies from CA-ORA-190, or the Buck Gully site. (a) Catalog No. 132; (b) Catalog No. 149.

(Catalog No. 413) (Figure 5), which was discovered in Unit J-117, in the 18-24 inch level, suggests a dorsal fin effigy. This \approx 170 mm long, \approx 54 mm wide artifact is transversely grooved on one face (Figure 5a) and exhibits two salient grooved areas on the opposite face (Figure 5b). These grooves are reminiscent of those seen on the ORA-190 specimens (Figure 4); they are far less expertly executed than those on each face of the ORA-83 effigy (Figure 2). Light incisions in no distinct pattern grace the surfaces of Specimen No. 413.

A CA-ORA-378 Specimen

The multi-component Christ College site, or CA-ORA-378, is located in the Turtle Rock area of Irvine, not far from Newport Bay. In late Late Prehistoric times, the site seems to have been a seasonal camp (see Koerper 1995). Around the middle Late Holocene, if not somewhat earlier, it served as at least a central-base village (central-base wandering model), but possibly ORA-378 had functioned as a semi-permanent sedentary village.

Numerous magico-religious objects were recovered, cataloged and analyzed. Among them was the tabular specimen illustrated in Figure 6. This triangular -shaped artifact (Catalog No. 3186) was discovered at the 20-30 cm level of Unit 10S/28E. Its material is a somewhat grainy siltstone. It is 10 mm long, 62 mm wide, and 12 mm thick, and it weighs 89.3 g.

Striations on both faces represent purposeful light incising. Whether the markings were intended as decoration or were the result of ritual behavior must remain a matter of conjecture. The morphology hints at a dorsal fin referent.



Figure 5. Possible dorsal fin effigy from CA-ORA-236, or the Coyote Canyon Cave site, San Joaquin Hills. (Catalog No. 413).

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A Possible Fin Effigy from Carson, Los Angeles County

The siltstone/sandstone artifact shown in Figure 7 was found by relic collector Joe Cote several decades ago in the vicinity of the intersection of Sepulveda Boulevard and Wilmington Boulevard in Carson (on or near the property of the Watson Industrial Center) (Bill Ward, personal communication 2011). Compton College teacher Gordon Pond obtained the specimen from Cote, and later it passed from the art instructor to Bill Ward of Long Beach in whose collection it resides today.

The artifact's longest dimension is between 210 mm and 220 mm. At its greatest width, the piece is about 100 mm. Maximum thickness measures 12 mm. Both faces are incised. The face shown in Figure 7 is decorated with shallow lines that frequently crisscross one another in somewhat haphazard fashion.

CA-LAN-264 Fin-like Artifacts

Five flattish, isosceles-shaped objects recovered at CA-LAN-264, or the Malibu site, could be simple dorsal fin effigies (see Figure 8). They are small enough to be considered as amulets or charms. They were illustrated in Cameron's (2000) publication on animal effigies from coastal southern California. Meighan (1976) had years earlier published a very short



Figure 6. Triangular-shaped, tablet-like artifact from CA-ORA-378, or the Christ College site. This specimen possibly represented a dorsal fin. (Catalog No. 3186).



Figure 7. Fin-like tabular artifact from Carson, Los Angeles County. (Bill Ward Collection).

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introduction to LAN-264 effigies, his focus being on Burial 35, one of five burials he counted as containing stone effigies. Those effigies from this and other LAN-264 burials whose shapes might evoke imagery ranging between cetacean-like to fish-like will be more fully referenced later in this essay. Meighan made no mention of the isosceles-shaped specimens.

Here we will report on Cameron's LAN-264 data regarding what she identified as Burial 36 and also those data regarding certain effigies not associated with interments (see Cameron 2000:Figure 12.12 and Figure 12.19, respectively). We do offer a note of caution, however, for there are inconsistencies seen in Cameron (2000) with reference to what Meighan (1976) reported.¹ There are other irregularities in Cameron not relating to Meighan's 1976 article.² Also, we point out that Meighan thought it possible that LAN-264 had been a Gabrielino rather than a Chumash site. Our map (Figure 1) extends Tongva territory to just west of Malibu.

Looking at objects from Burial 36, there is one isosceles-like object that Cameron labeled "triangle shape;" it appears in her Figure 12.12, top specimen in the third column of effigies (also see Cameron 2000: Table 12.4, Acc. No. 1751). Cameron believed that 17 of the objects shown represent fish, however, all sans dorsal fins (N=14) could just as well be suspected as being highly conventionalized cetaceans. Three have dorsal fins and might easily be considered as possible whale effigies (Cameron 2000:Table 12.4, Acc. Nos. 1741, 1742, and 1763, Figure 12.12, first column, fifth and fourth objects from the bottom [1742 and 1741, respectively] and third column, third object from the bottom [1763]). In her Figure 12.19, Cameron (2000) shows four more triangle-shaped objects (see also Cameron's [2000] Table 12.4, Acc. Nos. 1055, 1084, 1247, 2058) in a grouping of 11 "pebbles," none of which had been associated with each other, with other artifacts, or with any burial. Only 10 of the 11 "pebbles," were listed in her Table



Figure 8. Isosceles-like artifacts from CA-LAN-264, or the Malibu site. Of the five reported, none was burial associated, associated with another, or associated with other artifacts.

12.4, and two were given identical accession numbers (432). The important point is that five isosceles-shaped, fin-like artifacts (see Figure 8) had occurred at a site having a large number of effigies representing aquatic animals.

SNI-16: Other Small Fin-like Specimens

The shapes of two biconically drilled, steatite pendants from a San Nicolas Island site, SNI-16, suggest dorsal fin referents (Reinman and Townsend (1960:7, Plate 7a, d). Perhaps each had been intended merely for adornment, but more likely, we believe, they carried some magico-religious potency. One had been burial associated. Two other SNI-16 fin-like artifacts, similarly drilled for suspension, are also shown in Reinman and Townsend's report (1960:8-9, Plate 9c, e). One was made from Pismo clam, and the other was fashioned of *Mytilus*.

A Selection of Fin-like Specimens with Geometric Decoration

A CA-ORA-58 Example

A WPA Artifact

In 1937, under authority of Anthropological Project #4465, the Orange County WPA archaeological program produced a manuscript containing over 125 drawings of archaeological finds (Anonymous 1937a). Nearly all captions attendant to those renderings were absent any provenience. The objects were arranged in categories, one of which was labeled "Indian Art."

Among the 26 renderings of Native art, there was what appears to be a cetacean dorsal fin effigy (Figure 9). Its material was not identified. While no dimensions were given, circumstantial evidence suggests that the specimen had been drawn at actual size. Unfortunately, no indications of either site provenience or catalog number were provided. The WPA artifact drawing shows a very distinctive design. Two sets of parallel lines, the uppermost having two horizontally running lines and the set below it having three such lines, serve as borders for three panels, each of which exhibits diagonally crisscrossing elements that create diamond patterning. Viewing the uppermost panel, part of the geometric motif seems to have been worn away. The middle panel was not compromised.

Serendipity and Reviewer's Comment

One of the more accomplished examples of Gabrielino-Tongva tabular decorative art lay hidden away in the storage rooms of the Bowers Museum of Cultural



Figure 9. Probable dorsal fin effigy recovered by SERA excavators at CA-ORA-58, Costa Mesa. After a rendering by a WPA artist (see Anonymous 1937a).

Art. Its rescue from obscurity was abetted particularly through detailed renderings of each of its faces (Figure 10) by artist Joe Cramer. The specimen measures 115 mm (maximum dimension) x 59 mm (maximum width) x 13 mm (maximum thickness). Fashioned of what appears to be Catalina Island steatite, we supposed that this specimen was a regional production. It bears a catalog number (691), but that circumstance proved of no help in identifying provenance.

Over two years ago a rigorous literature search was undertaken in order to learn location and circumstance of its excavation. The motivation to find answers intensified with initiation of the present study, this because the object in plan view had a fin-like appearance, but also because of a recognition that the incised design on one face broadly parallels that seen on the artifact of Figure 9.

The effort to determine provenance was concerted, the breakthrough qualifying as serendipitous. The piece was spotted in a second generation Xerox copy of a 129 mm x 89 mm photograph (Anonymous 1935:Plate 11, upper row), where the image of the artifact is a mere 13 mm in. maximum length, and where it is displayed amongst dozens of finds recovered in a State Employment Relief Administration (SERA) archaeological dig at ORA-58, or the Banning-Norris site on Newport Mesa in Costa Mesa (see Koerper et al. 1996:3). This "fragment of [a] beautifully carved ceremonial stone of steatite" (also, "steatite pendant – or shaman charm stone richly



Figure 10. Same specimen as the probable dorsal fin effigy seen in Figure 9. Drawing by Joe Cramer who used the actual artifact as his model. Bowers Museum collection.

carved [fragment]") (Anonymous 1935:6 and "Banning Artifact Group" [unpaginated]) was unearthed on August 15, 1935.

A draft manuscript of this article treated the artifact shown in Anonymous (1937a) and shown here in Figure 9 as distinct from what is seen in Figure 10. However, one reviewer, Dr. Paul Chace, now persuades us that Figures 9 and 10 illustrate the same specimen.

Another CA-ORA-58 Specimen

Also curated at the Bowers Museum is the ORA-58 WPA discovery shown in Figure 11. This "shaman stone" was previously published (see Koerper et al.



Figure 11. Possible killer whale dorsal fin effigy from CA-ORA-58, Costa Mesa (Catalog No. 1954). Depression Era WPA find (see Koerper et al. [1996]).

1996:Figure 17). It was shaped out of a fine sandstone and subsequently incised.

An uneven geometric design develops from a series of criss-crossing lines. In places a repeating rhomboidal pattern can be discerned with minimum effort, but in other places this design is relatively crudely executed and consequently difficult to make out. There are patches of very rough scratchings, approaching randomness, that add visual distractions.

The artifact measures 182 mm in length and is 71 mm wide. Thickness is only 11 mm. If it represents a fin, it would more probably be that of a killer whale.

A CA-ORA-106 Example

The Bonita Mesa site (CA-ORA-106) was situated in the Upper Newport Bay area on tableland flanked by two arroyos—Bonita Wash to the southwest and a wash to the south which could be considered a tributary of Bonita Wash (Anonymous 1938:2). WPA crews expended but 16 days of labor between July 25 and August 17 in 1938, eventually cataloging only 37 Late Prehistoric artifacts for their efforts. One of those finds (Cat. No. 2810) is shown in Figure 12.

Artifact #2810 was described as 70 mm long with a maximum width of 51 mm; maximum thickness is 18 mm (Anonymous 1938:25). It has geometric decorations on both faces, with the more aesthetically appealing face of mostly zig-zag incising shown here (Figure 12). Incising on the opposite face (Anonymous 1938:19) was irregular and less well defined. Its material was not identified.

San Clemente Island Artifacts from the Murphy Collection

Three large steatite tablets found on San Clemente Island by relic collector Theodore Murphy are illustrated in Figures 13 and 14. Their opposite faces



Figure 12. Possible representation of a dorsal fin from CA-ORA-106, or the Bonita Mesa site. (Catalog No. 2810).

were not illustrated in Cameron (1990). These artifacts are curated at California State University, Fullerton.

The object of Figure 13a (Catalog No. 115.19.17) measures 162 mm in length, 117 mm in width, and 23 mm in thickness (Cameron 1990:116). There is red ochre on the surfaces of this specimen whose edges are described as smoothed and rounded. On the face shown, diagonally intersecting lines of the larger central panel form elements that range from diamond shaped to rhomboidal. In some cases lines have been incised within those elements to produce triangular forms. The panel, above and below, is bordered by parallel to semi-parallel lines, eight such lines at the curved upper end but only four parallel lines at the bottom, near the more or less straight edge.

The artifact of Figure 13b is close in length and width to the specimen just described, but it has a slightly

different plan view shape. It measures 162 mm in length and 122 mm in width (Cameron 1990:117). Thickness is greater at 23 mm, making it more weighty (741.7 g). Its surface design is somewhat similar to other specimens shown herein. They include the artifacts of Figures 10b, 13a, 15a, and 15b. Ochre adheres to some of the surfaces (Cameron 1990:117).

The largest tablet (Catalog No. 115.19.49) is 219 mm long, 165 mm wide, and 19 mm thick (Figure 14). It weighs 1188.0 g (Cameron 1990:117). As with the other two Murphy collection artifacts discussed above, the encircling edges had been rounded and polished smooth. Some amount of red ochre still adheres to the surfaces. The face shown in Figure 14 exhibits the familiar intersecting diagonal lines that create shapes both rhomboidal and diamond-like. There are two distinct panels of such decorations separated midfield by only a single line that runs laterally from edge to edge. Unlike the other two San Clemente Island artifacts (Figures 13a and 13b), the bottom edge is gracefully curved. Given its size, we suspect that this artifact was perhaps a grave marker.

The Malaga Cove Specimens

Over five and a half decades ago, a relic collector, Joe Cote, digging at a Santa Monica Bay site, unearthed a cache of three large tablets (two seen in Figure 15) in association with poorly preserved skeletal remains (Pond 1968). The stratum in which these tablets appeared was identified by Pond (1968:126) as Walker's (1951) Level 2, Malaga Cove site. Careful scrutiny of both the Walker (1951) and the Pond (1968) articles allows the determination that almost certainly the tablets had actually come from Level 3 (Mark Sutton, personal communication 2010). Since the three tablets were found in a cache, and since sacred objects were sometimes buried away from living areas, there is even a possibility that these three artifacts had been the property of a person or persons who had occupied Malaga Cove Level 4.



Figure 13. Possible dorsal fin effigies from San Clemente Island (Murphy Collection). (a) Catalog No. 115.19.17; (b) Catalog No. 115.19.15. After Cameron (1990:Figure 1).

In Figure 15a we illustrate one face of a Malaga Cove tablet weighing "five pounds" (\approx 2268 g) and measuring 10.75 x 7.25 x 1.25 in. (\approx 273 mm x 185 mm x 32 mm) (see Pond 1968:Figure 1B). The surficial incised motif is familiar, that is, comparatively deep, lateral coursing, parallel lines framing a series of lines that crisscross one another. On the side shown (Figure 15a) these lines are vertical and diagonal, and thus there are rhomboidal elements, rather than diamond-shaped elements. On the face opposite, shown in Pond (1968:125) as Figure 1B1, there are no deep parallel lines forming the many rhomboidal elements that look more busy than ordered, ergo less pleasing to aesthetic sensibilities.

In plan view outline there are similarities to other specimens previously illustrated. The upper bor-

der is noticeably convex, while the bottom border is minimally curved, approaching straightness. One vertical border is symmetrically and convexly curved, while the opposite border is somewhat undulating but retaining a general convexity. The plan view outline is somewhat less convincingly fin-shaped as compared to the other tabular artifacts previously illustrated.

In Figure 15b, again one sees comparatively deep laterally running lines (three sets of three parallel lines), whereas in the specimen of Figure 15a, there are only two sets of three parallel lines. With three parallel lines placed midway on the Figure 15b specimen, diamond to rhomboidal shaped elements are set apart in two panels. The crisscrossing incisions were more carefully rendered, and so the total composition



Figure 15. Tablets from Malaga Cove, Los Angeles County. Possible representations of dorsal fins. After Pond (1968:125, Figures 1B and 1A [respectively]).

appears more balanced. Any imbalance occurs in the plan view shape, where one vertical border is largely concave and its opposite is more generally convex. The two vertical sides are undulating, whereas the horizontal borders are straight. Even though this artifact (Figure 15b) exhibits the most unorthodox shape of the objects illustrated herein, we still see in plan view possible dorsal fin imagery. Pond (1968:127) gave the weight of this tablet (Figure 15b) as 3.5 pounds (\approx 1588 g). It measures 10.125 x 8.25 x 1.0 in. (\approx 257 mm x 210 mm x 25 mm).

The poor quality of the illustration of the third tabular artifact pictured in Pond's article (1968: Figure 1C) precluded its rendering for this article. It is somewhat similar to the two we have illustrated, since first it is not notably different in area size (9 x 6.5 x .875 in., or \approx 229 mm x 165 mm x 22 mm); weight is given as 2.5 pounds (\approx 1134 g). The use of three comparatively deep parallel lines as upper and lower borders to frame further surficial decoration should look familiar. In this case, however, the intervening decoration consists of numerous laterally coursing herringbone elements. They had been rendered somewhat more compact than the herringbone designs that run lengthwise on the ORA-106 artifact shown in our Figure 12.

Upper and lower borders are slightly curved, close to straight; the vertical borders are symmetrically convex (Pond 1968:Figure 1C). The artifact in plan view presents the outline of a barrel and thus is comparatively unconvincing as a dorsal fin symbol. Pond thought it looked like a drum.

It is tempting to see in at least two small tablet fragments, also illustrated by Pond (1968:Figure 2c, d), suggestions of fin imagery. These are from coastal sites that were not identified. The reader is also encouraged to contemplate a crudely worked artifact shown by Pond (1968) in his Figure 4 (left). It resides in the collections of the Southwest Museum and was shown to Pond by Bruce Bryan. The incised design on the face shown is two sets of parallel lines, top and toward the bottom, framing the larger area with the kinds of cross-hatchings that make for diamond/rhomboidal patterns.

A San Miguel Island Sandstone Slab

Charles Irwin (1975:14-15) documented the roughly 0.5 cm thick, shaped sandstone slab seen in Figure 16a. Irwin gave its length as 24 cm and its width as 17 cm. With the object set upright on the wider of its two ends, one views what could be a rectilinear representation of a dorsal fin.

Nine full circle design elements rendered with some kind of colorant (ochre?) grace one face of the artifact, and a meandering, mostly curvilinear line courses through this arrangement, cordoning off three of the full circles from the other six. On the side opposite there is a less accomplished motif, roughly circular and having radiating linear elements (Figure 16b). This is not a painted design, but rather it is crudely incised. The lines, some breaking across the crude circle but others not, offer the look of a sun symbol. This oddity is from the westernmost island in the Santa Barbara Channel. Thus, it is a Chumash artifact. Additional Chumash candidates under consideration as possible dorsal fin effigies include three objects pictured in Georgia Lee's classic work The Portable Cosmos (Lee 1981:Figures 16a, 18a, 18c).

A Fin-like Sandstone Slab Grave Marker from Santa Cruz Island

D. B. Rogers (1929:292-293) wrote briefly of two sandstone slabs that had served as grave markers at a cemetery that had been severely damaged in a land-slip. Both were illustrated in his Plate 34. The first (Rogers 1929:Pl. 34, upper) measures 19 in. (\approx 48 cm) in length by 13.5 in. (\approx 35 cm) in width. Its general shape might be considered roughly fin-like. Unfortunately, Rogers' photo has cut off what was probably just a small area of the artifact. Its surface exhibits busy but patterned incised lines. Among all of this, there are two design elements that especially stand out, each being formed of two deep line incisions that cross approximately at right angles to one another. There are additional "cross-like figures" and "many less pronounced scorings which run parallel to the uprights an the arms of the crosses." The other specimen (Rogers 1929:Pl. 34, lower) is 23 in. (\approx 58 cm) x 11 in. (\approx 28 cm) with incised designs. With minimal imagination one might see in its plan view shape some crude resemblance to a whale.

A Fin-like Slab from the Goff's Island Site

In the annals of southern California archaeology, the association of cetacean imagery with death rites finds what is perhaps its most elaborate expression in Burial I-35 from the Goff's Island site, or CA-ORA-108 (a.k.a. CA-ORA-8). This village site looked out over the ocean with the Laguna Hills as an immediate backdrop, and it sat just about 0.8 km north of where Aliso Creek exits to the Pacific.

We discuss the I-35 shaman's burial at this juncture of our study since it affords a convenient segue from this section with its emphasis on dorsal fin symbols into the section below with its attention to whole body representations, mostly of cetaceans, particularly whales. Specifically, among an impressive array of grave furniture, including shamans' paraphernalia (i.e., steatite sucking tube, quartz crystal, steatite elbow pipe, bell pestle, a beautifully fashioned steatite donut stone, and a ceremonial obsidian knife [Winterbourne 1967:21-23, 44, 80, 96, 130-133, 155]), there was also a stone slab that the WPA archaeologist supposed might have stood for a dorsal fin that was part of a mock-up of some kind of cetacean; his exact words follow:



San Miguel Island (Catalog No. 13423). (a) Painted design on one side; (b) incised design on opposite side. After Irwin (1965: Figures 1b and 1c).

Figure 16. Tabular object from



b

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South of the haliotis shell dish a slab of whale bone extended for thirty inches in much the same manner as a lining for this [I-35] grave. At the southern extremity of the whale bone slab a stone crudely triangular in shape projected several inches above the bone. Whether this stone had any significance other than forming an extension to the bone slab is problematic. However, the thought that the stone might be symbolic of the dorsal fin, the slab of the body and the haliotis shell dish of the head of either the grampus whale or some other sea animal held sacred by these people, is not too far fetched to consider [Winterbourne 1967:44].

There is little further information on the stone object. It was photographed in situ along with the rib and abalone dish (see Winterbourne 1967:Plate XXXIV). Unfortunately, the photograph is not a close-up image of the dish-rib-stone arrangement. The dish with its asphaltum plugs in the excurrent holes can, however, be seen clearly in Plate XXXXI (Winterbourne 1967:156).

Whole Body Effigies

Introduction

The regional archaeological record testifies to a broad range of authentic whole body, portable effigies representing or possibly representing cetaceans; this section offers notes about and illustrations (Figures 17-19, 21-33, 35) of many such examples, followed by a section dealing with inauthentic cetacean statuettes crafted for illicit purposes.

Only a small number of stone carvings might be interpreted with minimal equivocation as representing fish, but most of them are of questionable authenticity, a subject to be addressed elsewhere in this article. Beyond projecting a basic referent (kind of animal), authentic whole body cetacean effigies surely communicated deeper symbolism as their presence in burials and sacred caches would seem to indicate. Additional measures of the importance of cetaceans in the belief systems of regional peoples emerge from the ethnographic record. These animals would also have been food fare, and in some cases they provided manufacturing materials.

Documentations of genuine, traditional whole body cetacean effigies in the present section will indirectly support the idea that particular fin-like artifacts had been fashioned to resemble dorsal appendages. Certain ethnographic data to be discussed in another section will add weight to this argument.

Archaeological Recordings of Whole Body Portable Effigies and Their Associations

Descriptions and Contexts

The great majority of whole body cetacean-like effigies (see Figures 17-19, 21-33, 35) of reliable provenance are from territory occupied historically by the Gabrielino; fewer are documented from Chumash territory. Among those specimens alleged to have been carved by Chumash artisans, many turn out to be mere fantasy pieces created to sell to collectors of Indian antiquities (see Figures 36-39).

On rare occasion provenance of a genuine stone effigy has been incorrectly assigned, as when two San Nicolas Island cetacean carvings sent to the Smithsonian were labeled "Santa Barbara" (Anonymous 1879:219, footnote). The majority of known authentic effigies of clear cetacean referent were fashioned from medium to dark gray steatite quarried in most cases on Santa Catalina Island, and of these many were in Native use beyond the period of initial contact with Europeans.

Catalina Island Specimens: Two Paul Schumacher Finds

Among the earliest published images of steatite whole body effigies from coastal southern California are the two Santa Catalina Island specimens shown in Figure 17 that were discovered by Paul Schumacher (Anonymous 1879:219-221). Each was a grave good.

The well-published effigy of Figure 17a with its rounded and blunt head bears at least a superficial

resemblance to the sperm whale, a kind of toothed whale. The specimen of Figure 17b with its long dorsal fin suggests a male killer whale, the largest of all dolphins. The dorsal fins of orca males, particularly older males, can reach 1.8 m in height and are straighter than those of females, whose more curved dorsal fins extend up to 90 cm in length (Carwardine 2002:152-155). Particularly noteworthy is the incision encircling the top of the fin, an apparent effort to project phallic imagery. The flippers of this effigy may have been broken, which would account for their shortness.

> Figure 17. Santa Catalina Island, grave associated, steatite whale effigies. Discovered by Paul Schumacher. (a) Harvard Peabody Museum Catalog No. 77-85-10/13272; (b) Harvard Peabody Museum Catalog No. 77-85-10/13271. Illustrations after Anonymous (1879:220).





San Nicolas Island Specimens Recorded by de Cessac

In 1878 Léon de Cessac collected artifacts on San Nicolas Island; these activities were in conjunction with the French Scientific Expedition to California (1877-1879), also referred to as the Pinart-de Cessac Expedition (Hamy 1951; de Cessac 1951). The French explorer counted many "stone fetishes" among his finds (see Figures 18 and 19), and he published an article on these effigies. Robert Heizer's wife, Nancy, translated the 1882 article into English, and along with R. Bendix's redrawings of the small sculptures, de Cessac's scholarship (1951) appeared in Reports of the University of California Survey No. 12. The Frenchman regarded certain artifacts that appeared to represent cetaceans to be "particularly remarkable" for two major reasons. First, he saw design elements on some specimens as having enough realism to allow species identifications. It should be noted that in this de Cessac sought the counsel of Chumash informants (Hamy 1951:6). It is also worth pointing out that the Frenchman mistakenly believed San Nicolas Island had been home to Chumash seafarers (Hamy 1951:12). Second, de Cessac also took some of the more simple forms to be schemata for cetacean effigies. Rather, we suppose that such objects were finished, albeit highly conventionalized. De Cessac interpreted some of the aquatic "statuettes" as fish but many more as cetaceans. A large number of the sculpted pieces were grave associated.

There are illustrations of de Cessac's finds (see de Cessac 1951:Plate 1). Some of Heizer's drawings and photographs of the objects can be seen in Hudson and Blackburn (1986:Figures 318.9-6 through 318.9-17). Heizer's line drawings allow for some interesting observations; specifically, one witnesses that a number of the effigies had been drilled on their undersides to receive a bone or iron pin in order that the carving might be set securely in proper position upon a platform of some sort. One such specimen with an iron nail still

embedded in its underside is an effigy de Cessac took to be a killer whale (Figure 18g); the French explorer called special attention to a groove which sets off the head from the rest of the body. He presumed the groove had been made in order that a suspension cord might be fastened onto the effigy. We note that the encircling groove imparts a certain phallic look to the object. The Frenchman believed several other carvings related to the orca (see Figures 18a, d-f). He regarded the stone sculptures of Figures 18b and 18c as fish. He believed the artifact of Figure 19a represented the common porpoise, or striped porpoise. He used Scammon (1874:100, Plate 19) as his authority. Actually, this animal is a dolphin, not a porpoise. It is the Pacific white-sided dolphin (Lagenorhynchus obliquidens) which has several common names that incorporate "dolphin," two others that incorporate "porpoise." De Cessac also saw one specimen as representing a northern right whale (see de Cessac 1951:Plate 1-H and -I) and another as a California gray whale (see de Cessac 1951:Plate 1-K).

The largest single gathering of images of coastal southern California cetacean/fish effigies published in a scholarly work occurs in Hudson and Blackburn (1986:176-179, Figures 318.9-6 through 318.9-37). This profusion follows largely from the two scholars' decision to reproduce Heizer's (ca. 1950s) line drawings as well as three of his photographs from Heizer's examination of the de Cessac effigies at the Musée de l'Homme, Paris. Of those pieces in their "Effigy" section that are authentic Indian artifacts and which fit stylistically within a range of cetacean-to-fish category, we sort well more than half into a whale/dolphin/ porpoise group; most of the remainder are "betwixt and between" with reference to cetacean versus fish. Only one line drawing by Heizer strikes us as looking much like a fish, more specifically a shark (Hudson and Blackburn 1986: Figure 318.9-13 #7010; see also de Cessac 1951:Plate 1G) (see our Figure 19a). Again, de Cessac (1951:2) believed that this statuette represented what is today known as the Pacific white-sided



Figure 18. San Nicolas Island effigies with Musée de l'Homme catalog numbers. (a, f, g) According to de Cessac (1951:2), killer whale figurines; (b, c) according to de Cessac (1951:2), fish effigies; (d, e) according to de Cessac (1951:1-2), whale representations. After R. Bendix's redrawings; and see also Hudson and Blackburn (1986:185-189).



Figure 19. San Nicolas Island figurines. (a) Musée de l'Homme Catalog No. 1010; de Cessac (1951:2) believed this specimen represented a "porpoise." After R. Bendix's redrawing; see de Cessac (1951) and also Hudson and Blackburn (1986:192); (b) whale effigy. After drawing and photograph in Hudson and Blackburn (1986:187, 193).

dolphin (*Lagenorhynchus obliquidens*) (see Carwardine 2002:218-219).

San Nicolas Island is particularly notable first for the story of its "Lone Woman," Juana María, who spent 18 years (1835-1853) stranded at this place, 105 km distant from the mainland (see O'Dell 1960; Heizer and Elsasser 1961, 1973; Grant 1966:129-132; Mc-Cawley 1996:208-212). Secondly, it is notable for the spectacular artifact collection gathered up by León de Cessac. Thirdly, it is notable for its Cave of Whales on the southern shore which had grooved petroglyphs, some with traces of red colorant, representing orcas, dolphins, and/or sharks carved into a boulder close to its entrance and into the east wall (Figure 20) (Reinman and Townsend 1960: Appendix 2, 101-106; Rozaire and Kritzman 1960; Bryan 1970:book cover, 120-121; McCawley 1996:83). There were also black paint pictographs representing killer whales at

the back of the cave's main chamber (Rozaire and Kritzman 1960; McCawley 1996:83).

A lower panel of the petroglyphs became detached from the wall and was subsequently delivered to the Southwest Museum (Anonymous 1962:36; Bryan 1970:120). The remaining petroglyphs disintegrated in the 1960s (C. Rozaire, personal communication 2011; see also Grant 1966:132).

Reinman and Townsend's comments are considered:

...Petroglyphs of sea life as represented by the cave on San Nicolas Island have not been previously reported in California. Kroeber (1925:938) states that "The cave paintings of the south [southern California], therefore, represent a particular art, a localized style or cult. This can be connected, in all probability, with the technological art of the Chumash and island Shoshoneans as manifest in the occasional carvings of whales, quadrupeds, and the like in steatite."[Reinman and Townsend 1960:101]

Reinman and Townsend's assertion that petroglyphs of sea life were not previously reported is correct if we take "petroglyph" to refer to non-portable stone. Consider, however, that Hoffman (1885:31) wrote of stone slabs erected near San Pedro, south Los Angeles County, to either mark a grave location or to memorialize a deceased person. In his Figure 8, Hoffman reproduced incising on one such slab that showed geometric designs but also crude yet identifiable representations of whales (see also Heizer 1968:104).

More Nineteenth Century Island Collected Specimens

Another early collector on San Nicolas Island, A. Barnard, recovered killer whale effigies that are presently housed at the American Museum of Natural History. A drawing of an 1882 find (Figure 21a) was published by Lorenzo Yates (1900:Figure 365-2; see also Hudson and Blackburn 1986:Figure 318.9-21). Two years previous, Barnard had found a killer whale statuette whose dorsal fin exhibits a small drilled hole, presumably to allow suspension (see Hudson and Blackburn 1986:Figure 318-9-20).

Yet another 1880s era collector, but associated with Santa Catalina Island relic hunting, was Mrs. James Johnson. Her 1882 finds of steatite whale effigies also reside in the collections of the American Museum of Natural History (see Hudson and Blackburn:1986: Figures 318.9-18 and 318.9-19).

An additional important early discovery on Catalina, this by William Henry Holmes (1902:184, Plates 47 and 48), consisted of a grouping of grave goods; among other things it included a complete spike ("Wallace spike" see Sutton 2010:22), the "glans" ends of three spikes, a birdstone/hook stone, a platter, and "a much conventionalized fish or finback whale"



Figure 20. Cave of Whales petroglyphs, San Nicolas Island. After a photograph by Charles Rozaire published in Meighan (2000:21, Figure 11.5) and also after Reinman and Townsend (1960:105, Plate 1) and Bryan (1970:120).



Figure 21. Whale effigies. (a) Found in 1882 on San Nicolas Island by A. Barnard. After Yates (1900:Figure 365.52) and Hudson and Blackburn (1986:Figure 318.9-21); (b) found by William Henry Holmes in a Santa Catalina Island grave. After Holmes (1902:Plate 47).

(Figure 21b). The last noted object is far more likely to be a cetacean effigy than a fish effigy for the exaggerated look of its dorsal fin.

In 1908 Dr. Frank Palmer, dentist turned archaeologist and then Southwest Museum Curator, negotiated with De Moss Bowers, son of Stephen Bowers, for the purchase of specimens collected from the southern Channel Islands (Los Angeles Sunday Times, 24 November 1908:12). Several whale effigies were part of this collection.

The Palmer-Redondo Effigies

A turn of the century grading operation in Redondo Beach unearthed a treasure trove of grave offerings that included many effigies (Sawyer 1903; Miles-Stetson 1904; Anonymous ca. 1904; Palmer 1905, 1906; Wallace 2008:203). There were canoe charms, three animal figurines (one described as a whale, another a rabbit, and the third a dog [or coyote], and about 50 birdstones. Crystals, ochre, and a plummet-like charmstone were all mentioned. There were many phallic spikes (now called Wallace spikes [see Sutton 2010:22; also Koerper and Evans 2011:102, Figure 4]).

In many graves "every stone implement was broken in two;" obviously this bespeaks ritual "killings" of burial goods. Palmer (1905:21) gave the birdstone count as about 50. In a later article Palmer (1906:25-26) offered very little on what became known as the Palmer Redondo site (CA-LAN-127) save for an observation that no European goods were found within the site, and ergo the remains must have dated to before Cabrillo's arrival in 1542 at San Miguel (now San Pedro Bay).

In 1932 at LAN-127, nine burials and an "offertory area" were discovered. All but one of these burials contained grave goods (Van Valkenburgh 1932; also Wallace 2008:203-204). Two whale fetishes (see Figure 22a), a seal effigy, and a sea otter effigy were all recovered with Burial No. 2 (see Wallace 2008: Figure 2; also Koerper and Evans 2011). Other items with this adult skeleton included six bird/hook stones,² a spade-shaped fetish, three "Wallace" spikes (see Sutton 2010:22), a lump of red ochre, and a quartz crystal (see Van Valkenburgh 1932).

A child interment (Burial #1) was richly endowed with grave goods that included what the excavators in 1932 called a fish fetish resembling a "tadpole with curved tail." This oddity is far more likely to

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Figure 22. Figurines from the Palmer-Redondo site, Redondo Beach; curated at the Natural History Museum of Los Angeles County. (a) Steatite whale carving from the Burial 2 cache. (Catalog No. A3121-32-21); (b) shark or whale effigy from Burial 1 (Catalog No. A3121-32-5); (c) fish or cetacean effigy from Burial 5; material is probably steatite (Catalog No. A3121-32-35).

have been a bird talon effigy (see Miller 1991:62, lower photograph, at left). Another Burial #1 fetish was characterized as "cigar-shaped, with a finlike protuberance" that could have been a "shark" (Figure 22b). Cameron (2000:Table 12.3) took this specimen to represent a shark, however, it might also be interpreted as a whale mimic. Among other things, nine "Wallace spikes" accompanied the deceased child.

cm I

Burial 5 at the Palmer-Redondo mortuary site contained a fragment of a "fish fetish" with a "shark-like mouth" (Figure 22c). The specimen is so simple, however, that it is uncertain whether it is a fish or a highly conventionalized cetacean. In 1937 and again in 1956 excavations were conducted in the area of the Palmer-Redondo site, but the yield of cultural material never approached what was uncovered in 1903 and 1932 (Wallace 2008:204-205).

Las Llagas No. 1

In 1929 David Banks Rogers published the results of his archaeological investigations on the Santa Barbara coast. This tome incorporated his 1925 finds from Las Llagas No. 1, located 27 km west of the City of Santa Barbara. The site is also known as CA-SBA-78 (*Mikwi*). Rogers (1929:221) assigned Las Llagas No. 1 to the period transitional between the Hunting People culture and Canaliño culture. Chester King in a personal communication to Georgia Lee (1981:49) suggested a temporal placement around 600 BC, this based on his analysis of time sensitive beads.

Rogers' Las Llagas No. 1 discussions included relatively detailed descriptions of a circular enclosure, which he interpreted as a sacred compound or shrine. This approximately 32 m diameter, partially subterranean structure housed a wealth of ritual artifacts, four of which were whale effigies. Rogers chose only two of these statuettes to illustrate (1929:Plate 74, lower photograph); one is crafted of shale (Figure 23a) and the other of siltstone (Figure 24b). Their images in



Figure 23. Las Llagas No. 1 (CA-SBA-81,or *Mikiw*) whale effigies. (a) Unusual shale specimen with drilled eyes and a blowhole (Catalog No. SBMNH NA-CA-81-7A-2). After Hoover (1974:36, bottom) and Hudson and Blackburn (1986:Figure 318.9-27); (b) crude siltstone specimen (Catalog No. SBMNH NA-CA-81-7A-4). After Hudson and Blackburn (1986:318.9-28).

Rogers' study are relatively small, but fortunately each has been illustrated elsewhere (see Hoover 1974:36; Hudson and Blackburn 1986:Figures 318.9-26 and 318.9-27; see also Grant 1966:Figure 37) as have the two whale specimens not appearing in Rogers' (1929) work (see Lee 1981:Figure 25; Hudson and Blackburn 1986:Figures 318.9-28 and 318.9-29). Regarding the whale statuettes not illustrated in Rogers' (1929) study, both are of siltstone (Figures 23b and 24a).

Also found in the enclosure were two "sunbursts," each consisting of an arrangement of plummet-like ("cigar-shaped") charmstones radiating out from a centrally placed, roundish stone. Additional appurtenances found in the enclosure were displayed in Rogers' (1929) Plate 74 – pecten shall rattles; smoking pipes; bone panpipes;

crystals; and two "snake heads" in which Rogers (1929:388) saw "phallic suggestion." Also mentioned was a "unique 'gambling top'" fashioned out of a milky translucent calcite stone (Rogers 1929:388).

Subsequent burying of the dead had intruded upon the integrity of the enclosure. We can not be sure that the enclosure or any of its contents had connected with death rituals, either interment or mourning ceremonialism.

WPA Discoveries of Possible to Probable Whale Effigies at Newport Mesa

The artifact illustrated in Figure 25a was recovered during WPA excavations under the authority of Anthropological Project No. 4465 at the Banning-Norris

> Figure 24. Whale effigies from Las Llagas No. 1. (a) Siltstone specimen (Catalog No. SBMNH NA-CA-81-7A-5). After Lee (1981: Figure 25) and Hudson and Blackburn (1986:Figure 318.9-29); (b) white shale statuette (Catalog No. SBMNH NA-CA-81-7A-1). After Rogers (1929:Plate 74, bottom right) and Hudson and Blackburn (1986:Figure 318.9-26).



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a (1968).

Figure 25. Small effigies recovered in WPA investigations. (a) Naturally shaped sandstone object bearing some resemblance to a whale; this manuport subsequently incised on both surfaces. Recovered at CA-ORA-58 (Catalog No. N–379); (b) CA-ORA-58 sandstone or siltstone whale representation (Catalog No. N–416); (c) steatite killer whale symbol from CA-ORA-163 (Catalog No. 2560). Drawings (a) and (b) after Anonymous (1937a); drawing (c) after Anonymous

site (CA-ORA-58) in November 1936. ORA-58 is located at Fairview Park, Costa Mesa, atop Newport Mesa overlooking the Santa Ana River (see also Koerper et al. 1996).

This natural object of sandstone had been incised on both sides (Anonymous 1937a). The more elaborate decoration occurs on the side shown here. Maximum width was reported as one half inch (1.25 cm). This specimen (Catalog No. N–379) bears some resemblance to a whale, and that may account for why it was collected and brought to the site.

The artifact shown in Figure 25b was shaped from sandstone or siltstone (Anonymous 1937a). It too was recovered at ORA-58 (see Koerper et al. 1996)

by a WPA field crew working under the authority of Anthropological Project No. 4465. It too was discovered in November 1936 (Anonymous 1937b) and subsequently given a catalog designation, N-416. This specimen may have been incised on both sides. It resembles a whale, but one reviewer suggested a *Mola mola*.

What almost certainly is a killer whale effigy (Figure 25c) was found at a depth of 46 cm by WPA excavators on February 14, 1938, at the Griset site, or CA-ORA-163 (Anonymous 1968:29, 30, 42, 67; see Koerper et al. 1996). Excavations were undertaken under the authority of WPA Project #7680. ORA-163 lies just over 2 km north-northeast of ORA-58, on Newport Mesa and not far from the Santa Ana River.

The whale mimic was carved from Catalina Island steatite. It is 27 mm in diameter at the middle point of its 82 mm length. It was probably John Winterbourne who wrote, "This effigy might be that of a shark or perhaps a dolphin, but that it is a killer whale seems the more probable conclusion" (Anonymous 1968:67).

The Little Harbor Site, Catalina Island

Meighan's article (1959) on the Little Harbor site, Catalina Island (CA-SCAI-17) illustrates steatite effigies (Figure 26) that the late UCLA professor believed to be the "forerunners of the beautifully made whales, hook-shaped stones [birdstones, pelican stones], and other effigy forms of the protohistoric Canaliño culture" (1959:392). Meighan's Type 1 effigies (1959: Figures 5b-1, 10a, b) (Figures 26a, b) compared favorably, in Meighan's estimation (1959:392), to a Malaga Cove artifact pictured in Walker (1951:Plate 15b), which Walker referred to as a "spatula-like object" (Figure 27) that he believed had possibly functioned as a "ceremonial wand" (1959:60). Two steatite effigies from a San Nicolas Island site (CA-SNI-40) pictured in Reinman and Townsend (1960:Plate 13j, k) (Figures 28a, b) offer fits to Meighan's Type 1 artifacts.

Meighan also pictured six steatite elongate, pointed artifacts (1959:Figures 10f- k) that he interpreted as fragments.that had broken off Type1 effigies (Figures 26f-k). Similar objects, also of steatite, were pictured in Reinman and Townsend's SNI-40 report (Plate 13h, I) (Figures 28c, d). See also Evans (1963, 1964) and Chace (1965). Meighan's Type 2 artifact (Figure 26c) similarly sports an elongated, pointed design element. His Type 1 and 2 objects were later called "spike forms" (Meighan 1976:28) for the design element just noted. His Type 3 (Figure 26d, e) specimens are less descript.

Fitzgerald and Corey (2009:198) referenced their CA-SCAI-17 effigies, but some confusion attends their discussions of Meighan (1959). In an endnote they wrote:

Meighan did not assign specific traits to his three types of effigies...A general description of the three types is as follows: Type 1 has a bulbous end similar to a golf club with a single long flattened fin like appendage. Type 2 are [sic] elongated or pointed ovals that have a generic fish form, and Type 3 are [sic] simply long flattened and somewhat pointed specimens that Meighan thought were the broken tips of Type 1 effigies (1959:395). [Fitzgerald and Corey 2009:198]

It is not correct that a fragment (broken tip) of Type 1 was given a separate type designation. Meighan's Type 3 is what Fitzgerald and Corey describe under Type 2. Meighan's Type 2 has a golf driver look about it, not Type 1. They have not offered a correct description for Type 1, which as stated above, Meighan compared favorably to Walker's (1951:Plate 15b) "spatula-like object" (see Figure 27).

There is a statement that the steatite effigies were all unusually shaped "in forms vaguely suggestive of fish and/or sea mammals with elongated dorsal fins" (Fitzgerald and Corey 2009:186). Meighan's Type 3



Figure 26. Steatite objects from the Little Harbor site, Catalina Island, which Meighan (1959) saw as forerunners to later effigies such as whale forms and birdstones. (a, b) Meighan's Type 1; (c) Type 2; (d, e) Type 3; (f-k) fragments that Meighan believed had broken off of Type 1 "effigies." After Meighan (1959:395, Figure 10).

effigy (what Fitzgerald and Corey mistakenly called Type 2) has no elevation of any sort, that is, no hint of a dorsal fin. Meighan mentioned hook-shaped stones and whales as the possible referents, and it seems probable that he looked upon his Types 1 and 2 as prototypes for the later birdstones/pelican stones and the Type 3 as the inchoate step in the evolution of whale effigies or some other marine animal. Assuming that Fitzgerald and Corey (2009) meant their speculations regarding dorsal fins applied to those steatite artifacts that Meighan showed as his Figures 10a-c, f-k (our Figure 26a-c, f-k illustrations), we perceive Fitzgerald and Corey to have been in advance of Meighan with regard to decipherment of body part. Parenthetically, Meighan (1976:28) eventually recognized that some of the "beautifully made whales" were not genuine.

Finds from CA-LAN-264 (Malibu Site) and from the Palos Verdes Peninsula

Meighan (1976) shared his thoughts on burial associated effigies from CA-LAN-264, or the Malibu site,



Figure 27. Steatite artifact from a cairn at Malaga Cove; possibly representing a killer whale. After Walker (1951:58, Plate 15).

that he believed represented fishes and mammals (Figures 29 and 30). The UCLA scholar was struck by certain effigies' (Figure 29) similarities to effigies from a nonburial cache (Figure 31) uncovered in 1969 during bulldozer operations on Palos Verdes Peninsula and reported on by Wallace and Wallace (1974: Figure 1).

The Malibu site lies in territory generally considered Chumashan, but it is only a short distance west of Takic territory (see e.g., Kroeber 1925:Plate 1; Bean and Smith 1978:Figure 1; McCawley 1996:22, Map 2). Meighan contemplated whether LAN-264 had actually "belonged to Shoshonean territory," these musings reflecting, perhaps, an effort to account for close comparisons between the LAN-264 carved figures and those reported by Wallace and Wallace (1974) as tightly sequestered in an abalone shell on Palos Verdes Peninsula, which sits within the middle third of the Gabrielino coastal zone. LAN-264 was, however, the historically recorded *Humaliwu*, a Chumash settlement (Gamble et al. 2001:188; see also Martz 1984).

In his Masterkey article on the Malibu site finds, Meighan (1976) was particularly selective, his focus being the contents of one of five graves containing grave goods, specifically that having the most (N=17) stone effigies, Burial 35.¹ Radiocarbon dating placed Burial 35 at circa AD 850. The UCLA archaeologist illustrated only four of those 17, one a birdstone and three that he interpreted as fish or sea mammals, although in his Figure 1 caption (1976:25) all three were referred to as "fish effigies." Note in Figure 29 the mouths represented on these artifacts. One specimen (Figure 29c) (also Meighan 1976: Figure 1d) began its cultural life as a non-perforated, plummet-like charmstone to which a mouth was later added. A similar artifact accompanied a different grave at LAN-264. These two charmstones qua animal effigies offer a look at an intriguing phenomenon, to wit, recycling of pre-Late Prehistoric charmstones, only slightly modified, into Late Prehistoric ritual venues. Figure 30 illustrates several other effigies from LAN-264.

For Meighan the Malibu site fish/sea mammal mimics were, in terms of complexity of execution, at an intermediate position between his so-called "spike forms" (see Meighan 1959) and the "more elaborate effigies of whales and other animals, often decorated with inlaid Olivella beads." Parenthetically, Wallace and Wallace (1974:59) harbored little or no illusions that such objects with bead inlays were anything but bogus. Note that Meighan chose his words carefully, putting his emphasis on "complexity." He did not indicate that he supposed the "spike forms" had been the specific forerunners of cetacean or fish effigies.



Figure 28. Steatite artifacts from San Nicolas Island. Compare against the illustrations seen in Figures 26a-c and 26f-k. After Reinman and Townsend (1960:Plate 13h-k).

Figure 29. Effigies from CA-LAN-264, or the Malibu site (also Humaliwo). Meighan referred to these as "fish effigies." All have indications of mouths and (a) has two drilled eyes; (b), (c), and (d) came from Burial 35 in which there was also a birdstone (Meighan's [1976] Figure 1d). Meighan attributed (a) to a different burial. Gamble et al. (2001:193) provided lithic identifications for three of the above Middle period Chumash specimens: (a) green serpentine; (b) brown shale; (d) gray shale. After Meighan (1976:Figure 1).

The serendipitous recovery of the Palos Verdes cache allowed description of what Wallace and Wallace (1974:61-63) guessed to be possible representations of three whales (Figures 31a, b, d), two pinnipeds, a sea otter, and a dolphin (Figure 31c). The "whales" and "pinnipeds" might be described as highly conventionalized, and thus it is arguable what animal anyone of them actually represented. The specimen labeled a dolphin (Figure 31c) is more convincing as such owing to its "recurved dorsal fin and a furrow between back and forehead" (Wallace and Wallace 1974:62-63). The purported sea otter carving offers a somewhat credible resemblance to the mustelid. Interestingly, the artifact shown in Figure 31d is basically a waterworn stone that had undergone some amount of polishing by the hand of man and had also received an incised mouth. (Indeed, all these animal effigies were supplied with mouths.) Since the piece is so slender, the Wallaces offered the possibility that the referent was

the Minke whale (Wallace and Wallace 1974:63).³ Interestingly, a biconically perforated, plummet-like charmstone had been included within the Palos Verdes cache, yet another example of an antique, ceremonial object having been recycled toward a later magicoreligious purpose. Parenthetically, the Wallaces (1974:65) suggested the possibility that the carved figures may have served as hunting amulets.

San Clemente Island Effigies

Cameron (2000:30-35) illustrated and discussed a number of steatite effigies from four San Clemente Island sites, three of which produced artifacts with possible to clear cetacean referent. From the Eel Point site (SCLI-43C) there was a dolphin-like carving (Cameron 2000:Figure 12.2) found with Burial 3. There was also a representation of a whale (Cameron 2000: Figure 12.6, upper) with eyes, mouth, and a blow hole



Figure 30. CA-LAN-264, or the Malibu site (also Humaliwo), effigies. (a-c) Probable cetacean effigies, although Cameron (2000:Table 12.4) labeled each a "fish, dorsal fin"; (d) probable dorsal fin, but Gamble et al. (2001:193) thought it a "possible fish effigy"; (e) probable whale effigy, although Cameron (2000:Table 12.4) called it a "fish effigy". Specimens 1741, 1742, 1763, and 1751 were reported as excavated from Burial 36, and specimen 3218 was reportedly retrieved from Burial 63. Most objects from Burial 36 could reasonably be construed as whole body representations of swimming creatures, and thus the triangular artifact (Catalog No. 1751), if a fin mimic, would be a good fit with this aggregation. Gamble et al. (2001:193) provided lithic identifications for No. 1742 (gray steatite); No. 1741 (gray brown biotite schist); No. 1751 (brown metamorphic slate); No. 3218 (gray steatite). After Cameron (2000:12.12 and 12.17).



Figure 31. Gabrielino carved stone, sea animal figurines from Palos Verdes Peninsula. (a) Made of blue-black steatite, this possibly conventionalized cetacean had a mouth created by two short diagonal strokes on either side that met at one end (Wallace and Wallace 1974:61); (b) Bill and Edith Wallace suggested that this micaceous siltstone carving represented a humpback whale; (c) the Wallaces saw this soft gray soapstone carving as a dolphin; (d) largely a natural, waterworn pebble of blue-black steatite but with a tiny incised mouth. This slender body suggested a minke whale to the Wallaces (1974:63). After Wallace and Wallace (1974:Figure 1).

indicated (Figure 32); part of its dorsal fin had broken away, and approximately one third of the distal end is also missing. Cameron (2000:Table 12.1) incorrectly listed its weight as a whopping 7,710.5 grams, or heavier than an Olympic track-and-field shot! This error is less likely one of a misplaced decimal and more likely a typographical mistake that provided an extra numeral seven. Thus, we surmise the correct weight is likely to be 710.5 grams.

Two halves of what Cameron believed was a "dish, ladle, or scoop" were recovered at the Eel Point site (2000:Figure 12.7) (Figure 33). One piece was associated with Burial 1, and the other came out of Unit 4. This specimen was included in Cameron's effigy article since "it bears a resemblance to a fish form" (2000:33). This interpretation, we presume, followed her notion that it was the side (lateral) view of a fish that the artisan created; however, the symmetry (refer to Figure 33) is unconvincing for a fish. Rather, the outline of the object offers a better fit to a whale as seen from either a dorsal or a ventral view. If correct, then the device at the right in Figure 33 represents flukes rather than a piscine tail.

Another oddity from the Eel Point site is a biconically drilled object that Cameron (2000:Figure 12.4) suspected had represented an elephant seal. The perforation was taken to indicate an eye on each side of the pinniped's head. Biconically drilled holes often functioned to allow suspension. The position of the hole on this effigy (Cat. No. E-230) strongly implies its intended orientation, which would be correct if the carving represented a seal or sea lion, but it would also make sense if the artist had sought to fashion a dorsal fin pendant.

Four steatite objects from the Ledge site (SCLI-126) were labeled as "whale-fish?" effigies (Cameron 2000: Table 12.1, Figure 12.8). Three are fragments; only one is complete. They are so stylistically conventionalized that none is clearly either a whale or a fish.

Figure 32. Broken steatite whale effigy from SCLI-43C, or the Eel Point site, San Clemente Island (Catalog No. E240). It has eyes, a mouth, and a blow hole. After Cameron (2000:34, Figure 12.6, top).



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Figure 33. Steatite dish that evokes whale imagery (Catalog No. E263). Excavated at SCLI-43C, the Eel Point site; artifact refitted from two halves not found together. One piece came from Burial 1 and the other from Unit 4. After Cameron (2000:34, Figure 12.7).

There is a purported whale statuette (Figure 34) surface recovered from the Eel Cove Sand Dune site (SCLI-47)(Cameron 2000:Table 12.1, Figure 12.6, bottom row). McKusick and Warren (1959:145, Plate 7H) had previously illustrated the artifact and had drawn attention to its "large dorsal fin." They wrote, "A small mouth and one eye are discernable, the other eye apparently being obliterated by weathering. There are two pairs of fins, one pair at the tail and the second near the center of the body." Cameron concurs with this perspective. In the photographic images provided by McKusick and Warren (1959:Plate 7H) and Cameron (2000:Figure 12.6, bottom row) the so-called "eye" and "mouth" are not convincing.

McKusick, Warren and Cameron have interpreted the stylized appendages seen to the lower right of our Figure 34 as flukes and the other lateral elevations

cm

as pectoral fins when these appendages might just as well represent, respectively, the hind and front flippers of a bulky species of pinniped. In other words, the so-called "dorsal fin" could actually be the uplifted head and neck of, say, an elephant seal or a California sea lion!

An Oddity from San Diego County

Discovered as the consequence of a roadside washout three miles southwest of Julian, San Diego County, a Diegueño shaman's cache yielded 21 sucking tubes and one "rudely crescentic," steatite artifact (Heye 1927). George Heye suspected that the carved crescent was an *atulku*, a sacred stone employed in girls' puberty rites and/or heated and applied to ease the delivery of a child (see Koerper 2007a). Oriented as it is in Figure 35 and as it is in Heye's article (1927:Figure 132), this object hints at a dolphin or porpoise referent; however, one might think its inland provenance is at odds with any such interpretation. However, several miles to the south at West Mesa in the Cuyamaca area, two small dolphin/porpoise-like effigies were recovered (True 1970:41, 90, Plate 5). One was molded of clay and subsequently fired, while the other was shaped from a pot sherd.

An Oddity from San Nicolas Island

Gifford (1940:163, 174, 217-01) published brief information and a drawing of what he guessed was a small bone hair ornament. Its provenance is San Nicolas Island. We were struck by its resemblance to a whale. Gifford invited his readers to consider the piece in a horizontal position since in this aspect, he noted, "it suggests slightly a whale figurine" (1940:174).

Inauthentic Cetacean Effigies

The majority of carved stone whole body effigies that are recognizable as to taxonomic order and are illustrated in the regional literature represent cetaceans. Of these, the great majority are labeled "whales." Many of the better known cetacean mimics turn out to be mere fantasy pieces, nearly all displaying distinctive mischaracterization of traditional Native artistic expression. For instance, the majority of these "whales/dolphins" sport bead inlays for eyes and/or



Figure 34. Steatite effigy from SCLI-47, the Eel Cove Sand Dune site, San Clemente Island (Catalog No. 198-48), and presently housed at the Fowler Museum, UCLA. Maximum dimensions 14 x10 x 5.5 cm (McKusick and Warren 1959:145). Oblique lateral view. After a photograph supplied by the Fowler Museum.



Figure 35. Possible cetacean effigy from the Incopah Range of the San Jacinto Mountains, 5 km southwest of Julian, San Diego County (MAI Catalog No. 15/3337). Found in a shaman's cache along with 21 steatite tubes. After Heye (1927: Figure 132).

for highlighters gracing appendages; we are unfamiliar with any cetacean effigy with acceptable provenience documentation that possesses similar inlays.

Figure 36 illustrates several such phony pieces. Collector Clarence Ruth was hoodwinked into purchasing the two too cute pieces of Figures 36a and 36b. These were "collected" by Arthur Sanger who falsely claimed San Nicholas Island provenance (Lee 1993:119) for both.

The object of Figure 36c is stored with the Santa Barbara Museum of Natural History together with other objects that the institution long ago deemed as not "good." The reader might wish to compare this fake effigy and pseudo-smoking pipe with an object acquired by the Los Angeles County Museum of Natural History that is shown in Hoover (1974:36). Arthur Sanger's fingerprints are also on this specimen which sits among a selection of LACMNH artifacts similarly taken to be bogus.

The two tiny whales with shell bead eyes (Figures 36d and 36e) reside in a private collection whose owner is aware of their inauthenticity. The reader might want to compare these with the many small specimens of the Desenberg Collection pictured in

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Dentzel (1971:nos. 272-279). Beyond the Arthur Sanger owned, egregiously grotesque and otherwise strange cetaceans pictured in Burnett (1944:Plates 21-24, 27[20/3727], 29[20/1124]), (see Figure 37), perhaps the next strangest specimen is that of Figure 36f; its overstated curvilnarity seems to project an art deco ambience.

The ithyphallic whale of Figure 38a creatively mocks nature's design. The central motif element would seem to involve a play upon the huge dorsal fin of the male orca. In older killer whales this appendage towers to 1.8 m (Carwardine 2002:152). Known as the "Moby Dick figurine," it resides in a private collection.

The broad smile together with bead inlays seen on the statuette of Figure 38b immediately red-flags this steatite carving, which was once owned, not surprisingly, by Arthur Sanger. Subsequently, the chain of ownership included Eva Slater, noted expert on California Indian baskets, who sold it to Bill Ward in whose collection it currently resides.

When the imprimatur of authenticity for a fake artifact emerges through argument by authority, vouchsafed by a highly regarded archaeologist, the error is all too easily repeated. The protagonist in one cautionary


Figure 36. Twentieth century whale-shaped fantasy pieces. (a, b) Lompoc Museum acquisitions from the Clarence Ruth Collection (Catalog Nos. 1388 and 1389, respectively); (c) fraudulent smoking pipe/cloud blower with bird bone stem; Santa Barbara Museum of Natural History (Catalog No. IPB 3873); (d, e) phony artifacts from the Paul Goldstein Collection (private); (f) "Art Nouveau" whale curated at the Santa Barbara Museum of Natural History (Catalog No. JP93872[6]). (a) and (b) reportedly collected by Arthur Sanger (Lee 1993:199).

tale was Robert Heizer (1957:10), who with uncharacteristic abandon of critical analysis pronounced the steatite carving of Figure 39 as genuine. In calling this California State Indian Museum (CSIM) acquisition "an unusually excellent example of the California stone-carvers art," Heizer had undoubtedly placed emphasis on its exquisite symmetry and surface finish. Its "further significance," he explained, turned on "no reason to suspect its authenticity as a prehistoric aboriginal production." This statement followed on the heels of Heizer recognizing the piece as unusual and noting that "it is rather more realistic" than any of the examples illustrated by de Cessac from the same island [San Nicolas]..." (refer to Figures 18 and 19). It is more technically accomplished by standards of Western Civilization art critique, and so it appears far less conventionalized when set against de Cessac's San Nicolas Island effigies; does this not offer a clue to its modern fakery? Also, does not its dolphin-sperm whale hybrid appearance somewhat belie the judgment of "realistic?" Further damaging to the pronouncement of authenticity is the fact that "nothing of the history

of the piece is on record" (Heizer 1957:2).

The CSIM holding (Figure 39) is without qualifications to deem it "a remarkable piece of prehistoric California Indian sculpture," nonetheless its likeness reemerged in subsequent publications (e.g., Grant 1966:Figure 60; Stickel 1978:Figure 24, right; Heizer and Elsasser 1980:Figure 25; Miller 1991:59). Campbell Grant (1966:125) took the piece as genuine, its remarkable execution laid to an "especially gifted" Native artist. He also stated that it looked like a sperm whale with a killer whale dorsal fin (1966:64), but its dorsal fin is not like that of an orca.

Robert Heizer's carelessness was compounded when he and Albert Elsasser (1980:47, Figure 25) without explanation attributed the carving to San Nicolas Island. Worse yet, the UC scholars referred to the

> Figure 37. Fake effigies in Burnett (1944). Sold to the Heye Foundation by Arthur Sanger and O. T. Littleton. (a) Killer whale effigy falsely attributed to Sequit Canyon, Malibu Ranch. After Burnett (1944:Plate 27[20/3727]); (b) dolphin-fish hybrid effigy falsely attributed to Solstice Canyon, Malibu Ranch. After Burnett (1944:Plate 29[20/1124]).



effigy as Chumash stonework. Equally perplexing is the fact that the artifact's length was stated by Heizer (1957:10) to be 22.5 cm, but in that same article the illustration with scale indicated (1957:Figure 2a) suggests something closer to 18 cm. Heizer and Elsasser (1980:Figure 25) later gave the length as 18 cm. Were they operating off of the earlier illustration, or had the effigy been remeasured?

Other twentieth century carved whale effigies have similarly enjoyed multiple billings. For instance,

Mohr and Sample (1955:Figure 2) illustrated a 3.5 inch steatite whale having what is perhaps the most engaging smile of any regional fake. Bernice Johnston (1962:109) in her classic work, *The Gabrielino*, pictured this grinning creature. Leif Landberg (1965) used the exact same image as the frontispiece for his classic *The Chumash Indians of Southern California* (see also Stickel 1978:Figure 32). Fake whales abound (see also e.g., Anonymous 1946:174; Curtis 1963:103-109; Landberg 1965:74, bottom; Hoover 1974:36-38; Dedera 1976:20; Grant 1978b:525, Figure 2;



Figure 38. Carved steatite whale effigies; fakes crafted for the antiquities market. (a) The "Moby Dick" specimen (private collection); (b) phony whale with a big smile. Bill Ward Collection. Formerly Eva Slater Collection. Once owned by Arthur Sanger.



Figure 39. Twentieth century steatite whale carving. After a rendering by John Goins, published in Heizer (1957:Figure 2a). No scale provided owing to certain discrepancies in the literature. The piece could be about 18 cm long or about 22.5 cm long.

Chartkoff and Chartkoff 1984:Figure 50; Hudson and Blackburn 1986:Figures 318.9-23, 318.9-24, 318.9-25; Gibson 1991:62; Miller 1991:60).

Piscine Effigies: Fishy to Phony

For most observers the bone object of Figure 40 is likely to evoke swordfish imagery, less likely marlin or sailfish imagery. The dorsal fin, however, is somewhat unlike those of such long-billed fish and more like the appendage witnessed for many sharks, porpoises and most dolphins. The rear extension of the effigy indicates a tail, not flukes.

The specimen is attributed to San Nicolas Island (Hudson and Blackburn 1986:179) and was possibly a find of Ralph Glidden (Michael Pahn [Media Archivist, NMAI], personal communication 2011). Certainly it had been in Glidden's possession. In 1936 the artifact entered George Heye's Museum of the American Indian (Patricia Nietfeld [Supervisory Collections Manager, NMAI], personal communication 2011).⁴

The artifact is problematic, as are many "relics" accumulated by Glidden through mostly pothunting but also via purchase and trade (Wlodarski 1978:9, 1979:9, 1982:8-10). This fish looks exotic, especially when its relative realism and material are considered together. Wlodarski (1979:59) had written this of Glidden's collection: "Question arises [sic] when Glidden's artifacts, attributed to the Channel Islands...do not correspond to previously identifiable forms attributed to the area." Glidden did add "unique specimens to his museum [at Avalon] to draw more public interest" (Wlodarski 1978:9). Glidden's unpublished notes do reveal a five month trip to San Nicolas Island in 1915 (Wlodarski 1978:4) where he had gone to collect pearls but ended up with arrowheads, etc. Perhaps at some time he did find the Figure 40 artifact on San Nicolas Island, but then there is the possibility that it had been the handiwork of a Native Alaskan hunter employed by an American or European fur company operating along the southern California coast. Carving in bone and tusk was long a tradition within the cultures of the so-called "Russian Indians" and "Kodiaks." Then again, it may be a fraudulent piece; after all, so many of the local fake artifacts appear comparatively realistic set against local Native carvings, and many mix the physical attributes of two or more categories of animal.

Some mischief involving cross-species hybridization might be imagined looking at the creation of Figure 41a. This steatite fish-like dolphin or dolphin-like fish was purportedly of Gabrielino manufacture (Johnston 1962:185); however, the identical image appears in a classic work on the Chumash (see Landberg 1965:99). Even earlier, Mohr and Sample (1955:63) had published the same image a swordfish they said, "probably of Chumash origin." The carving sports a Pacific sailfish-style dorsal fin, yet it possesses a transverse A Proposed New Genre: The Dorsal Fin Effigy



Figure 40. Bone "swordfish" effigy; supposedly from San Nicolas Island and originally in the Ralph Glidden collection. In 1936 it was purchased by the Museum of the American Indian (Catalog No. 18/9446[189446.000]). After Hudson and Blackburn (1986: Figure 318.9-37) and a photograph supplied by the NMAI, Smithsonian Institution.



Figure 41. Steatite carvings lacking provenience; each fraudulent. No scale available. (a) Bernice Johnston labeled this a "dolphin" carved by a Gabrielino artisan. After Johnston (1962:185); this identical drawing (artist unknown) appeared in Landberg (1965:99); (b) Hoover (1974:37) was unsure whether this carving represented a swordfish, but Miller (1991:62) supposed that it did. It sports a sailfish-style dorsal fin. After Hoover (1974:37).



(fluke positioned) hind appendage, which is contoured in the manner of many kinds of fishtails. This statuette possesses a "beak," a bit long by dolphin standards, but neither long enough nor pointed enough to qualify as a credible "sword." The arched body and sideways turned head project dolphin imagery. Note the shell bead inlays for eyes. Such inlaid eyes are a near certain signature for fakery. Another creation, perhaps by the same sculptor, seen in Figure 41b, appears in both Hoover (1974:37) and Miller (1991:62). With a sailfish dorsal fin but with a proximal extension hovering between beak and spearlike bill, there is hint of yet more cross-species hankypanky. The tail, while clearly fish form, is far different from tail configurations witnessed for sailfish, marlins, or swordfish. Ignoring for the moment the proximal

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extension, the general look is that of a fish. It too has bead inlays for eyes.

"Marlin" would be the best guess designation for both the slate effigy and the steatite effigy pictured in Burnett's (1944) Plate 30. "Sailfish" would perhaps be the better designation for the steatite specimen in Burnett's (1944) Plate 31, although its distal extremity appears to mimic flukes somewhat more readily than some kind of fish tail. All three objects arrived at the Heye Foundation and Museum of the American Indian through Arthur R. Sanger and Orville T. Littleton. Greater taxonomic dissonance attaches to the egregiously grotesque "fishes" seen in Burnett's (1944) frontispiece (see Figure 42) and his plates (Burnett: Plates 16-20, 25, 26, 27[20/1857], 28, 29[20/1998], 30, and 31), all these objects likewise obtained by the Museum via Sanger and Littleton. Although curved incorrectly, the dorsal fin of the Figure 42 creature might recall the killer whale dorsal fin.



Figure 42. Huge steatite fantasy piece smoking pipe qua grotesque fish. Bird bone mouthpiece is affixed using asphaltum; visible stem is about 5.6 cm long. Upper lip to curved tail measures 51.4 cm. Weight is 4.876 kg. Arthur Sanger and Orville T. Littleton falsely represented this piece as having come from Sequit Canyon, Malibu Ranch. Note the outer lip chestnut cowry (*Cyprea spadicae*) inlay which perhaps represents a gill area. After Burnett (1944:frontispiece).

Cameron (2000:Figure 12.10) pictures two stone carvings that had been shaped to resemble sharks; each is associated with San Nicolas Island. Cameron noted that one of these sharks (Figure 43b) was "found" on a sand dune by Arthur Sanger (see Bryan 1930a:148, 1930b:217, 218; 1970). This was on the occasion of the 1926 Los Angeles Museum Expedition to San Nicolas Island (Bryan 1930a, 1930b, 1970). It is almost certainly another fantasy piece. Cameron (2000) omits it from her Table 12.5 (effigies having "dependable provenience"), and thus we presume she took it to be a "bad" piece.

However, Cameron (2000:38, Figure 12.10) regarded the second representation of a shark (Figure 43a) as having "dependable provenience." We are extremely skeptical. It turned up in a Nicoleño burial excavated by Bruce Bryan on November 11, 1926 (Bryan 1970:50; also Bryan 1930a:148, 1930b:217, 218), but it is more than reasonable to strongly suspect that Sanger, who was on the island with Bryan, had planted the object, perhaps, in part, in a perverse effort to garner credibility for what he had planned as his December 13 "discovery" of the shark-like effigy shown in Figure 43b.

Bryan reported the material of the artifact of Figure 43a as steatite, but Cameron (2000:38) wrote that it was crafted of sandstone (see also Bryan 1930a:148, 1930b:218). Cameron failed to address the incongruity. Parenthetically, a miniaturized duplication of Bryan's shark, which Bryan illustrated in black silhouette (Bryan 1931:178, 1970:50), appears as a kind of spacer on the last page of every chapter in Bernice Johnston's (1962) book on the Gabrielino.



Figure 43. More fishy fish. (a) A sandstone shark effigy, purportedly from a San Nicolas Island burial, but this provenance is highly doubtful; (b) shark effigy supposedly found on a San Nicolas Island sand dune by Arthur Sanger, notorious dealer in fake artifacts; (a) and (b) after Cameron (2000:Figure 12.10); (c) steatite fish pendant of questionable authenticity, Phelan Collection, Santa Barbara Museum of Natural History. After a line drawing in Walker and Hudson (1993:Figure 16c) and in Lee (1981:104, Figure 24c).

Sanger's shark figurine (Figure 43b) was fashioned out of dark gray steatite, and red pigment adhered to the mouth (Bryan 1970:75). Bryan (1970:84) noted that other animal effigies of the types that incorporated small shell beads to denote eyes sometimes had touches of red ochre in their open mouths. Sanger was notorious for dressing up artifacts (Ross ca. 1950; Lee 1993:210-211, 213; see also Koerper and Chace 1995), fraudulent as well as genuine, with red ochre.

The reader may be amused, or not, to learn that there is much more to the present fish story. To wit, Bryan referred to November 11 as "effigy day." Just prior to his unearthing of the shark seen in Figure 43a, which came in two pieces that fit together perfectly, he had also unearthed at Artist's Mound a "fragment of a shark image showing the head and a large dorsal fin, carved from a harder stone resembling quartz or feldspar" (Bryan 1970:50). Further, with the "next spadeful of earth," following recovery of the second piece of the shark of Figure 43a, there appeared yet another shark image, this one carved from the inner nacre of a piece of abalone shell. Incidentally, also on November 11, preceding all three of Bryan's Artist's Mound recoveries of shark symbols, he uncovered a "small fragment of a whale effigy."

All four of the shark effigies, Bryan's three and Sanger's one, were photographed clustered together in a specimen tray with a large and varied gathering of artifacts (see Bryan 1970:89) that were all associated with the October-December 1926 San Nicolas Island "archaeological expedition" attended by Bryan, Sanger, and Charles Hatton. This expedition was sanctioned and supported by the Los Angeles Museum of History, Science and Art.

Our suspicions regarding object plantings were aroused in part by what Bryan had observed on November 10 at Artist's Mound. He had returned to do work at this place after a one day absence only to discover that his deep trench and six-foot deep pits had become completely filled in and "there was actually a mound of sand over them..." (Bryan 1970:49). With a tongue-in-cheek dismissal of ghosts as the culprits, Bryan convinced himself that the "famous San Nicolas wind" had accomplished all this. He seems not to have considered a hypothesis of human agency, which is curious since he signaled if only obliquely at least some distrust of Sanger's credibility and judgment (Bryan 1970:20, 27, 39, 46, 75).

Bryan's continuing general naivete and/or self-delusion is on display (1970:84-85) with his reference to animal carvings that constituted, he believed, "the outstanding artistic accomplishment of the primitive peoples of the southern California coastal area" (1970:84-85). His citation of "shell beads…often inlaid into the soft stone to denote the eyes of such creatures, and open mouths…sometimes painted with a touch of red ochre" should have raised suspicions.

There are yet more San Nicolas Island fish stories. Sanger informed Bryan of an infant burial he discovered on a subsequent visit to the island (Bryan 1970:82). The baby was purportedly accompanied by five sandstone slabs, all carrying decorations rendered using asphaltum. The largest of these artifacts was 2.5 ft. (about 76 cm) long (Bryan 1970:83, top), the smallest just 10.5 in. (about 27 cm) (see Bryan 1970:83, bottom). Rough sketches of two other slabs, probably drawn by Sanger (Bryan 1970:84), show a fish representation on each. One of these is 22 in. (about 56 cm) long, the other 20 in. (about 51 cm) long. The fifth slab carried a simple geometric pattern. Five slabs on one burial is highly unusual. One might reasonably wonder whether Sanger added two additional fish to the San Nicolas Island catch in order to boost the credibility of earlier purported finds.

If all this fish silliness were not enough, Bryan (1930b:222) mentioned a small soapstone carving recovered by Sanger in subsequent looting at "Cannibal Hole" on the northern shore of San Nicolas Island—a bison representation (see Gamble 2002: Figure 3). Bryan reported that Sanger had been searching for proof of long distance connections between coastal California peoples and the pueblos of southern Arizona. Bryan believed at the time that Sanger had indeed found his proof in the steatite bison. Witness the "buffaloed" Bryan's uncritical assessment:

To have pictured the original buffalo with his own eyes the ancient artist must necessarily have traveled at least five hundred miles inland. And even if he merely carved the image from hearsay description, the fact remains that whoever described the creature to him is himself direct evidence of intercourse between the races. [Bryan 1930b:222]

Forty years later Bryan (1970:82) reported his reconsideration of the imagery of Sanger's four-inch-long "buffalo." He supposed that it had instead been intended to be the likeness of a bear. Wording in Bryan's 1970 publication signals that the Los Angeles Museum archaeologist perhaps had arrived at some general distrust of many statements proffered by Sanger (see Bryan 1970:20, 27, 28, 39, 46, 75). We are left to wonder what Bryan might have thought of Sanger's claim to having discovered a red ochre covered walrus effigy on one of the Channel Islands (see Woodward 1927:65).

At some time after the 1926 expedition, Cannibal Hole is also supposed to have produced for Sanger two skulls, each embedded with a projectile point (Bryan 1930b:221). The senior author is preparing a paper on Sanger's shenanigans involving arrowheads and spearheads inserted into human neurocrania.

There are many effigies with legitimate coastal southern California provenance that are purported to represent fish. However, the authors caution against invoking the community of such artifacts as an impressionistic measure of the roles of fish imagery in such things as increase ritual, fishing magic, folk belief, and formal mythology. Many examples are so conventionalized that they might just as easily be interpreted as cetaceans (e.g., Bryan 1963:47) (see also Figure 22c). Hudson and Blackburn (1986:179, 199, Figure 318.9-36) illustrate seven supposed fish effigies that had been collected by Ralph Glidden and presently curated at the Catalina Island Museum, Avalon. The reader is directed to Figure 44 where these seven objects are illustrated, all but one lacking a design element that would offer some suggestion of a dorsal fin. The specimen of Figure 44c is reminiscent of the whale carving of Figure 25c, which was found at ORA-163. The pendant of Figure 44f exhibits the arched look one associates with a small cetacean leaping out of the water.

Yet another questionable fish is shown in a line drawing in Walker and Hudson (1993:Figure 16c) and rendered herein (Figure 43c). It is a steatite pendant. It is without archaeological provenience and arrived at the museum with a private donation, the Phelan Collection. It possesses inlaid shell eyes, prima facie evidence of "fishiness." A very cute but very phony stingray is pictured in Anonymous (1947:104). There is one noteworthy example of an authentic Channel Islands effigy that offers a specific piscine referent. Porcasi and Andrews (2001:61, Figure 11) illustrated the specimen, a *Mola mola* pendant of abalone shell that entered the collections of the American Museum of Natural History in 1891 (see Nelson 1936).

The Material Contributions of Cetaceans, "Swordfish," and Sharks

Introduction

This section discusses the material contributions of cetaceans, "swordfish" (fishes with sword-like bills), and sharks to regional human sustenance and industry. Whales, dolphins, and porpoises were sources of food, and whales, especially, were sources of bone



Figure 44. So-called "fish effigies" collected by Ralph Glidden on Santa Catalina Island (Hudson and Blackburn 1986:179). Several might just as easily be interpreted as cetacean effigies. After Hudson and Blackburn (1986:199, Figure 318.9-36).

for house constructions, grave furniture, utilitarian manufactures, and nonutilitarian artifacts. The various fishes with "swords" (swordfish, marlins, and sailfish) and large sharks offered some amount of flesh, but comparatively speaking other body tissues of these fish provided little to Native economy.

Perhaps the fishes just mentioned had been more actively and more directly pursued than cetaceans, but whether this is an accurate generalization or not depends largely on knowing whether the medium and smaller sized cetaceans that had entered Native larder were hunted or whether they were harvested mainly after having been beach stranded, a result of being chased ashore by other marine animals, or by being washed ashore dead or dying through sickness or wounds. Minke whales (a kind of baleen whale) and pilot whales (a kind of dolphin) have been observed being chased towards shore by killer whales (a kind of dolphin) and sharks (Colby 2000:4). Some Indians believed that swordfish and killer whales worked in tandem to drive whales ashore (see below). Another consideration here is the degree to which cetaceans were fortuitous captures owing to entanglement in fishing nets (see Chartkoff and Chartkoff 1984:159).

Cetacean Flesh

Archaeological investigations in southern California attest to the exploitation of the smaller cetaceans across many millennia. For instance, Owen et al. (1964:462, 469) noted dolphins and porpoises as possible food sources during the Early Horizon at the Glen Annie Canyon site (CA-SBA-142). Meighan (2000:22) saw significant exploitation of porpoises and dolphins at some island sites, pointing especially to data from the Little Harbor site, Catalina Island (Meighan 1959:400-403). Porcasi and Fujita (2000) wrote of the capture of dolphins as early as eight thousand years ago on the southernmost Channel Islands and an island in the Cape Region of Baja California. They believed that this activity exceeded the hunting of near-shore pinnipeds and that it could be accomplished without the requirement of large boats. Glassow (2004) presented a case for dolphin hunting going back over six millennia. Citing Garlinghouse (2000), Porcasi and Fujita (2000), and Porcasi et al. (2000), Byrd and Raab (2007:219) provided a definitive statement attesting to Early Holocene Channel Island peoples enjoying a productive marine economy based significantly on dolphin and pinniped exploitation. The implication seems to be that the smaller cetaceans were hunted rather than scavenged. Colby (2000:24) cautioned that the question is unresolved whether cetaceans were hunted or merely harvested when they had become stranded.

The meat and blubber of the largest cetaceans consumed by regional Indians was definitely not obtained through hunting, but rather through scavenging (e.g., Kroeber 1925:634; Heizer 1974; Blackburn 1975:10; Hudson et al. 1978:130; Heizer and Elsasser 1980:119; Erlandson 1994:28-29). Stephen Bowers (1878) reported that Santa Rosa Islanders hunted whales from canoes constructed of sea lion skin, but Heizer (1974:27-28) easily disposed of Bowers' claim. Grant (1978a:517) thought that Bowers' Santa Rosa Island informant was referring to porpoises or pilot whales.

Ingles (1965) noted that whale strandings and the washing ashore of their carcasses had occurred with some frequency. One might wonder about the dependability of the flesh supply; witness, for instance, the 1810 reportage of Fr. Jose Señán at Mission San Buena Ventura:

In less than two months five whales have been washed ashore, one of them on the

beach of the Mission itself, the other four near by. And so in a short time we have seen five of these monsters stranded, whereas sometimes several years go by without seeing them at all. [Simpson 1962:46]

Yet, it may have been the case that word would spread near and far with the sighting of a large dead sea mammal. Also, it should not be assumed that discovery of a whale provided all who showed up with enough flesh satisfactory to peoples' needs. From Chumash informant Juan Justo, Lorenzo Yates (1891:375) learned that when a whale was found ashore, a "big feast" was occasioned, but a "general fight" might ensue on the event of not enough meat to go around.

Other relevant quotes include information from Hugo Reid, who, in his Letter No. V (Heizer 1968:22), related that "the principle subsistence of the immediate coast range of Lodges and Islands" consisted of fish, whales, seals, sea otters, and shellfish. His exclusion of dolphins and porpoises is puzzling. Does this reflect that these animals were not systematically hunted but rather were obtained following entanglements and drownings in fishing nets (see Chartkoff and Chartkoff 1984:159)? Perhaps his statement reflects only an amount of taxonomic license, the smaller cetaceans having been subsumed under "whales."

In response to Question 17 of the Interrogatorio, a priest attached to Mission San Fernando observed that Indians living "on the coast are fond of every species of fish especially the whale" (Geiger and Meighan 1976:85). It is reasonable to wonder whether the Franciscan respondent had subsumed other kinds of cetaceans under the label of "fish." The questionnaire was circulated among the California missions in 1813.

A wide range of whales had been available for scavenging (see e.g., Orr and Helm 1989). Five or six good possibilities were baleen whales such as the relatively small minke whale. There would have been even a greater number of possibilities from the kinds of toothed cetaceans whose common names embraced the term "whale"—as many as three sperm whales; as many as four beaked whales; and three kinds of dolphins, viz., the killer whale, the false whale, and the short-finned pilot whale. Pilot whales are noted for their mass strandings (Norris and Prescott 1961:347; Carwardine 2002:22).

Among the smaller oceanic dolphins with common names incorporating "dolphin," about five could have been hunting targets from watercraft, but any one of them plus perhaps other small cetaceans would have periodically washed up on local shores. Of the two porpoises, Dall's porpoise could have been a more common procurement target than the rarely encountered harbor porpoise. Again, some unknowable percentage of dolphins/porpoises were serendipitous outcomes of net fishing.

Some of this net casting would have been from the *tomol*, or plank canoe. Hudson et al. (1978:Chpt.8) noted that with regard to subsistence pursuits, the *to-mol* was mainly for fishing, although Chumash informant Fernando Librado mentioned their employment in taking abalones (Hudson et al. 1978:125). Blackburn (1975:10) and Grant (1978a:517) wrote that occasionally smaller cetaceans, seals, and sea otters were procured using harpoons and/or tridents from planked canoes. Otters might also have been dispatched using bow and arrow. The Chartkoff's (1984:159) maintained that any systematic use of boats to hunt sea mammals was directed to sea otters.

Cetacean Bone

Introduction

The greater bulk of bones employed by Channel Islanders and those mainlanders living along the adjacent coastal zone were skeletal elements salvaged from the larger cetaceans, especially ribs and scapulae, but occasionally jaws and rarely rostrums. Such osteological remains were most conspicuous in house constructions, but they also served varied purposes related to disposition of the dead and for the construction of shrines. Bones of cetaceans, both the large animals as well as the small, were fashioned into tools but also nonutilitarian objects, some with decorative purpose and others that were directed to ritual. Below, we bring together archaeological and ethnographic witness to the value of cetacean bone.

The Uses of Large Whale Bones

House Construction

The employment of whale bone for house construction is well documented in the ethnographic and ethnohistoric literature. Barbareño Juan Justo informed Lorenzo Yates about whale remains so employed on the Northern Channel Islands (Yates 1891:375). There are the accounts of Carl Dittman, George Nidever, and Emma Hardacre regarding Nicoleño huts which were built using whale ribs (Heizer and Elsasser 1973:3,11, 21, 23). Nidever recorded that brush was used to cover the ribs (Heizer and Elsasser 1973:11; see also Ellison 1937). Hardacre was more informative, observing that whale ribs were "planted in a circle, and so adjusted as to form the proper curve of a wigwam-shaped shelter ... " and that rushes might have been skillfully interlaced within the bone framework (Heizer and Elsasser 1973:21, 23). Kroeber (1925:634) included whale jaws as having been incorporated into Nicoleño house framing, and he stated that either sea lion hides covered this framework or it was wattled with brush or rushes. Regarding the whalebone hut of Juana María, this Lone Woman of San Nicolas Island incorporated whale scapulae along with ribs (see Morgan 1979). Salls et al. (1993:184-189) noted the use of whale bone in other houses at the Nursey site, not just for roofing but also as material to fashion entrances to houses. Raab et al. (1994:252-253) placed such construction on San Clemente Island as far back as the Middle Holocene (see also Byrd and Raab 2007:221-222).

Some of the most detailed hut building data are from investigations conducted on San Clemente Island. For instance, Rigby (2000, also 1985) described a house pit at the Nursey site (SCII-1215) that had been roofed with whale ribs. The floor measured 470 cm x 400 cm with a depth of 50 cm. The construction of this house feature was estimated to have been about 1400-1500 years ago.

David Banks Rogers' (1929:315) description of a house feature at the Willows site, Santa Cruz Island, offers further testimony to whale ribs as roofing material. On the floor there lay decayed wooden poles and fragments of whale ribs crisscrossing one another. Rogers (1929:332) also discussed a Santa Rosa Island house structure with split ironwood posts alternating with the ribs of whales. Remains of sea grass mats that had been used to thatch the hut still adhered to these posts. They had been kept in place by rope woven of sea grass. Four whale scapulae had apparently helped keep the thatching in place.

Whale Bone in Death Related Contexts

The employment of whale bone in death related contexts drew the attention of Father Crespi, who on August 14, 1769, at what is now Ventura, recorded in his diary that a large whale bone at a certain spot outside any burial ground was where a person recently deceased would be brought, shrouded, and accorded a mourning wake (Brown 2001:392-393). The deceased's head would be set upon this whole bone. Soon the body would be taken away to either the men's graveyard or the area reserved for women. Crespi noted that a great many whale bones were seen in all the grave yards (See also Bolton [1926:147], but a read of pages 107-113 in Brown [2001] is recommended.).

Crespi's diary entry for August 20 (Brown 2001:426-427) is identical to the entry of six days prior (see also Bolton 1926:156). The Portolá party was then in Barbareño territory, near Mescaltilán Island, Goleta Slough.

Pedro Font (Bolton 1933:254), a diarist on the Anza Expedition (1775-1776), recorded on February 24, 1776, that deceased persons were laid to rest with large bones of whales placed atop the corpse. He also commented that whales were "customarily stranded" along the coasts. The exploration party was then in Ventureño territory. Another early observer, naturalist Longinos Martínez (1961:62), noted in 1792 that a whale rib would be placed lengthwise over a grave to serve as a marker.

Phil Orr (1943:10) related that as of 1875 it was common to see whale bones projecting out of cemetery grounds. These easily drew the attention not just of collectors of Indian artifacts but also vandals. These factors as well as natural weathering eventually effaced such monuments, and by the 1940s they had all disappeared from sight (Orr 1943:10).

Paul Schumacher (1877) documented whale vertebrae on San Miguel Island as grave markers and also reported that bone slabs cut from whale ribs served to line burials (see also Heye 1921:75, Figure 5, 76, Figure 6). The whale sternum might also turn up in cemeteries (see Rogers 1929:208-209, 379, 380). Colby (2000:15) made note of a large rostrum.

Among the more noteworthy Chumash burials having whale bone are ones that were excavated by Phil Orr (1941a, 1941b, 1942, 1943:25, 1956:25) and David Banks Rogers (1929). Orr investigated the skeleton of a young woman laid to rest in a flexed position on a whale scapula at the *Helo* site on Mescaltitlán Island in the Goleta Slough. The scapula, which had possibly functioned also as a bier, was highly decorated (Orr 1943, 1956:25). Olivella disc beads had been inlaid around the rim using asphaltum. Countersunk into the scapula were two large abalone shells, each of which was surrounded by the same kinds of beads. There were even more inlays, calluses of the giant keyhole limpet, at the scapula's distal end. The inlays were fitted into prepared grooves and depressions.

Rogers (1929:383) observed a unique use of whale bone slabs. At an unspecified Canaliño site in the Santa Barbara Valley, he excavated the grave of a mother and her twins. There were many personal adornments with this grave. At either side of the woman's head were steatite ollas, each housing the remains of a newborn. The opening for both globular coffins had been sealed with a whalebone slab.

So-called "Cannibal Hole," a "facetiously termed" location (see Bryan 1927:149-150) near Corral Harbor on the north shore of San Nicolas Island, yielded four whale scapulae, markers for graves (Bryan 1930b:215-217, 1970:32, 33, 93-97). However, these shoulder bones, along with human bone and varied grave furniture, appeared to have been deposited together in a bewildering jumble, their dispositions probably indicating reburial in a formal ritual of materials exposed by winds (see Bryan 1970:2-3) rather than primary interments. Holder (1910:245) had previously reported San Nicolas Island graves marked by whale bones.

The reader wishing additional mention of whale bone connected to disposition of the dead is referred to Taylor (1863a:99); Yarrow (1879:35); Heye (1921:75-76); Kroeber (1925:634); Harrington (1928:134, Plate 22, 1942:10, item 230); Rogers (1929:376-380); Meighan and Eberhart (1953); Winterbourne (1967:44); Morgan (1979); Hudson and Blackburn (1986:73); McCawley (1996:122); and Colby (2000:15).

Whale bone might play some small role in the Gabrielino Mourning Ceremony. In 1945 Edwin Walker excavated a trove of ritual items from the Big Tujunga Wash site which measured a mere 38 ft. (\approx 11.5 m) long (north to south) by only 10-14 ft.

(\approx 3-4.3 m) wide. Among the range of objects were burned whale remains and human bone fragments (some of them cremated), representing as many as 15 individuals. Other bone included "gaming pieces of deer-bone" (most probably astragali [see Koerper and Whitney-Desautels 1999; Koerper 2007b, 2008]). There were ceremonial stone knives, projectiles of several types, incised soapstone gorgets, small to large pestles, fire-stained bowls (many "killed"), bowls containing cremated human remains, broken steatite tobacco pipes, and so on. Perhaps the most remarkable artifacts were sherds (about 40) from a large red-onbrown Hohokam jar (Walker 1951:Plate 49), its type identification supplied by Emil Haury who placed its period of manufacture between the seventh to ninth centuries AD.

Walker interpreted the constricted area with its many and disparate objects to be the outcome of several related events. Certain people had been first buried in a cemetery and subsequently removed to a place at which an anniversary Mourning (Burning) Ceremony was carried out. These deceased had been special persons. With Kroeber (1925:609) as his authority, Walker (1951:114) informed his readers that such mourning rites were "observed two, five or ten years after the death of only prominent members of the village ... "Following such mourning rituals, what remained from the burnings was gathered up and scattered in the contracted space, that is, the Big Tujunga Wash site, which was not in the immediate locality of the mourning events. If Walker's speculation is correct that the charred whale bones had previously functioned as grave markers, then this might help account for the comparative infrequency of definitive evidence of whale bone grave markers within some parts of Gabrielino territory.

Shrines and Shrine Markers

At CA-VEN-27, or the Pitas Point site, the Chumash village of *Misnagua* (see Gamble 1983), Chester King

discovered a whale bone shrine (King 1978:Figure 6; Gamble 1983:Figure 1, 2008:Figure 16, 132). The site dates to AD 1050-1500. This feature was located behind a house pit in Area 2 of the investigations, well away from the cemetery. A second whale bone related feature, perhaps also a shrine, or at least a ritual related item, occurred in Area 3 within a house depression. Here was a large, flat, red dot painted whale bone. The dots perhaps, according to King, depicted stars (personal communication 2007 to Gamble, in Gamble [2008:132]).

Whale bone may have been used to identify a location as the site of a shrine (see Hudson and Blackburn 1986:68). J. P. Harrington learned from Fernando Librado that Chumash employed a whale jawbone to indicate a ritual setting where on a designated day certain powers would be demonstrated (Hudson et al. 1977:40). The whale bone marker was decorated with red ochre zigzag lines (Hudson and Blackburn 1986:67). Perhaps the flat whale bone with red dots found at *Misnagua* was such a marker, but one stored away until the next ritual demonstration of powers was to take place.

Cetacean Bone - Utilitarian Manufactures

When a category of cetacean is indicated in reference to the bone material of some utilitarian object, in most cases it is "whale." Among the weapons that might have been fashioned of whale bone are the following: arrow points (e.g., Heye 1921:Plate 46, 79); clubs (e.g., Heye 1921:80, Plate 47; Colby 2000:22); daggers/knives (e.g., Heye 1921:4, Figure 8; Harrington 1942:15, item 486; Hudson and Blackburn 1986:304); harpoon/spear points (e.g., Abbott and Putnam 1879:224; Heye 1921:Plate 46, 79, Plate 47a-c; Gifford 1940:164, 178, 224-W3; Reinman and Townsend 1960:24, Plate 19); and swords (e.g., Abbott and Putnam 1879:231-232; Heye 1921:80, Plate 47; Hudson and Blackburn 1986:307). Swords might have been made of the ribs of other kinds of cetaceans and also the lower jaws of porpoises.

Whale bone procurement tools that were not weapons include the following: digging stick weights (e.g., Heizer 1955:154; Hudson and Blackburn 1982:248) and shellfish pry bars (e.g., Harrington 1928:134, 1942:13, item 366; Reinman and Townsend 1960:23, Plate 19a, b; Grant 1966:57; Bryan 1970:88; Hudson and Blackburn 1982:254, 1987:58, 59; Colby 2000:15, 22). Manufacturing tools include the following: awls (Heye 1921:Plate 46d, 79, Plate 47); chisels (e.g., Heye 1921:80, Plate 48; Reinman and Townsend 1960:24, Plate 19g; Hudson and Blackburn 1987:61, 62); bead making drills (e.g., Hudson and Blackburn 1987:125); reamers (e.g., Heye 1921:81, Plate 48e); wedges (e.g., Harrington 1928:134, 1942:13, item 366; Reinman and Townsend 1960:24, Plate 19h, I; Grant 1966:57; Bryan 1970:88; Hudson and Blackburn 1982:254, 1987:58, 59; Colby 2000:15, 22); shaft straighteners (Grant 1978b:526, Figure 4; Hudson and Blackburn 1987:108, 110-111); and skin dressing tools (e.g., Heye 1921:79, Plate 47). Fernando Librado told J. P. Harrington that fleshers were never made of whale bone but rather of elk ribs until the Spanish introduced domesticated animals (Hudson and Blackburn 1987:139); Librado was of Island descent but held Ventureño information (Harrington 1942:5). George Heye (1921:81, Plate 49) illustrated certain tools not made of whale bone but possibly of some other kind of cetacean bone that he considered as perhaps employed for plaiting sea grass into mats or garments.

Among the list of whale bone household items are the following: cups and other receptacles (e.g., Los Angeles Sunday Times, 24 November 1908:12; Heye 1921:76-78, Figure 7; Gifford 1940:165, 178-179, 225 BB-1, Figure BB-2, 226 BB-3; Anonymous 1964:16; Hudson and Blackburn 1983:251-252, 255, 302, 304); fasteners (e.g., Hudson and Blackburn 1985:49); spatulate scrapers for caulking or for removing excess caulking/adhesive substances (e.g., Reinman and Townsend 1960:24, Plate 19g); stools (Harrington 1942:10, item 230; Heizer 1970:69; Boscana 1978:146; Hudson et al. 1978:113); and tables (e.g., Hudson and Blackburn 1983:371). The stools and tables were of whale vertebrae. A particularly well made mortar carved from a whale vertebra is pictured in Heye (1921:77, Figure 7).

Certainly other kinds of utilitarian items had been crafted from cetacean bones. It is often the case that bone objects noted in archaeological reports are not identified as to the species that provided the manufacturing material. What follows is a list of some artifacts not named above that may well have been, at least on occasion, produced from cetacean bone: fishhook shanks, meat cutting saws, sewing needles, pressure flakers, scrapers, body scratchers, and strigils.

Uncertainties frequently attach to efforts at assigning a functional category to bone and tooth artifacts. Indeed there are many instances when an archaeologist is even unsure whether some manufacture is utilitarian or whether it is non-utilitarian. In his classic work, California Bone Artifacts, Gifford (1940:163, 174, 216-N1) had no guess as to function of a "shoehorn-shaped object" crafted of dolphin jawbone. It was found on Santa Rosa Island. Heye (1921:Plate 61b, 97) pictures a similar artifact from San Miguel Island that had been created from a cetacean rib. Unlike the Santa Rosa Island specimen, this object is complete, having a sharply pointed end that is either missing from the Santa Rosa piece or perhaps never existed. Heye regarded the San Miguel object as probably a hair pin, yet its needle-pointed part may have been the business end of an awl.

For another such example from Gifford, one that involves cetacean bone, there are two thin perforated discs (1940:165, 179, 227-DD1, -DD2), one a vertebral epiphysis, that may have served as spindle whorls. However, one or both could have been simple buzzes (a kind of whirligig amusement/toy). We offer a last example involving artifacts that Gifford thought might be of whale ivory. These are five coneheaded, shouldered objects (1940:166, 167, 184, 233-234 QQ1, QQ2) which look like possible atlatl spurs, yet four exhibit careful punctate treatment to produce geometric patterns. See also Grant (1966:Figure 58-2). Add to this the application of ochre to the punctations and one begins to wonder whether these objects had been ornaments or small talismans.

As an aside, there are comparatively few references to pinniped bones used to fashion utilitarian objects. Heye (1921:81) offered that sea lion ribs had been employed to make a multitude of tools. The shinbones of seals were mentioned by Hudson and Blackburn (1982:254) as tools to pry shellfish off rocks. Heye (1921:Figure 9) illustrated a tool handle made from the radius of a northern elephant seal; it had possibly been the proximal end of a club. The specimen has a hole through which a thong or rope of some sort might have attached and then looped around the wrist of the person wielding the weapon.

Non-Utilitarian Cetacean Bone Manufactures

Above, note has been taken of large pieces of whale bone in death related venues. Small artifacts of cetacean bone were only infrequently grave associated. One example is an ochre stained dolphin humerus found with Burial 9 at Eel Point C, San Clemente Island (Colby 2000:17). A semi-globular whale bone bowl, 26 cm in diameter and 14 cm tall, was recovered from an interment found by a collector on Santa Cruz Island (Anonymous 1964:16); it had been housed with the collections of the Southwest Museum, Highland Park, Los Angeles. D. B. Rogers (1929:415) made reference to a Canaliño ritual practice in which a shaman would take a bowl cut from a whale vertebra and deposit in it flower pollen. The pollen, he supposed, symbolized plenty and fertility, and periodically the medicine man would mutter invocations to the chief

Indian deity while sprinkling the pollen on "whatever the people most earnestly desired should be productive, the sea, a hunting or fishing party, wild fruits and live oaks, and young married women" (Rogers 1929:415). Unfortunately, Rogers did not cite a source for this information.

There are rare documentations of effigy figures having been carved from whale bone. Reinman (1983) reported a miniature whale bone *tomol* from San Nicolas Island (site SNI-56). The great majority of such canoe talismans were made from soapstone, fewer from wood (see Hudson et al. 1978; Hudson and Blackburn 1986:181-182). J. P. Harrington's notes indicate that these plank canoe mimics were dream charms that might have helped promote good fortune in fishing (Hudson et al. 1978:126; see also Applegate 1978:54, 56). Hudson and Blackburn (1986:213, Figures 318.9-58 and 318.9-59; see also Walker and Hudson 1993: Figure 16a) noted two "birdstone" or "pelican stone" effigies made of sea mammal bone; one of these is actually fossilized whale bone.

There are bone ceremonial wands shown in Hudson and Blackburn ((1986:257-264), many of which are probably of cetacean bone. Some decorative hairpins were carved from cetacean material (see Hudson and Blackburn 1985:76-85). Hudson and Blackburn (1985:80, Figure 212-13) illustrate a possible hairpin made from the "split lower (?) jaw of a porpoise."

One should anticipate that various ornaments, especially from the Channel Islands, had been crafted of cetacean bone. Reinman and Townsend ((1960:24, Plate 190) noted a possible charm fashioned of such. Other objects might include bull roarers. Perforated teeth were body ornamentation; Orr (1947:129) listed three animals he believed had provided teeth —whales, sea lions, and dogs. In their Figure 318.2-6, Hudson and Blackburn (1986:146-147) show three perforated teeth (possible talismans)—whale, sea lion, and dog. Hugo Reid noted pieces of whales' teeth, "ground round and perforated" to make beads (Heizer 1968:24).

Grave furniture at "Cannibal Hole," San Nicolas Island, included whale bone discs that had been placed against the face of some of the deceased (Bryan 1930b:215, 216, 1970:32, 33, 89). Bryan (1930b:93, 219) supposed that the contents of "Cannibal Hole," being a "conglomeration," reflected a "highly ceremonial" reburial feature.

Swordfish and Shark Products

The consumption of swordfish meat is well established (e.g., Gamble 2008:2, 156, 180, 182-183; see also Noah 2005:280). José Señán of Mission San Buenaventura, briefly noting Native fisheries, mentioned in an 1822 letter that a swordfish might feed 40 persons (Simpson 1962:164). Gamble (2008:183) believed that among the Chumash the eating of swordfish meat was reserved for special occasions. Interestingly, the Franciscan priest misattributed the species to the cetacean category. Evidence of shark procurement is commonly discovered on the mainland as well as the islands. Beyond their flesh, swordfish and sharks did contribute other body parts useful to coastal peoples.

Shark parts are rarely noted in the literature. Harrington (1928:136) described a red ochre coated paint cup made of a large shark vertebra that had been recovered at the Burton Mound site at Santa Barbara. Shark skin was used as sandpaper in woodworking to shape and to smooth (Hudson et al. 1978:73; Hudson and Blackburn 1987:74). This function is possible since sharks have small tooth-like scales (placoid scales) that make their skin quite rough. Shark sandpaper is called "shagreen" and has been used in many different cultures for carpentry. Fernando Librado informed J. P. Harrington that shark skin was useful in manufacturing *tomol* planks, since fine abrading was necessary to make planks close fitting (Hudson et al. 1978:45). In their Figure 318.2-5, Hudson and Blackburn (1986:146-147) picture "animal component" talismans from the Chumash site of *Muwu* at Point Mugu (see Love and Resnick 1979). Among these "tooth and talon" specimens from the Wubben Collection, there are two shark teeth and two elements from either the horn shark or spiny dogfish that belong to neither the tooth nor the talon categories. Rather, these elements, shaped like the horns of some ungulates, are the spines that grow in front of the animals' dorsal fins (Mark Roeder, personal communication 2011; see also Miller and Lea 1972:34-35). Gifford (1940:167, 184, 234-SS1, SS2) noted perforated shark teeth; he also pictured a perforated stingray mouth plate (1940:167, 184, 234-TT).

Swordfish bone is identified as a material for drill bits used in bead manufacture (Wiedman ca. 1970; Gibson 1976:93; Hudson and Blackburn 1987:124-126). Swordfish bills are rare finds in Chumash sites, and all occurrences are laid ultimately to the reverence in which the swordfish had been held; the mythological background to this phenomenon will be discussed shortly, but for now it is enough to know that in conjunction with swordfish "worship" there had been a Swordfish Dance. Hudson et al.(1977:75-76) wrote that at least the Ventureño, Barbareño, Ineseño, and Cruzeño had swordfish dancers.

In 1901 a perforated swordfish bill was found on Santa Rosa Island (Gifford 1940:164, 178, 224Y). The perforation was beveled in four places, leading Gifford to suggest a possible shaft straightening or shaft smoothing function; he was skeptical about any atlatl function. An encircling groove around the base may indicate attachment, but Gifford neglected to consider that this artifact may have been part of a swordfish dancer's regalia.

D. B. Rogers (1929:410) occasionally discovered swordfish beaks close to the skulls of male burials. One of his most remarkable finds was a Canaliño skel-

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eton that had the swordfish bill in near perfect association with its skull, viz., "protruding above and forward from the face..." Rogers explained further:

...above and below the skull lay a thick sheet of overlapping triangular ornaments, shaped from the iridescent inner layer of abalone shell. Each of these pieces was pierced with one or more small holes, as though for attachment to some fabric or dressed skin...The body that had lain here had been dressed to symbolize the swordfish, the scaly sides of the head and neck and the formidable sword being very suggestive. [Rogers 1929:410]

Phil Orr found the bill of a swordfish associated with a Santa Rosa Island burial (Hudson and Blackburn 1985:200, Figure 255-4).

In not all cases, apparently, was the swordfish's "sword" that attached to the headdress an actual bill. It could have been some kind of bone imitation of the "sword," shaped to have a sharp, pointed tip (Hudson and Blackburn 1985:199). Harrington photographed Fernando Librado in regalia demonstrating the Swordfish Dance. Other parts of the dance costume were feathered skirts, percussive sticks that were rhythmically tapped together during a performance, chest bands, breast ornaments, and a headdress having bird down and egret feathers (Hudson and Blackburn 1985:134-135, 139-141, 198-201). From Pinart's Chumash vocabularies one surmises one kind of head ornament of a chief had been crafted from the bones of swordfish (Heizer 1952:46-47).

Swordfish and Cetaceans in Regional World Views

Introduction

Archaeological evidence demonstrates that cetacean imagery and swordfish imagery occurred within the belief systems and ritual practices of regional late prehistoric cultures. As previously explained, whale bones were associated with graves and shrines; also discussed and illustrated above was a broad range of whole body cetacean stone carvings, some of which had served as burial furniture. The authors anticipate that this study's advocacy for certain artifacts as dorsal fin mimics will further emphasize the special place of whales, dolphins, and/or porpoises in regional Native world views. As also noted above, artifacts connecting with swordfish imagery include the animal's saber-like bills, several of which were discovered among other evidence of death rites.

The varied archaeological findings, while robust, do not make quite as strong a case for past peoples' reverence toward these marine creatures as do testimonies from ethnographic and ethnohistoric documentations. Accordingly, the emphasis in this section is directed more to mentalistic kinds of data than to materialbased data. However, before proceeding to the pithier information relating to cetaceans and swordfish in ideational landscapes, the authors offer some cautionary food for thought bearing on taxonomic treatments of the marine animals under discussion.

It is reasonable to suppose that Native folk taxonomies had set apart cetaceans from those sea creatures sporting sword-like bills, although both groupings had likely been regarded as kinds of fish. Whether or not distinctions were drawn between the fishes with pointed bills (swordfish, marlins, and sailfish) is long past knowable and is not particularly important here. What is important is that in Native beliefs the long- billed fish that teamed with the killer whale, or orca (from Orcinus orca), to drive whales ashore (Bowers 1878:318-319; also e.g., Landberg 1965:67; McCawley 1996:127) and into the Indian larder was clearly the swordfish (Xiphias gladius). Obviously the orca bore a distinct identity; whether Chumash or Gabrielino had folded this killer into a more generic folk category, one limited to only certain larger cetaceans, or had grouped the orca, say, among just

other members of the family Delpinidae, all of them smaller, is another moot issue.

Contemporary nomenclatures/categories can be daunting. The best known common name for the largest of all dolphins, killer whale, reflects the fact that in western culture "whale," broadly speaking, is used to indicate size more so than zoological affinities (c.f. Carwardine 2002:144). Marine biology often makes a vernacular distinction, but not a formal scientific distinction, between those oceanic dolphins with very prominent beaks and those oceanic dolphins lacking such; this recognizes no basis for scientific classification but only a means to identification, a convenience (see Carwardine 2002:160).

We suppose it possible that Indians might likewise have separated the prominently beaked dolphins from those members of Delphinidae lacking a prominent beaked look. If this had occurred, would Native peoples have included the non-prominent beaked dolphins with the two local members of the family Phocoenidae (i.e., harbor porpoise and Dall's porpoise)? After all, these animals have rounded snouts. We presume Indian net fishermen had been particularly familiar with the two local porpoises as they easily become tangled in fishing nets and drown. On the other hand, would Native peoples, presumably keen observers of nature, have kept dolphins and porpoises in separate categories on the basis of, say, tooth shape? Consider that when identifying a stranded small cetacean, one suggested way to easily tell a porpoise from a dolphin is to examine the teeth, spade-shaped for porpoises but conical-shaped for dolphins (see Carwardine 2002:236). Then again, it is also possible that for regional Indians all small cetaceans constituted a bounded grouping.

In common parlance, particularly in North America, "porpoise" can be so general a term as to include all small dolphins. As a further cautionary note consider that certain members of the Delphinidae family having the prominent beaked look might answer to common names that seem misleading; for example, *Tursiops truncatus*, best known as the bottlenose dolphin, has other common names, among them gray porpoise and cowfish. The common dolphin (*Delphinus delphis*) is also known as the "common porpoise," among other names. It taxes one's sense of orderliness to learn that another name for the harbor porpoise (*Phocoena phocoena*) is also "common porpoise." Recall also that Scammon (1874:Plate 19) used the common name "common porpoise" and "striped porpoise" for *Lagenorhynchus obliquidens*, a dolphin best known as the Pacific white-striped dolphin (a.k.a. Pacific striped dolphin, white-striped dolphin, and hook-finned porpoise [see Carwardine 2002:218]).

The Sea People (Swordfish Men)

Swordfish imagery looms large in Chumash oral narratives and ritual practices, but whales are "surprisingly downplayed" (Hudson and Conti 1981:227). Hudson and Conti (1981:227) pointed out that whales receive no mention as players in major Chumash rituals, and in narratives they are merely a food source for swordfish and humans.

In Chumash mythology whale killing was an inveterate activity of the Sea People, the most prominent of supernatural beings within the Middle World. These eight old "swordfish" were long-bearded men who dwelled in a crystal house beneath the sea (Blackburn 1975:37). Formidable looking with their beards, long white eyebrows, and either plumes or bone swords, they would viciously dispatch their cetacean prey. Their modus operandi is described:

When they catch a whale they play ball with it, throwing the whale back and forth. They have prodigious appetites and terrible manners, for they tear a whale apart with their hands and teeth and eat it raw. [Blackburn 1975:37] The sword was the "hand" of a Swordfish Man. In being thrown about, a victim might land on the shore where it became the property of the people who owned the territory (Blackburn 1975:192). Thus, while generally regarded as malevolent and unpleasant (e.g., Narrative 26 in Blackburn 1975), the Sea People were also regarded as benefactors. That is why the swordfish came in for veneration (see Blackburn 1975:192).

Chumash paid homage to these supernatural beings in an elaborate swordfish dance (see Hudson et al. 1977:75-79; Gibson 1991:85). Previously the authors made reference to this dance, noting that remains of dance regalia have been recovered archeologically, at times in mortuary contexts (see Rogers 1929:410; Davenport et al. 1993). Swordfish, incidentally, received special attention in song at Chumash winter solstice ceremonies (Hudson et al. 1977:61, 105, note 65). McCawley (1996:146, 167) explained that Gabrielino likewise had special songs (*papu marata* songs) dedicated to the swordfish at the Winter Solstice Ceremony. *Papu marata* is probably a Gabrielino word for "swordfish" (Hudson et al.1977:61, 105, note 65).

Roberta Greenwood (1972:83) passed on some of Rosario Cooper's observations gleaned from J. P. Harrington's 1914-1916 unpublished notes. Mrs. Cooper was said to be the last Obispeño speaker. She told Harrington that old women at Avila would cast beads, feathers, and tobacco mixed with lime as offerings to swordfish which passed along the shore.

Mohr and Sample (1955:63-64) speculated that the archaeological discoveries of stone swordfish reflected that the species provided humans with whale blubber and meat (see Heizer 1974:27). Colby (2000:24-25) left the inaccurate impression that it was Stephen Bowers (1878) who had offered this just noted suggestion regarding swordfish effigies. The authors are unaware of any authentic stone swordfish effigies. Mohr and Sample's example of a steatite swordfish effigits (1955:63, Figure 1) sports a horizontally set distal

appendage, (fluke-like) (see Figure 41a), rather than one that is set vertically in fish fashion.

For reasons lost in time, a black-on-red, conventionalized swordfish pictograph was produced at CA-SBa-503, Vandenberg Air Force Base (Lee 1977:10, Figure 12; see also Anderson 1978:cover). Grant (1966:81, Figure 71) illustrated this same Purisimeño pictograph, but inexplicably there are stylistic differences between Grant's rendering and that of Lee (1977).

Clearly the swordfish was caught up in some amount of death imagery in part, we suppose, for its vicious predatory behavior. Fernando Librado had informed J. P. Harrington that a black circle was painted onto the cheek of a Santa Cruz Islander swordfish dancer who was associated with death and mourning (Hudson and Blackburn 1986:73). Henry Russel recalled for Harrington certain foot square Chumash gravestones having a six inch diameter black circle, the line about a half inch in thickness (Hudson and Blackburn 1986:73). At least in some areas where Chumash erected a grave pole on the spot of the ceremonial burning of deceased person's belongings, a swordfish dancer erased by dancing all traces of what had been consumed in fire (Hudson et al. 1977:48-49, 104).

Orca as Benefactor

Again, Reverend Stephen Bowers (1878:318-319) observed that the swordfish was venerated because it united with the killer whale to drive whales ashore (see also Andrews 1916:198-200). The anthropomorphized swordfish in Chumash mythology put on murderous displays that victimized whales, and the orca in the real world is a very fierce character. A short excerpt from a classic work by whaling captain, historian, and naturalist Charles Melville Scammon communicates something of this voracious dolphin's persona:

The attack of these wolves of the ocean upon their gigantic prey [baleen whales] may be likened...to a pack of hounds holding the stricken deer at bay. They cluster about the animal's head, some of their number breaching over it, while others seize it by the lips and haul the bleeding monster under water; and when captured, should the mouth be open, they eat out the tongue. [Scammon 1874:89-90]

Mohr and Sample (1955:63-64) speculated that the archaeological discoveries of stone whales reflected the killer whales provisioning of some sea mammal foods to humans (see Heizer 1974:27). The great majority of aboriginal whale effigies lack close resemblance to the orca. Mohr and Sample's Figure 2 (1955:64) shows a steatite whale effigy with what is clearly an orca dorsal fin, but it also has a very non-orca snout. Its silly smile belies any claim to authenticity.

The Rainbow Bridge

Dolphins (presumably at least some species of Delphinidae) held a very special place in world views of at least some if not all Chumash peoples. Some Chumash oral traditions have passed down a story of migration occasioned by population-resource imbalances. It is called "The Rainbow Bridge." Details are readily available via the internet (e.g., http://www. gaviotacoastconservancy.org/rainbow.html). The most recent retelling can be found in an issue of "News from Native California" (Sanchez 2007/2008:25), and the most artful telling in terms of both prose and illustration is a children's book (Wood 1995).

The narrative explains that the earth goddess, *Hutash*, created a rainbow bridge so that some people could walk from their overcrowded home on Santa Cruz Island to take up new residence on the mainland. On their journey, some individuals looked down from the elevation, grew dizzy, and toppled from the Rainbow Bridge into the turbulent sea. To prevent any drownings, *Hutash* quickly transformed these imperiled people into dolphins. From this there are Chumash

who draw a kinship with these animals, their brother and sister dolphins.

The Whale in Juaneño Creation

The whale played a prominent role in the creation mythology of the coastal Juaneño (Boscana 1978: Chapter 3) and presumably at least some of the coastal Gabrielino. Boscana related the Indian belief in Nocuma, an invisible and all powerful supernatural being responsible for making the world, ocean, man, animals, and plants. The world was spherical and rested in the hands of Nocuma. To secure the world, which until then was in constant motion, Nocuma placed a black rock (Tosaut) at the earth's center. There was little ocean water (then it was fresh water) at the time, and consequently the fish were inconveniently crowded together and in some distress. Then a "large fish" arrived with the rock, Tosaut, which broken open revealed that it was a containment filled with gall. This was emptied into the freshwater ocean, immediately swelling the waters which overflowed upon the earth, giving the fish ample room. (This explains the somewhat bitter taste of the ocean.) In his annotations of the Boscana manuscript, Harrington (Boscana 1978:146, note 69) explained that the Indians took the whale to be a kind of fish. Some of Harrington's informants were convinced that the reference to a "large fish" in the creation story actually identified a whale.

It has been common in many cultural settings to regard whales as large fish. Recall that the Hebrew god caused Jonah to be swallowed by a "great fish" (Jonah 1:17). Most biblical scholars accept that the story line actually placed this son of Amit'tai inside the belly of a whale. Even as late as the contact period, sea captains, explorers, and missionaries clung to the perception that whales were kinds of fish.

"Porpoises" - Guardians of the World

"Porpoises" held special significance for the Gabrielino. Hugo Reid, married to a Gabrielino woman, explained that the animals were believed to be intelligent beings who circled the world making sure that all was safe and in good order (Heizer 1968:20; see also Kroeber 1925:644; McCawley 1996:146-147). On a cautionary note, it is not possible to know Reid's frame of reference when he used the word "porpoise." Was he referring to some small cetacean or small cetaceans of the Phocoenidae family, or to all small cetaceans of the kinds with a blunt, rounded snout (Phocoenidae together with those Blackfish of Delphnidae), or more broadly to any or all members of both Phocoenidae and Delphinidae, even those dolphins with beak-like projections?

Hudson and Conti (1981:228) wondered aloud whether any Chumash peoples had similar beliefs regarding porpoises or other marine creatures in protectionist modes, this question prompted by Thomas Blackburn personally suggesting to Hudson that such might be reflected in a pictographic composition appearing on a ceiling at CA-SLO-211, near San Luis Obispo (Figure 45) (see also Lee 1977:11, Figure 14; Hudson and Conti 1981:Figure 8; Saint-Onge et al. 2009:49, Figure 12A). Four figures, each appearing to swim near a central circular element and within a wider, irregularly circular field, are identified as a particular type (IIb) within the "aquatic motif." This motif was recognized by Campbell Grant (1966:84, Figure 77) as distinct from other designs.

The larger setting within which these four aquatic figures were placed (Figure 45) is one design variant of the "four direction motif" (see Saint-Onge et al. 2009:49). This motif is purported to relate to the cardinal directions and perhaps invoked the role of Polaris in the celestial geometry uniting earthly and heavenly existence.

Returning to the "aquatic motif," it is described as a bar-like element, usually slightly curved and often with a bifurcated design element positioned at either end. The Type II variety sports a "dorsal fin"



Figure 45. Four "aquatic motifs," each within a quarter area of an irregular, \approx 39 cm diameter disc that was painted on the ceiling of a cave (CA-SLO-211). After Lee (1977:11, Figure 14), Hudson and Conti (1981:228, Figure 8), and Saint-Onge et al. (2009:49, Figure 12).

projection; the projection is apparent on each of the four aquatic motifs that appear to be swimming in Figure 45. It is the fin-like elevation seen on some of the subtypes that is most responsible for the motif being called "aquatic" (Hudson and Conti 1981:224, see also Hudson and Conti 1984). Definitive statements are not possible regarding specific animal referent for the aquatic motif. For those rendered with "dorsal fins," there have been the following suggestions: swordfish; trout; gray whales; and basking sharks (Hudson and Conti 1981:225-227). Whales and porpoises receive some consideration, but Hudson and Conti (1981:227) pointed out that both animals are conspicuously absent in Chumash oral narratives and major rituals. However, the aquatic motifs in Figure 45 are suggested as possibly being "celestial porpoises" (Hudson and Conti 1981:228) and perhaps as being swordfish since, unlike the Gabrielino, the Kitanemuk believed that it was swordfish supernaturals who circled the world. Blackburn and Bean (1978:568) observed that Kitanemuk mythology might reflect an amalgam of the sacred stories of Chumash, Yokuts, and Gabrielino. Kitanemuk swordfish were clearly borrowed from the Chumash "eight brothers who lived in a house under the sea near Mugu... They also hunted whales, tossing them back and forth like balls until they died, throwing them up onshore" (Blackburn and Bean 1978:568). Perhaps the Kitanemuk, who were Shoshonean speakers and shared a border with the Fernandeño, had melded Chumash and Fernandeño/Gabrielino beliefs in their story of swordfish circling and protecting the world.

A major problem with any proposal that the aquatic motifs in Figure 45 are swordfish is simply that the most distinctive morphological feature of the fish, its very prolonged and sharp-ended terminus of the upper jaw, is absent from the design. The four presumably swimming figures in the SLO-211 pictograph are far more credible as cetaceans than as swordfish. Also, when one views Conti's rendering of a rock art panel at CA-SBA-1380 (Cave C) (Hudson and Conti 1984:[Figure 45]) there is suggested the near certainty that the aquatic motif does not refer to the swordfish; specifically, on view are nine aquatic motif figures swimming together in a pod, behavior not associated with the fish.

Returning to the Cave of Whales, San Nicolas Island, one might now wonder whether the aggregation of marine mammal petroglyphs had communicated a theme revolving on world guardianship. Reinman and Townsend (1960:Figure 1) partitioned the cave into four zones. Their Plate 1 (see Figure 20) shows 10 of 12 swimming animals in zone 2, three of which Dr. Warner of the UCLA Department of Zoology thought might have stood for orcas and three others which possibly represented smaller cetaceans (dolphin and/or porpoise) (Reinman and Townsend 1960:101). Zones 1, 3 and 4 each had one ocean animal. Reinman and Townsend indicated that in addition to porpoises, dolphins, and whales there might be fish present on the panels.

Some of the dorsal fins are large in proportion to their respective animal's body size, thus making orca

an acceptable guess. Grant (1966:130, Figure 20) illustrated all the petroglyph figures shown in Reinman and Townsend's Plate 1, accepting each as a killer whale. Actually the whole cave lot seems so conventionalized that any identifications as to species invites healthy skepticism. However, it seems safe to say that most if not all non-geometric pictographs at the site belong to the order Cetacea. See also Rozaire and Kritzman 1960; Heizer and Clewlow 1973: Figure 248e; and Meighan 2000:20-22).

Summary and Concluding Remarks

When the Cogged Stone site artifacts of Figures 2 and 3 were recognized as possible mimics of cetacean and/or shark dorsal fins, a literature search was initiated to document additional objects that might have projected a fin referent. A general impression of unity emerged from the resulting sample based first on comparisons of shapes seen in plan view. Unities also seemed apparent within sample subsets when crosssectional morphologies and surficial incised designs were considered. An outcome of these comparative exercises is advocacy for recognition of a new artifact genre, the "dorsal fin effigy," to be included in the portable cosmos of south central coastal California. This advocacy pointed to the fact that regional ancient peoples did indeed craft animal body part effigies that are reasonably inferred to have abetted ritual and belief (see Koerper 2011; Koerper and Evans 2011).

Following the descriptions, illustrations, and other attentions to discoveries (e.g., provenience and association) regarding the possible to probable dorsal fin mimics, further advocacy turned on demonstrations of the importance of cetaceans, and to a lesser extent certain fishes, in past lifeways (both in spiritual/aesthetic landscapes and in peoples' material lives). In this, "Exhibit 1" was a plethora of authentic, whole body effigies, many very clearly representing whales or other kinds of cetaceans. A contribution of these descriptions and illustrations of Native carved whole body representations was the calling out of certain relatively conventionalized crafted stone symbols that had gone largely unrecognized as possible whale effigies (see e.g., Figures 26a, b, c; 27; 28a, b), their possible dorsal fins raising suspicion that similarly shaped oddities (e.g., Figures 26f-k; 28c, d) might too have stood for the appendage.

Discussions that centered on authentic whole body specimens necessitated some discussion of forgeries and fantasy pieces, thus broaching the subject of especially the machinations of con artist Arthur Sanger and his sometimes accomplice, Orville T. Littleton. This in turn brought up examples of incaution and gullibility on the part of archaeologists, museum curators, and relic collectors.

Other persuasions vouching for the great importance of certain aquatic animals in regional Native cultures drew upon additional archaeological evidence, ethnographic descriptions, and ethnohistoric documentations. For instance, some of the body part and whole body symbols appear directed to life-force and/or death-force thematics. Here and there one sees phallic imagery (see e.g., Figures 17b and 18g). What Holmes (see 1902:184, Plates 47 and 48) saw as a "much conventionalized fish or finback whale" (see Figure 21b) was discovered in association with spikes and a birdstone, artifacts clearly possessing sex-based content (see e.g., Koerper and Labbé 1987, 1989; Koerper and Evans 2011). Also, some cetacean carvings had burial associations as at the Palmer-Redondo site (see Figure 22). Mortuary practices and other religious behaviors often incorporated whale bone into features.

Cetacean flesh and bone addressed a wide variety of material needs. There were swordfish and shark bone manufactures, and these animals were sources of food.

While the swordfish played roles in regional world views, there are more references to cetaceans in Native belief systems. What we are calling "dorsal fin effigies" most probably evoked the cetacean appendage rather than the fin of any piscine. The fins of fishes possessing a sword-like bill are formed by nature in ways not reflected in the effigies that are the focus of this study. Some purported dorsal fin carvings might be taken as looking like shark fins, but then sharks lacked apparent significance in local iconography and world view. We believe that our study has marshaled enough information to reasonably support recognition of a new regional magico-religious artifact genre, the "dorsal fin effigy."

End Notes

- Irregularities between Meighan (1976) and Cameron (2000) are several. Meighan attributed four specimens in his only figure to Burial 35. They are the objects of his Figures 1b, 1c, 1d, and 1e. The object of Meighan's Figure 1a belonged to a different burial (Meighan 1976:26). His figure 1e is a birdstone. Cameron attributed only one figurine, the noted birdstone, to Burial 35 (2000: Table 12.4, Acc. No. 1733, Figure 12.2) but placed all four of the other specimens illustrated by Meighan in Burial 48 (2000: Table 12.4, Acc. Nos. 1769-1772, Figure 12.4).
- 2. Cameron (2000: Figure 12.11) illustrated six birdstones that she attributed to Burial 2 at CA-LAN-127, or the Palmer-Redondo site. However, in her Figure 12.11 the two specimens that are at left and at center in the top row and the specimen at bottom left in that same figure have nothing to do with LAN-127. One of these three (upper left in Cameron's Figure 12.11) is most likely the artifact pictured bottom right in Miller (1991:61), which is housed in the Southwest Museum collections. Also, Cameron (2000:38) incorrectly gave the dig date as 1921 (see Wallace 2008).
- 3. Wallace and Wallace (1974:64) noted that certain effigies discovered at Arroyo Sequit (CA-LAN-62)

bear likeness to two of their Palos Verdes specimens. The reader might wish to consult two studies by Freddie Curtis (1959:62, 1963: Plate 4a) and make the comparisons.

4. On March 10, 2011, the senior author sent an e-mail to the National Museum of the American Indian, Cultural Resources Center, regarding the bone effigy of Figure 40. A return e-mail was soon received from Dr. Patricia L. Nietfeld, the Supervisory Collections Manager. She replied:

> Unfortunately, this is one of the objects that is listed in MAI records as only a "purchase" with no indication as to the source of the purchase (see attached report). Also, most unfortunately (it drives us nuts), we have not been able to find definitive purchase lists among the MAI archival material we hold. The "swordfish effigy" was cataloged into the MAI/Heye Foundation collection in 1936. We have objects specifically sourced to Sanger which were cataloged in 1926, 1927, 1933, and 1936 (virtually all of them reputedly from the Channel Islands). Re the latter two dates, the catalog numbers given to the Sanger sourced material run up to 18/6077 and then pick up again at 18/9977, leaving 18/9446 hanging in the middle. We know that Heye worked with several California "archaeologists," but it is probably impossible to prove that the swordfish effigy derived specifically from Sanger. So you are left with evaluating it on its own merits, whatever they might be ...

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