

# **Integration of Spanish galleon artifacts into Native American Indian lifeways along Baja California's Pacific coast**

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A serendipitous stay by this author and others along one of the more barren shores of the Baja California peninsula, coupled with other investigative linkages and further associations, have led to the major discovery of a lost Manila galleon wreckage along this same Pacific coast. Such visits have also resulted in noteworthy findings of Native American Indian use in this vicinity. During the author's earliest recreation-based camping visit of this desolate shore, a prehistoric campsite and workshop was discovered, with the initial investigations later published (Ritter and Payen 1992), a study that served as a prelude to the work and discoveries along other not too distant locations in this Pacific coastal region. Noteworthy was the archaeological evidence of a late prehistoric maritime-focused string of camps from people coming on occasions from the mountains to the east.

A later camping venture in 1989 by this author to the north of the earlier camp revealed Indian sites with prehistoric and contact-era artifacts, including artifacts identified as derived from the lost galleon on the Pacific shore over 10 km distant. This discovery and information derived from local amateur archaeologist Lysel Muñoz and various beachcombers led to subsequent formal investigations of the various archaeological sites in this region (Ashley et al. 2003; Breiner et al. 1999; Ritter 1999, 2002, 2006b, 2009, 2012), resulting in the discovery of the main galleon debris fields by the scientific community. Kuwayama (1997) independently illustrates sherds from beachcombers along the western Pacific coast that are also from the galleon wreckage. The contact-era artifacts found at Native American Indian sites along this Pacific stretch provide this chapter's focus and offer a broader picture of the other remarkable discoveries discussed in this volume.

This author and others (Fenn et al. 2009; Ritter 2004, 2006a; Stapp 1999; Von der Porten 1999, 2009) have discussed in some detail the contact-era artifacts found at the Indian sites, artifacts that appear derived both from interior missions and possibly Spanish explorers who plied the Pacific coast, but also artifacts derived from the debris fields of the lost galleon. This article will concentrate on what appear to be remains scavenged from the debris field of the lost galleon or could potentially be derived from this source.

That the Native American Indians visited this coastal stretch is not surprising, but the harsh, dynamic environment and impoverished fresh water supply over the last few thousand years were not conducive to long visits. In fact, Jesuit missionary Miguel del Barco (1973:252-253) in 1757 wrote that the beaches were unpleasant, short of drinking water, cold, and full of fogs for much of the year, such that the Indians did not live there, only coming to collect shellfish and remained there only a day or two until the water supply they brought with them ran out, requiring them to return to the less inhospitable mountains. Del Barco (1973:253) doubted that any galleon survivors alive but sick or lacking in strength could have survived a trek through



Figure 1. Green glass Comondú series projectile point from protohistoric coastal Native American Indian camp (scale in mm).

the expansive dunes and dry terrain along this coast.

Del Barco (1973:252) also wrote that during the earliest times of Spanish presence in the peninsula there were indications that on the west coast there were many pieces of China porcelain. Also found was a metal candlestick in the shape of a small dog, Spanish *reales* bearing the inscription of Felipe II, Rey de las Españas (1556-1598), and unworked wax. José de Ortega and Juan Antonio Balthasar (1754) as well as Homer Aschmann (1959:32) also note that debris from one or more Manila galleons was found by the Native American Indians along the peninsula's west coast.

The overall archaeological work on one region of the Pacific seaside near the galleon wreckage suggests over 2,000 years of Native American Indian visits from various mountain locations. The contact-era artifacts imply that coastal stays continued into the early part of the nineteenth century. For instance, a perforated coin appears to be a one-quarter of a kreutzer, with letters representing Joseph II of Austria (JOSEPH US·II). This is a "current reign" type of small-denomination coin from about 1765-1790. The derivation of the coin from Austria is not surprising, since Jesuits from the German-Austria areas were among those serving at the missions in the southern two-thirds of the peninsula.

Also occurring at these sites are a number of glass trade beads of at least 11 types, including the widespread compound *cornaline d'aleppo* type with a dark red outer section and a dark green center. It would seem that most of these various beads represent Indian losses, discard, and/or offerings (as in burial/cremation contexts). The acquisition of these beads directly or indirectly from Spanish sources seems most likely. It looks unlikely that these beads came from the wreck refuse itself, as none have been found there as yet and none appear of Chinese origin. Also present at the Native American Indian camps were mission-era plainware ceramics (bowls and ollas) manufactured with fiber temper.

### Flaked glass artifacts

There are 14 similar olive green glass artifacts recovered from the main Native American Indian camp. These include 10 small flakes, two edge-modified flakes, and two projectile points, one a Comondú series specimen likely used on an arrow (Figure 1). Three of the flakes appear to



Figure 2. Various degraded iron artifacts from coastal Native American Indian camp.

be derived from a flat piece of glass, such as a bottle, tumbler, or vial.

All glass artifacts appear to be derived from the same source, either historic beach debris possibly associated with the galleon wreckage on the nearby outer coast or glass originating from the missions to the interior dating anywhere from the mid-1500s to the early 1800s. A better idea of the glass origins must await testing such as elemental and isotopic characterization.

### **Iron artifacts**

Over 200 mostly small (less than 2 cm) historic corroded iron artifacts were found (Figure 2). The vast majority of these small pieces may have splintered off a larger artifact. The flattish piece measures 4.5 cm in length, 3.2 cm in width, and 0.9 cm thick. A spike-like artifact is 7.5 cm long and 1.8 cm in thickness. The platy pieces are splitting horizontally, and several other pieces include single small fiber-like casts. Following Aston and Story (1939), the iron characteristics indicate these fragments are wrought iron.

The elongated spike-like objects may have served the Native American Indians as perforators, flakers, harpoon or arrow points, etc. The flatter pieces may have provided cutting-like instruments. In Spanish America, Deagan (2002:31) has noted that blacksmiths were present in virtually all settlements from the earliest days of colonization, working with imported raw iron. These items may have been obtained from mission settlements or, more likely, historic-period wrecks like the galleon remains on the nearby coast, or both. Specialized analyses could help solve the origins of the iron.



Figure 3. Cuprous sheeting fragments from coastal Native American Indian camp (scale in mm).

### Cuprous finds

Two Native American Indian sites in the study region shore yielded 118 cuprous artifacts. A number of these have been described by Stapp (1999), who divides the artifacts into a miscellaneous assortment of copper-based wire and sheeting scraps. There are 15 wire objects; 76 sheet fragments or scrap, including rolled sheets; one possible eight-sided button with iron residue on one side; and a short cuprous tube. The possible button is 1.8 cm across and is similar in size and configuration to an eighteenth-century button illustrated and described by Deagan (2002:168, Fig. 8.13) as probably used on uniforms, ca. 1700-1750, as found at St. Augustine, Florida. At the other side of the Spanish-American empire is the report by Blind et al. (2004:144) of several undecorated copper alloy loop-back buttons from the presidio of San Francisco.

The cuprous sheets include thinner and thicker pieces, from 1.4 to 2.5 mm thick (Figure 3). Some of the flat pieces could be recycled utensils such as kettle/cauldron fragments.

Some pieces of the copper wire (1.2-1.5 mm diameter) have a loop formed on one end or eyelets intertwined (Figure 4). At least one of these may be a clothing clasp. Deagan (2002:176) notes that copper-alloy hooks and eyes are found on Spanish colonial sites from the fifteenth through the nineteenth centuries and were used to fasten doublets, jerkins, bodices, and other clothing elements. These various native camp base artifacts could come from the galleon shipwreck debris off the coast and/or from mission sources in the mountains to the east and sources beyond as discussed below.

Production of cuprous artifacts in Mexico started very early in the Spanish reign, in part a carryover from Indian metallurgical skills. Clearly, cuprous items were abundant in the peninsula in Spanish times (cf. Crosby 2003:55), and these coast Native American Indians valued such



Figure 4. Cuprous wire from coastal Native American Indian camp (scale in mm).

artifacts for uses like ornamentation and possibly as curiosities and sharp-edged tools.

Fenn et al. (2009) undertook preliminary compositional, metallographic, and isotopic analyses of a sample of copper-based artifacts found at one of the protohistoric sites along this western shoreline, the main one with much of the contact-era evidence. Preliminary data indicate that some materials were of European origin, likely by way of the missionaries, while others may have originated from other locations, including potentially Southeast Asia and mainland Mexico. As such, there is a strong possibility that at least some of the cuprous artifacts found here were derived from the galleon debris field.

### Chinese porcelain reuse

The most convincing evidence of scavenging galleon debris is in the porcelain vessel pieces acquired by those Native American Indians utilizing the temporary residential bases nearby. Three sites were discovered containing these porcelain fragments, all within a range from each other just under 1 km north to south. No historic artifacts were found at Native American Indian residential bases just to the north of these sites up the coast in a similar environmental zone. The porcelain pieces at the Native American Indian camps fit within the types found in the galleon debris fields within 10 km or so. These are underglaze blue-on-white wares from ca. 1574-1580, during the early years of the reign of the Wan-li Emperor (1573-1619) and were produced in or near the city of Ching-te Chen. Two sherds have traces of overglaze polychrome decoration (Von der Porten 2009).

The most abundant and largest set of sherds is from a plate with “gentleman’s purse” motif (Figure 5). Twenty-eight such sherds were found at one site. According to Von der Porten (2009:355), this plate has a central motif of a gentleman’s purse with ribbons. It is surrounded by beaded pendants, pearl strands with Buddhist symbols spaced along the strands. Along the rim there are hanging blades enclosing *rui* scrolls with a leafy flowery fringe surrounded by pearl strands. This plate had an original diameter of about 20 cm, and it was sheared off on three planes, likely during the shipwreck, and tumbled in the surf at least briefly. Subsequently the Native American Indians flaked pieces into artifacts, including a scraper-like tool (Figure 6) and



Figure 5. Chinese ceramics recovered from Native American Indian sites (diameter of original top figure plate with “precious cargo” motif is about 20 cm).



Figure 6. Chinese porcelain plate sherd with “gentleman’s purse” edge modified by the Native American Indians into a tool (scale in mm).



Figure 7. Projectile point tip manufactured from Chinese porcelain (scale in mm).

a projectile point (Figure 7), probably a triangular type that may have been used on a harpoon end or a Comondú triangular or side-notched arrow type. It is also possible that this point end may have been discarded during manufacture after breakage during knapping.

Porcelain sherds representing three separate cups with red medallions and blue crisscross diapers were found at two Native American Indian camps. According to Von der Porten (1999:325), these bowls were about 12 cm in diameter, and their decoration consists of overglaze enamel red medallions, tassels, sprays of foliage enhanced with green, and an underglaze blue crisscross diaper band inside the rim. One sherd shows no post-beach deposition breakage, while the other two sherds have breakage with beach tumbling abrasion on exterior and interior surfaces but not on the broken edges, suggesting breakage by the Native American Indians after recovery (Figure 5). The breakage of these latter two specimens implies the sherds are residue from experimentation, tool manufacture, or production of “blank” pieces for later use/exportation.

A single sherd found at a third site is derived from a cup with phoenix motif. The original vessel diameter was about 12 cm, with the decoration consisting of a phoenix on the exterior and a crisscross diaper band inside the rim, according to Von der Porten (1999:325). The sherd is abraded on all surfaces, indicating there is no post-recovery modification evident to the eye.

A rice bowl-like rim from the main Native American Indian camp has evidence of overglaze polychrome decoration on the exterior and blue-on-white diamond diaper border on the upper interior. The second sherd of this type is a wall sherd with traces of overglaze polychrome decoration on the exterior. These sherds may represent debitage from breakage by the Native American Indians and cannot be assigned to a particular polychrome design due to their fragmentary nature.

One sherd from a possible rice bowl about 12 cm in diameter like those above from the main site has a blue-on-white rim stripe below the interior and exterior. It may also represent manufacturing residue.

Finally, from the main site there were found 11 small unattributable Chinese porcelain pieces that appear to represent flaking or manufacturing debris (Figure 8).

While excavations at the shallow sites would likely produce more historic artifacts, including small porcelain flaking/manufacturing remnants, there appears to be a good representation present at the major site to confirm beach salvage of galleon artifacts and



Figure 8. Sherds and flakes of Chinese porcelain from Native American Indian camp (scale in mm).

reprocessing into tools related to native practices. Overall there does not seem to be an abundance of shipwreck debris at the protohistoric sites examined, suggesting only modest interest in what was likely a considerable scatter of wreckage debris and familiarity with it for over 200 years. Some may have been collected as curiosities; others, as potential substitutes to flakable stone that had to come from many kilometers away, especially the obsidian that is abundant at the camp sites. Furthermore, these transient populations could well have exported historic wreckage debris to inland camps not yet investigated and awaiting the archaeologist's trowel.

There is no doubt that the native Cochimi visitors from at least one mountainous area were familiar with the wreck debris, owing to Del Barco's account and the fact that late prehistoric artifacts were found in the vicinity of the debris field, including two projectile points of a late prehistoric/protohistoric type and flaked stone tools and debitage.

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