

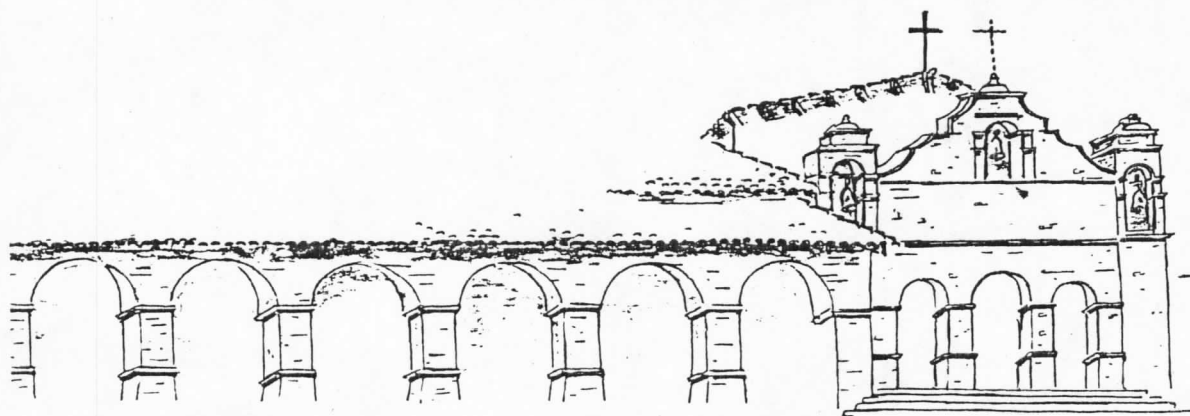
EXCAVATIONS

at MISSION SAN ANTONIO 1976-1978

Robert L. Hoover and Julia G. Costello
Editors

Monograph XXVI

Institute of Archaeology
University of California, Los Angeles



Los Angeles 1985

TABLE 29
DISTRIBUTION OF VITRIFIED ADOBE BY WEIGHT
STRATA/LEVELS

Unit	01	02	03	S1	S2	S3
0/1A	-	-	-	20.0	-	10.0
0/2E	-	14.0	8.1	-	-	-
0/4A	-	-	-	-	55.1	14.5
0/4B	32.8	-	-	-	-	-
1W/2C	-	8.4	-	-	-	-
0/2AY	-	-	5.4	-	-	-
Total	32.8	22.4	13.5	20.0	55.1	24.5

Effigies (Fig 13)

Three fired clay figurines were recovered from the dormitory. Specimen #746 was found in Stratum III of 0/2E, while specimens #735 and #736 were found in the same stratum of 0/3E. Effigy #735 is a clay model of a Spanish saddle, with the raised back and horn clearly visible. Specimen #736 is a crude cylindrical portrayal of a human figure with broken appendages where arms, legs, and head were attached. Both of these effigies may have been children's toys. Similar effigies were found at the nearby mission refuse dump in 1968-69. Specimen #746 is a disk with a single central perforation, perhaps part of a top or a whorl for a spindle.

Glass Artifacts

Trade Beads - Clement W. Meighan

The bead collection from Mnt-100 was examined through the courtesy of the excavator, Robert L. Hoover. Identification of bead types is based on my manuscript (Meighan, n.d.) which includes a key to some 400 types and color photographs of these types, as well as a partial type collection at UCLA. The large reference type collection I assembled at Berkeley was not consulted, however, and the matching was in some cases the "best fit" to the described types. This means that some individual beads may not be correctly identified since they may have small variations of color or other features from the type specimens. However, the overall pattern is clear and the most common types were matched against comparative specimens; the interpretation of the collection will not be changed even if some of the specimens prove to be different types than indicated in the identifications given here.

The collection of trade beads includes 308 specimens. Of these, 11 are unidentified and the remainder are classified as 43 separate types of glass beads, including a number of new types not in the type collection. However, only 14 of the types have 5 or more examples; these 14 types constitute 255 specimens or about 83% of the total collection.

The trade beads from San Antonio are comparable to the collections from several other mission sites, notably Santa Clara and San Jose (Bone, n.d.) and Ventura (Gibson 1976). These sites were occupied and used for a long period of time and include not only limited material from the early Spanish period but a large admixture of glass beads from much later times including the American period [post 1850]. Since many glass bead types continued in use for long periods, down to the present day in some cases, it is not possible to do a precise sorting of "Spanish" versus "American" glass beads at mission sites in California. However, the overall pattern of beads at San Antonio supports the impression that only a small number of beads in the collection, probably less than 20%, are from the date of founding [1771] to perhaps 1820, another small group is apparently derived from Hudson Bay Company indirectly and may date from 1820-1850, and many of the beads are from the American period, after 1850.

A cursory survey of provenience does not indicate that there is a stratigraphic difference between the earlier and later glass bead types. This is to be expected in a shallow site since glass beads are easily moved by rodents and other disturbance, and there are too few diagnostic types to provide a stratigraphic sequence even if there were no disturbance at all. The common types occur in all levels of the site from top to bottom. There may be some horizontal differences in distribution, however, with earlier and later types concentrated in particular areas of the excavation. This can only be clarified by reference to the total collection and excavation records, however, and it is beyond the scope of the present discussion.

Table 30 lists the bead types from San Antonio. The bead classes are discussed here, with special mention of new types not in the existing type collections. Major classes include the following.

Wire-Wound

These beads are made by putting small bits of molten glass on a revolving wire; they usually show spiral marks at the ends resulting from the manufacturing process, although if the beads are tumbled when soft they can lose the spiral indications. In the Mnt-100 collection, there is considerable uniformity -- all the beads are 5-10 mm in maximum diameter and most are transparent or translucent. There are 7 types constituting 154 beads or 50.5% of the total collection. All are very similar in appearance except for color variations. Two of the types [249, one specimen, and 338, two specimens] are known only from Spanish-period contexts. Type 249 is widely distributed, being known from 21 sites, including four other mission locations. I date it at 1770-1820. Type 338 appears on limited evidence to be in the 1800-1825 period.

The remainder of the beads in this class are all likely to be late or originated either with Hudsons Bay Company sources or American suppliers. Type 68 is documented from sites dating 1800 to after 1900. Types 48, 53 and 68 all are recorded from very late sites in northern California [Shasta and Humboldt counties, well outside the area of the Spanish missions].

The most common bead in the San Antonio collection is a new type in this group, beads which are yellow-brown in color and quite variable in shade. Some are very light, almost a transparent yellow, and others are dark brown similar in color to the glass of a beer bottle. Type 68 of this group is so dark that it appears

black, but held up to the light is seen to be merely an extremely dark brown color. There are 101 beads in this group classified as yellow-brown or amber. This is about a third of the total bead collection from San Antonio Mission. With such a large number of specimens, the range of color variation is clearly seen; if these beads were found in small numbers they would probably be classified as several different types because of the variability in color. However, since they all occur together in the same context I consider all of the color shades to belong to the same type.

The light yellow-brown beads are recorded only from one other California location: the Yokuts Indian cemetery excavated by Walker (1947) . This is a site with a long history of historic artifacts, but it extends down to the late 1800's and I believe this particular bead type is post-1830 and it may well be post-1850. Absence of the type from any other mission site, while yet being the most abundant type at San Antonio, also suggests that it is a late type entering perhaps from the San Joaquin Valley.

The final type in the group of wire-wound beads includes a group of 21 specimens appearing black, but on close inspection they are made of purple glass. Like the yellow-brown beads, these are somewhat variable in shade with some appearing dark purple, others seem to be purple only when held up to a light. This type of bead is not in the type collection and is not recorded from other California sites. It looks visually much like type 338 previously mentioned; if it is indeed in that group it could date back to the early Spanish period before 1800. However, such a dating cannot be supported on physical appearance alone, and the type could well be one of the later ones.

"Seed Beads"

These small beads constitute slightly less than a third of the San Antonio collection [98 examples] . However, there is much variety, at least 18 types of beads being present in this small collection. These beads are made from small pieces of tubing -- usually they are tumbled while semi-molten so that the ends are rounded off and it is not possible to see that they are sections of tubing. Occasionally, particularly with the earlier types, the finishing process is less thorough and specimens can commonly be recognized as short segments of tubing.

Most of the beads in this group are blue [8 types] or green [4 types] . Also present are two types of transparent glass, two opaque white varieties, and one yellow type. There is a single example of a small Cornaline d'Aleppo bead [red over a core that appears black but is green when held up to the light] .

While small seed beads are almost universal in California sites containing historic material, the particular mix of types at San Antonio is somewhat unusual and confusing. As with the group of larger wire-wound beads, the seed beads include some types that are clearly early, some types that are clearly quite late, and a few forms with long periods of use that could be either early or late.

One of the surprises in this collection is the presence of only one Cornaline d'Aleppo [red over green core] bead [my type 105] . This is the most widely distributed bead in California historic sites, known from 53 sites of all periods, and it is usually present as a significant percentage of the beads in mission-period sites. While the type is not in itself a time-marker, the very small ones like type 105 appear to be more common in early sites, and they are frequently

associated with the other small beads of the mission period [mostly blue, green, and white]. Based on examination of other bead collections, I would suggest that Mission San Antonio should have many more beads of this type, probably in an early historic area that has not yet been excavated. Yet the site does yield a considerable number of the small blue and green beads commonly associated with Type 105, so the scarcity of the latter type remains somewhat of a puzzle.

Of the total seed beads, 7 types [Nos. 201, 204, 211, 215, 217, 228, and 442] totalling 41 specimens, can be reasonably dated before 1830, based on wide occurrence in mission sites and also common presence in contact-period sites which did not continue into the American period, such as Malibu, several sites on Santa Rosa Island, and others. At the other end of the time scale, there are three types [208, 228, 229] of shiny "enameled" appearance known only from contexts dated as American period [after 1850]. There are 14 beads in this group. The remainder of types and specimens are widely distributed in time and space and could be either early or late.

Faceted Beads

These beads are produced from segments of multiple-sided tubing [usually six-sided or seven-sided, although this collection includes one of these beads with 8 sides -- a unique specimen]. If the tubing is merely broken into pieces the beads have flat ends. Usually, however, and in all of the San Antonio specimens, the beads are detached by grinding off pieces of tubing so that the finished bead has faceted ends as well as faceted sides.

The present collection includes 14 specimens of 6 different types. Widely distributed in the west, particularly the Northwest and Alaska, the faceted types were mostly derived from Hudson Bay Company suppliers. All of the examples in the San Antonio collection are after 1850; some types occur in dated contexts as recent as 1880. The only mission sites containing these beads are those known to have occupation and use in the American period, such as Ventura; most mission sites have not yielded faceted beads.

Globular Yellow Beads

A group of 19 yellow beads is discussed separately since they appear related although variable in size. All are bright shiny yellow of the same color, opaque but with occasional small air bubbles visible in the surface. This is an unusual color for trade beads found in California, but a close match to varieties of glass beads made in China in the 19th century (see Liu 1975). However, although uncommon, beads similar in appearance were also produced in Venice -- the Dan Frost trade bead collection, a merchant's collection dating from 1840 or later, has at least one type [no. 466 in that collection] that is photographically similar to those described here. Hence, it would require very close examination and possibly chemical testing to confirm the origin of the San Antonio specimens.

The yellow beads occur in three sizes: the large example is 9.3 mm in diameter, medium size is 6.5 mm in diameter, and the more common small ones are 3.8-4.5 mm in diameter. The larger sizes are wire-wound in manufacture, but the small ones are so spherical that the manufacturing technique is not visible.

In the type collection I assembled at Berkeley, the large yellow beads appear to be Type 89, known from Santa Rosa Island, a site on Tomales Bay in Marin County, and La Purisima Mission. The small ones are closest to my Type 291, recorded elsewhere in California only from Carmel Mission. The medium size is not in the type collection. The distribution suggests an early date before 1820, but appearance of the beads, their very regular manufacture, and association in Mnt-100 with lots of late beads would argue for an origin in the 1840's or 1850's. For the present, I have to leave the age of these beads unresolved.

Miscellaneous

A small number of additional beads form the remainder of the collection. There are 5 ovoid or somewhat egg-shaped beads. Two are small; of these, one is the same yellow glass as discussed above. The other is green in color and type 126. The latter is dated by Gibson (1976) as 1785-1816 at Ventura Mission. The type is known from 6 sites including two of the missions.

The other three ovoid specimens include two large green transparent beads of the same type, and a similar one that is blue in color. These beads are not represented in the type collection. However, similar beads in other colors are late and apparently derived from American sources after 1850.

A few additional new types are described in Table 31 and briefly discussed below:

1. A large blue transparent bead, similar to type 316 but not the same shade of blue.
2. An amber or yellow-brown bead which is ring-shaped rather than spherical. This may be merely an oddity of manufacture and not a deliberate form; these can result in wire-wound beads when a specimen is made from a smaller amount of glass than usual.
3. A blue bead with ridges on the surface. The type collection has somewhat smaller forms in red, green, and black, all of which are quite late in time (post-1850). However, it is unclear whether the present specimen is to be put in the same class since it differs in size, color, opacity, and the size of the ridges.
4. A distinctive large pink and white banded bead -- unmistakable in form and color and cannot be confused with any other type in California. This type is not in the reference collection but I have seen other examples from the Santa Barbara area. There is no information on source or dating.

Finally, there are a few beads which remain unidentified. Some appear to be minor variants of types previously discussed, and a few are altered by burning or weathering so that their original appearance cannot be determined.

Conclusions

The glass bead collection from San Antonio Mission shows two periods of trade. The Mission Period [1771 to 1836 at this site] showed limited use of the standard glass beads found at mission sites: mostly small seed beads in blue, green, and white. These same beads are commonly found at contact period villages and were the standard gifts passed out to the Indians by the missionaries. The San Antonio

collection lacks types that might be expected in this period. However, it includes the small Cornaline d'Aleppo beads and the occasional larger and fancier beads of the same time period. This may be a function of the sampling of the site; with a larger excavation additional early types may be expected.

Of the 305 glass beads from San Antonio, 44 [slightly less than 15%] are clearly of the mission period; additional specimens are probably of this period but have such long periods of use that they cannot be so dated.

A roughly equal number of beads from San Antonio can be firmly dated to the post-Mission period and most of these are probably from the American period after 1850. Most prominent in this group are the faceted beads.

The period of 1830-1850 is difficult to demonstrate in the trade bead collection, partly because trade beads diagnostic of this time are little known in California. While some of the types at San Antonio were used throughout the 19th century, and could have been present at the site in the 1830-1850 period, there are no glass beads that document this time in an unquestionable way.

TABLE 30
GLASS BEADS FROM SAN ANTONIO MISSION

<u>Class</u>	<u>Type No.</u>	<u>No. of Specimens</u>	<u>No. of Sites Where This Type is Found</u>	<u>No. of Other Missions Where This Type is Found</u>
<u>Wire-Wound</u>				
Clear	48	10	5	1
Brown	53	8	4	1
Blue	68	11	14	1
Blue	249	1	21	4
Black	338	2	2	1
Yellow-brown	NT*	101	1	0
Purple	NT*	21	0	0
<u>Seed Beads</u>				
Red, green core	105	1	53	4
Clear	117	9	12	2
Clear	442	2	1	0
White	180	20	30	1
White	185	4	49	2
Blue	201	14	13	4
Blue	204	13	21	1
Blue	208	7	3	0
Blue	209	9	2	0
Blue	211	1	9	2
Blue	215	5	25	4
Blue	217	1	2	0
Blue	NT*	3	0	0
Yellow-orange	197	1	7	3
Green	228	5	12	3
Green	229	2	2	0
Green	NT*	1	0	0
<u>Faceted Beads</u>				
Blue	147	5	11	0
Blue	154	1	25	1
Clear	159	3	4	0
Clear	160**	2	20	2
Clear	299	2	2	0
Brown	320	1	1	0
<u>Globular Yellow Beads</u>				
Large	89(?)	1	3	1
Medium	NT*	1	0	0
Small	291	17	1	1
<u>Miscellaneous</u>				
Green	126	1	6	2

Various additional types are described in Table 31, not counted here, since they are known only from Mnt-100 (see text discussion).

TABLE 30 (continued)

*NT = New Type, not in reference collection.

**Includes one specimen with 8 sides rather than the normal 7.

Type numbers refer to types as described in Meighan, n.d.

TABLE 31
NEW TYPES OF GLASS BEADS FROM SAN ANTONIO MISSION

	Manufacture	Length Mm.	Diameter Mm.	Diameter of Perforation Mm.
Yellow-brown or amber	wire-wound	3.5-5.5	5.4-6.4	2.7-3.2
"Black" (purple)	wire-wound	4.0-5.3	5.5-7.5	2.5-2.7
Blue opaque, ovoid	?	11	8.5	1.5
Yellow opaque, ovoid	?	6.6	4.5	1.0
Green transparent, ovoid	?	11.9-13.7	8.4	1.3
Deep blue transparent	wire-wound	12.3	14.2	2.0
Pink & white banded, six-sided, concave sides	?	18.8	9.0	2.0
Blue, globular, ridged surface	?	9.1	8.5	2.3

Bottle Glass

Fifty-eight fragments of green bottle glass were recovered from various locations in the Indian dormitory. All were too fragmentary to reconstruct bottle shape, but most were clearly in an archaeological context.

TABLE 32
DISTRIBUTION OF BOTTLE GLASS FRAGMENTS

Unit	S1	S2	S3	01	02	03	04
0/2A			1		1	2	
0/2B					1		
0/2C					1		
0/2E				1		1	
0/3A			2	1			
0/3B						3	
0/3D				1	1	1	
0/3E				1		2	
0/4A						1	
0/4B							1
0/4E				1	1		
1W/2C					2		
1w/2D				2			

TABLE 32 (continued)

Unit	S1	S2	S3	01	02	03	04
1W/3D	1			1			
1W/4C				1			
1W/4D		1			3	1	
1W/4E						1	
1E/2A			1			1	
1E/2B				1		1	
1E/3A					1		
1E/3B				1		1	
1E/4A		1			3	1	
1E/4B					1	2	
2E/1		1					
3E/1D				1			
4E/OA				2			
4E/OB				2			

Other Glass Fragments

Nineteen small flat fragments of clear glass were also recovered from the Indian dormitory. These appear to be modern fragments of pane glass, which would probably not have been present in the dormitory during the Spanish period. Extensive ground squirrel disturbance at the site accounts for some of these specimens in Stratum II and III.

TABLE 33
DISTRIBUTION OF OTHER GLASS FRAGMENTS

Unit	S4	01	02	03	indeterminate
NESWP4					1
0/2A			1		
0/2B		1	1	1	
0/2D			1		
0/2E				2	
0/3A	1	1			
0/3C			1		
0/4A		2		1	
0/4B		1			
0/4C		1			
1E/3A	1				
1W/2C			1		
1W/3D			1		