TARQUI, AN EARLY SITE IN MANABÍ PROVINCE, ECUADOR

By Matthew W. and Marion Stirling
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TARQUI, AN EARLY SITE IN MANABÍ PROVINCE, ECUADOR

BY MATTHEW W. AND MARION STIRLING

INTRODUCTION

During the course of an archeological reconnaissance of Ecuador in the summer of 1957 under the auspices of the National Geographic Society and the Smithsonian Institution, a stratigraphic trench was excavated at Tarqui near the town of Manta in the Province of Manabí. This report describes the work.

Small test digs were also made on Cerro de Hojas, one of the famous "stone seat" sites nearby, and at La Tolita on the coast of Esmeraldas Province.

These three sites represent important cultural developments for the Ecuadorian coast, so radiocarbon dates were secured for each.

The Tarqui site belongs to the "Bahia de Caraquez" culture, a florescent period of the Late Formative. It gave a date of 2170±200 years (213±200 B.C.).

The Cerro de Hojas site, made familiar by the work of Saville, belongs to the "Manteño" culture. Our excavation in the center of one of the stone corrals produced charcoal which gave a date of 560±200 (A.D. 1397±200) (see pl. 2, b). There is a brief appendix (p. 27) in this work describing the potsherds from this dig.

At La Tolita we excavated one of the so-called pottery "tube" burials of the Atacames period. This contained a typical Atacames figurine (pl. 18, b), and charcoal which gave a date of 1690±200 (A.D. 267±200).

La Tolita is famous for the large amount of gold work that has been found there, and because its ceramics bear a close resemblance to those of Middle America.

The radiocarbon determinations were made by Dr. H. R. Crane, of the University of Michigan Laboratory.

Throughout the expedition we were assisted by Woodbridge M. Williams, photographer and foreign editorial staff member of the National Geographic Society.
The work was greatly facilitated by the wholehearted cooperation of Sr. Carlos Zevallos Menendez, Presidente, Casa de la Cultura Ecuatoriana, Nucleo de Guayas, who granted permission for the project and gave us all assistance.

We are also under deep obligation to Sr. Emilio Estrada, director of the Museo Arqueológico "Victor Emilio Estrada" of Guayaquil, who not only aided us with his knowledge of Ecuadorian archeology but gave us practical assistance in the way of transportation and the like.

The work throughout was made pleasant by the interest and hospitality of many other members of the Casa de la Cultura, who are doing so much to further science in Ecuador.

We are also obligated to Sr. Pedro Balda, a merchant of Manta and the owner of the Tarqui site, who generously gave us permission to excavate on his property. Sr. Emilio Bowen of Manta, whose knowledge of the region was of great help, aided us in many other ways.

Through the auspices of Emilio Estrada we secured the services of Felix Martinez, who acted as our work foreman at Tarqui. Our work crew consisted of eight men recruited locally.

We hired a large vacant building on the beach at Tarqui for use as a field laboratory. Although our excavation was relatively small, the sherd yield was so large that we required the services of four women to act as sherd washers and two boys as water carriers.

The Tarqui site (MA-1) is located midway between Tarqui and Estero, two small fishing villages just east of the town of Manta. The complete site lies on the dunes just back of the beach and extends for a quarter of a mile between the two towns. It appears to be between 50 and 75 yards wide. In most places the sand has drifted over the site, burying it from 2 to 20 feet deep.

The area which we selected for excavation was free from overburden and was on fairly level ground on the east side of a small dry ravine which had cross-sectioned the deposit at that point.

This section revealed a hard white sterile layer of caliche some 35 cm. thick and about 125 cm. below the surface, separating the upper and lower sherd-bearing levels (pl. 2, a).

We laid out a trench on the site, extending 6 meters E–W and 3 m. N–S. The deposit was much more compact than we had expected, and picks were needed to break the soil in digging. The occupation debris continued to a depth of 4 m. 70 cm. (approximately 15 feet).

The first meter consisted of well compacted, rather dry earth and sand. Under this was a layer 40 cm. thick of hard moist sand, which lay on top of the hard white deposit of caliche. The latter was completely sterile and was apparently a deposit that had formed in a pond.
At about 2 m. 50 cm. there began a layer of hard, dry powdery sand. Sherds were present in abundance throughout, except for the caliche layer, where they were entirely absent, and for some 40 cm. below it, where they were scarce. Indications are that this portion of the site was inundated for a while, causing its temporary abandonment. Shells were surprisingly scarce except in a small area near the surface at the south wall of the trench. Animal and fish bones were also relatively rare. Those which we did find were well preserved, so their scarcity was not the result of decomposition.

The trench was dug in 20-cm. levels, the material in each layer being kept separate. The material between 80 and 125 cm. was grouped in one level since the lower 35 cm. of this consisted of the completely sterile caliche layer. A new series of 20-cm. levels was begun at 125 cm., the base of the caliche.

Considering the depth of the deposit, we had expected to find significant stratigraphical changes, especially since the lower part of the deposit was so clearly separated from the upper by the caliche layer.

However, it appeared in the field that the material was the same throughout the trench. This impression was later verified by statistical studies after the collection had been examined in Washington.

Sherd counts giving the stratigraphic occurrence of various pottery types and features are shown in table 1 (p. 25). The same kind of data is shown for the principal figurine types, ocarinas, and stemmed cups in table 2 (p. 26).

Although the pottery falls into a number of distinct types and there are at least six relatively abundant figurine types, including both hollow and solid handmade, and hollow and solid moldmade, nevertheless all occur side by side throughout the 15-foot depth of the excavation. We could not see that there was any significant increase or decrease in the relative abundance of any given pottery or figurine type according to depth.

Artifacts of stone, bone, and shell were not abundant as compared with the ceramics.

Significant absences were spindle whorls and objects of metal.

Textile impressions on pottery and lumps of clay occurred rather frequently. The absence of spindle whorls may indicate the use of fibers that were not spun.

Nose rings are characteristically shown on the figurines; it seems likely that they were not of metal, although we found no artifact of any material that appeared to be a nose ring.

Clusters of charcoal occurred here and there throughout the excavation. One of the best samples from a depth of 2 m. 50 cm. was tested by Dr. H. R. Crane, of the University of Michigan Laboratory,
which, as already mentioned, yielded a date of $2170 \pm 200$ years ($213 \pm 200$ B.C.).

Although the Tarqui deposit is thick, the uniformity of the material leads us to believe that it represents a single occupation, and that a date of 200 B.C. is probably a good average for the site.

The Bahia de Caraquez culture appears to represent a florescence of the Late Formative. The wide variety of ceramics and figurine types in association at the Tarqui site and its radiocarbon date make it a key site for the Ecuadorian coast.

There is very little evidence of influence from Peru, nor are the connections particularly close with the Atacames culture and La Tolita to the north, although there are some traits in common. Our radiocarbon date for La Tolita would indicate that its florescent period was approximately 500 years later than Tarqui.

Specific relationships with the Formative in Peru are not many, although many of the widespread generalized traits characteristic of the Formative throughout Middle America are present. The same may be said in comparing the material from the northern Ecuadorian coast, although the comparisons are somewhat closer.

The Guayas basin, although sharing a number of specific traits with Tarqui, has more differences than one might expect.

For the reader interested in comparative material, the bibliography herein covers previous archeological work done in the general vicinity. Basic to the understanding of the archeological periods of the region, are the publications of Emilio Estrada, who has established the major cultural sequences for the area.

**POTTERY TYPES**

Pottery making at Tarqui seems to have been little crystallized by tradition, and so seldom do wares, shapes, and decorative techniques combine in exclusive patterns that we have reduced our ware description to five basic types, to which are applied a rather surprising variety of decorative techniques. So great are the number of combinations used that it would be impractical to attempt to give them all in detail. The following are the most typical and cover the bulk of the ceramics.

With certain exceptions which have been noted, it should be remembered that almost any combination of traits might occur.

**COARSE WARE**

Coarse ware is a thick utilitarian ware which falls into two types: buff with rather soft tempering material, and brick red, which has a gritty temper and is somewhat harder. Otherwise the treatment of
the two is the same. Coarse ware is frequently fire blackened. Usually it is decorated with simple designs in red paint, bold incising, or both (pl. 5, a).

There is a variety of rim forms but the most frequent shapes are large short-necked ollas with everted rims or large bowls with slightly incurving rims (fig. 1). Some of the sherds were 2 cm. in thickness, and the orifice of one olla which could be measured was 30 cm. across.

SMOOTH WARE

Smooth ware is a rather fine paste ware, buff in color and may be painted dark gray to black, or red. It varies in thickness from 5 mm. to 1 cm. Generally the exteriors are smooth and the interiors rough, although the reverse also occurs. Paint, when used, is applied to the smooth surface. Sometimes there is additional decoration in the form of a row of engraved dots around the shoulder.

POLISHED WARE

Polished ware is composed of a paste similar to smooth plain, but the surface is slipped and polished, having a waxy feel to the touch. The slip is gray to black, or orange to red or brown. The vessels usually have a composite silhouette, frequently with notched and decorated rims, raised collars, notched shoulders or flanges, perforated rims, and engraved decoration. Any combination of these colors and decorative techniques may occur. Both pedestal bases and polypod supports are used.

The polishing is frequently of the striated or "pebble polished" type (pl. 7, b).

PLAIN RED ON BUFF

Plain red on buff is perhaps the most diagnostic ware at the site. It is relatively thin, crisp, and hard with a fine grit temper, and is light buff in color. The surface is slipped but unpolished. The red paint is rather carelessly applied in spots, bold lines, or bands in very simple designs, or is merely splashed on in irregular splotches. Typically, paint is applied to both interior and exterior, and almost invariably there is a band around the rim (pl. 8, a).

There is a wide variety of forms accompanying this combination; bowls with incurving or outcurving rims, shoulders, ring bases, pedestal bases, and polypod cylindrical or conical supports all occur with plain red on buff.

POLISHED RED ON BUFF

Polished red on buff is the same as plain red on buff except that the surface is polished, and the paint as a rule is applied with a little more care (pl. 8, a).
Figure 1.—Typical rim sections, coarse ware.
Figure 2.—Typical rim sections, smooth and polished ware.
As is the case with virtually all Tarqui ceramics, all sorts of hybrids occur in the red on buff wares. Sometimes the red areas are polished and the buff unpolished, or the interiors are polished and the exteriors unpolished. Occasionally the exterior is red on buff and the interior polished buff, brown, gray or black. The interiors sometimes are painted solid red.

Negative designs also occur on the red painted interiors.

One sherd was found with narrow zones of red outlined by engraved lines, on a buff base (pl. 3, a, 11).

DECORATIVE TECHNIQUES

MODELING

A sort of horizontal gadrooning occurs with some frequency. This produces a corrugated effect in which a series of concentric terraces surround the vessel (pl. 3, a). Luster paint is frequently applied to this ware.

Sometimes circular, hemispherical, or concentric nodes are applied to the outflaring rims of flanged vessels (pl. 3, b). Sharp shoulders occasionally are modeled into flanges which in turn are usually notched.

Rims are frequently modified by scalloping or terracing (pl. 3, b). In a few instances human faces were modeled on the shoulders of vessels (pl. 3, a).

NOTCHING

Notched rims and notched shoulders or flanges were produced by pressing with a sharp implement while the clay was soft. The various effects produced by this technique can best be seen in the illustrations (pls. 6, a, b; 7, a). Notching is very common at Tarqui and may be considered one of the diagnostic features of the site. It is found most frequently on red polished ware.

ENGRAVING

Engraved designs are very frequent and typical of the site. They are used on the smooth and polished wares, but are most common on the polished monochrome, gray to black, or red (pl. 4). Rectilinear designs are the general rule, although horizontal or vertical squiggled lines occur. In one instance the engraved figure of a bird, apparently a long-legged waterfowl, was on the inner surface of the outflaring rim of a large jar (pl. 4). This was the only attempt at representation found at Tarqui in a technique other than modeling.

Engraved lines are also used in zoning color areas. This occurs with red on buff and with polished black on dull black.
There are actually two types of engraving, fine and bold. The former was produced with a very sharp point rather lightly applied, while the latter was gouged out deeply with a somewhat wider tool. An interesting variant of the bold engraving is a polychrome technique wherein the deep lines are colored with alternate red, white, and yellow pigments. This is actually a five-color ware, since the rim and interior are orange, and the exterior is polished black. In some examples, the interior is also polished black (pl. 4, b).

**INCISING**

Incising has a very specialized application at Tarqui. It is used only on coarse plain ware (pl. 5, a) and to decorate the pedestal bases of red on buff vessels (pl. 5, b).

It is interesting to note that on these two types engraving techniques are never used.

In both cases the designs are boldly and carelessly applied. Zoned punctate areas occur occasionally.

**PUNCTATION**

Punctate designs are not particularly common. Zoned punctate areas occur with incising on the pedestal bases mentioned above and on coarse plain ware, but they rarely are used with the engraving technique.

Single punctate lines, running around the shoulder or below the rim, are fairly common. Sometimes these are true punctations formed by a sharp point while the clay was plastic, but in other cases they are produced by gouging out dots after the vessel was fired and polished.

**PERFORATED DESIGNS**

Perforations passing completely through the wall of the vessel are used as a decoration, sometimes on the rim but occasionally below the rim. These holes may be circular, triangular, or in the form of slits. They are often used in combination with rim notching. They are seen mainly on polished monochrome, but occur on polychrome as well (pl. 7, a).

**INDENTATION**

Fingernail indentations or marks similar to them are common on coarse plain ware. They are usually applied just below the rim (pl. 5, a).

**PSEUDOCOILING**

This type of decoration is represented by a few sherds from different vessels, found in the deeper levels of the trench. These sherds have
a highly polished dark red or polished black interior. The buff unpolished exterior is decorated by pushing up little mounds of the clay while plastic, with a chisel-shaped implement, giving the impression of a modified coil decoration (pl. 3, a).

This ware seems similar to specimens illustrated by Estrada (1958) which he calls Machalilla corrugated.

**TEXTILE IMPRESSED**

Textile impressions occur on some large moldmade figurines, on a few sherds, and on three lumps of burned clay which look as though they had been wrapped in a fabric and burned. However, apparently textile impression was not used as a decorative technique.

**PAINTING**

There has already been some mention of the simple use of paint. Red and black are the colors most frequently used.

Orange occasionally may be an accidental variation of red, but sometimes it is intentionally used with red as a contrasting color. Buff, sometimes approaching yellow, is a frequent slip color. Real yellow pigment was apparently never used on the surface of pottery vessels, but was applied frequently to figurines, stemmed cups, curved conical vessel supports, and as one of the colors used to fill engraved decorative lines.

White was also used, but it is rare.

Silver or rose-colored luster paint is one of the characteristic features of Tarqui. The silvery variety is found at other early sites in this general region.

In most instances the paint is rather carelessly slapped on. Even in polychrome or tricolor ware in which small element designs are used, the potters were not very meticulous in applying their pigments.

Negative or resist painting occurs but is not particularly abundant at the site.

Some of the more characteristic combinations follow:

*Tricolor.*—This is evidently the ware which Estrada calls Bahia Tricolor. It consists of red and black over orange or buff.

It falls into two types: the first, polished and painted on both interior and exterior, the other, polished and painted on the exterior only, the interior being left rough and undecorated (pl. 8, b).

One unique sherd was found in the deepest level of our trench. This was a thin, fine paste ware polished and painted on both sides with an elaborate design with scrolls, dots, and both curving and angular lines applied in narrow bands of orange and dark red. These bands in turn are outlined with black and red. The base color is
buff. A deeply notched flange runs around the exterior. Although the colors are similar, this appears to be an exotic piece and the ware itself is finer than the typical Tarqui polychrome (fig. 8, b).

Luster painting.—This curious thin, transparent application has a metallic luster and is either silver or rose tinted. It is usually seen in broad vertical or horizontal lines on the interior near the rim. Other designs consist of round dots or bold hour-glass figures (pl. 9, a).

It is found typically on polished black, polished red, and polished buff. Sometimes it is on polished black with polished red exterior or polished black with unpolished buff exterior or polished black, both exterior and interior. In at least one instance luster painting was combined with red and black on buff.

Negative painting.—This occurs on both red and black polished wares and sometimes in combination with red and buff on black and red. The color under the resist application is usually buff or white (pl. 17, a).

Red on white.—This occurs on coarse ware coated with a white wash over which bold and rather crude designs in red are applied. Two rim sherds of this ware were found, one near the surface, the other at a depth of 385 cm. Although identical in appearance, they are obviously from different vessels (pl. 3, a, 5, 6).

Black on red.—This is used on both smooth and polished ware. The black designs are applied over the red.

Red on black.—This is the reverse of the above, the red designs being applied on the black surface.

Red, orange, and black on buff.—Similar to tricolor, this combination is usually painted on a smooth exterior, the inside being rough and unpainted.

Sometimes the painting is on the smooth interior, in which case the exterior is usually rough and undecorated. Another variant is with the three colors on the interior, with the exterior also smooth and painted solid red. Sometimes there are resist stripes on this ware. It may be possible that these stripes are made by scraping off the slip rather than by a resist technique (pl. 17, a).

Black on buff.—This consists of a buff exterior with a black interior, the black extending over the rim.

White on black.—This is on polished ware, sometimes on both sides, sometimes on the polished interior, with the exterior plain and unpolished.

Black and red on buff.—This is polished on both sides; the designs are applied to the interior. The exterior is solid red.
Light brown on dark brown.—Only a few sherds were found of this highly polished ware. The design, consisting of broad horizontal bands, is on the exterior. The interior is light gray and unpolished. This might be an exotic type.

Dull black on polished black.—This is reminiscent of the technique used in San Ildefonso Pueblo, New Mexico. Typically, broad unpolished zones are left below the rim.

A variation is to create narrow zones outlined by engraved lines with the polished and unpolished areas alternating (pl. 9, b).

Pencil line.—This is used as a further embellishment on the dull black zones. Vertical or cross-hatched polished lines are applied by a stylus and look very much like pencil marks (pl. 9, b).

Dull red on polished red.—This is identical with the preceding technique, except that red instead of black is used. Pencil-line decoration is also used with it. The red combinations, however, are much more rare than the black.

VESSSEL SUPPORTS

The majority of the pottery vessels appear to have been equipped with polypod supports, or with pedestal or ring bases. The various types used are described below.

Cylindrical supports.—These were the most abundant of the polypod supports, 213 being found in our trench. They consist of hollow cylinders, open at the base. Usually they expand toward the lower end. Although frequently used on smooth or polished wares, unlike the conical variety, the cylindrical supports are never polished and seldom smoothed. Normally they are buff or black in color (pl. 10, a).

Hollow conical.—These are the second most abundant type and appear to have been used on all kinds of smooth and polished ware. There is a certain amount of variation in form. Typically they are smoothed or polished and red or black in color. The majority taper evenly to a blunt point which sometimes terminates in a plane surface. A few are bulbous in shape. All have a slit or a round hole in the side. Rattles were not used. One or two have a loose inclusion which is probably accidental. They seem to have been used normally on shallow bowls. We recovered 187 supports of this type but were unable to determine how many were used on a single vessel (pl. 10).

Solid curved supports.—These look something like modified conical supports with curving points, but they are solid and lack the ventilation holes. They are never polished, but at least one specimen was decorated with red and yellow paint (pl. 10, b).

Solid rectangular supports.—These consist of square slabs, flat and somewhat longer than they are broad. Only five were found.
Solid conical and cylindrical.—A few solid conical and cylindrical supports were found. They were small, carelessly made, and probably do not constitute types (pl. 10, a).

Loop supports.—The few examples found had been attached to rather large bowls with buff exteriors and smooth black interiors. One specimen had a small rectangular protuberance at the terminus (pl. 10, a).

Effigy supports.—Effigy supports are most frequently modifications of the solid curved type, on which are added “coffee-bean” eyes, nose, and mouth and sometimes a pair of arms (pl. 10, b). Circular tabs are sometimes applied to indicate the features in place of the coffee-bean eyes (pl. 10, b).

In only one instance was a hollow conical support modified to effigy form (pl. 10, b).

In a few cases the supports were simple but complete effigies with legs. These are rather flat and broad. One example is shown with a nose ring (pl. 10, b).

Estrada shows an interesting distribution chart for most of the polypod types of supports (Estrada, 1957, c, chart 14).

Pedestal bases.—These are fairly common. Both the tall slender and low broad forms were used. They are most frequent with smooth red and red on buff wares. In the latter case they are normally decorated with boldly incised geometric designs (pl. 5, b).

Ring bases.—Ring bases are sometimes used, and occasionally may be 2 cm. or more in height (fig. 3).

FIGURINES

One of the striking features of the Tarqui site is the abundance of figurines. From a trench 6 m. long, 3 m. wide, and 4 m. 70 cm. deep, we recovered 1,003 figurines and figurine fragments.

These could be classified into six major types which we have indicated by the letters A to F. Although distinct in style, there is a certain relationship between the types. Some are definitely hybrid, and certain characteristics occasionally are shared by several. Miniature forms are frequent in all types except “F.”

The great majority of the figurines are in human form, both male and female, but there are a few animal and bird effigies as well. The majority of the animals appear to be dogs with long bodies and short legs. The birds are in tripod form with the tail and two legs forming the supports. Both hollow and solid animal figurines were found.

Complete specimens were relatively scarce.

Of the large number of human figurines, only three represent seated individuals; all the rest are shown in a static, standing position. There
Figure 3.—Cross sections of ring and pedestal base supports.
are also a number of aberrant specimens which do not fall into the six major types.

Type A appears to be similar to what Estrada calls the “Estero” type. Our type B is Estrada’s “Bahia” type. Type C seems to be what he calls “La Plata,” and type F is his “giant modeled.” As with the other ceramics, all figurine types occurred from top to bottom in our trench with no significant differences in proportion between the shallow and the deep parts of the excavation. Most abundant were types A (122) and E (764).

The apparent greater abundance of type E is due to the fact that being larger and of thin hollow construction they broke into a much larger number of fragments. The figure for type A, on the other hand, is probably close to the actual number of figurines represented.

Detailed descriptions of the various types follow. However, the reader will get the best impression of them by studying the illustrations.

Type A.—These are small, flat, solid, handmade figurines with coffee-bean eyes. The backs are plain except for occasional surface decoration, and the back of the head is typically concave. The nose is thin, arched, and very prominent. In a few instances, the nostrils are shown. Usually a nose ring is worn. The eyes and mouth are formed by applying round or oval tabs of clay in which is pressed a transverse slit made by a sharp-edged instrument. The body proportions vary from short to long. The crotch is U-shaped and the legs are relatively short, sometimes bowed. The legs terminate in a blunt point without forming the feet. The arms are short and normally hang down at an angle from the sides, with the hands suppressed. Sometimes the arms cross the chest, and fingers are indicated by incisions. All type A figurines are represented in a static, standing position.

Males and females are about equally abundant. The bodies of the males are usually longer than those of the females. Frequently the arms of the females are represented as supporting the breasts.

No clothing is represented except an occasional simple forehead band and articles of adornment such as nose rings, bead and band necklaces, multiple string necklaces, and, rarely, cheek plugs. Hair or headdress is never indicated, the top of the head usually terminating in a rectanguloid manner.

The bodies of both sexes are frequently tattooed with small incisions, sometimes on one side of the body only. Occasionally this tattooing extends over the back. Many are painted, usually red and in a variety of patterns. Normally painting is confined to the head and the upper part of the body, as a rule extending around the back.
Frequently the lower part of the nose is pierced laterally with a very small hole, evidently for inserting a detachable nose ornament in lieu of the usual modeled nose ring.

The ears are sometimes punctured with a row of small holes which do not penetrate all the way through (pls. 12, 13).

*Type B.*—These show a relationship to type A but in general are considerably larger in size. They are moldmade, solid and flat with plain backs.

The eyes are raised circles or ovals. Ears are indicated by from two to eight raised circular tabs. The noses are thin, arched and prominent. The base of the nose extends well above the eyes. Usually nose rings are worn, but occasionally the nose is in the form of a loop, evidently for the purpose of adding a detachable nose ring.

The mouth is a narrow raised tab under the nose, with a transverse slit. The chin and mouth are small in proportion to the rest of the face.

As with type A, male and female figures are equally abundant. The genitalia are never indicated, though no clothing is worn. The female breasts are always formed. The male figures wear a bead necklace with a pendant hanging on the chest. Usually they also have bracelets and armlets.

The females wear a semicircular bead necklace like that of the males, but without the pendant. The males wear a belt around the stomach; the females do not. Females are sometimes shown with the hands crossed on the chest.

Frequently type B figurines are painted with red, white, and yellow paint, the yellow being used on the face. It is common for the upper half of the body to be painted red, this painting extending over the back.

There are several variants of this type. One is shown with a raised headband, while another is a man playing panpipes.

Little attention is paid to modeling the legs and feet. Normally the arms are shown hanging at the sides, but extending at an angle from the body. The legs are separated.

Some of the larger figurines are made from a hard terra-cotta-like material, with the backs perfectly flat as though modeled on a board (pl. 14).

*Type C.*—These are solid moldmade figurines which are intermediate in size between types A and B. They are relatively flat and the backs are plain. They are typically represented as standing, but the only three seated figurines found were of this type.

The ears are represented as decorated with circular ear spools or with small circular tabs. A few have nose rings but the majority do
not. Although the legs are represented as separated slightly, the space between is closed. A small form of type C has a perforation through this connecting web as though for inverted suspension. The broad upper part of the head is modeled more like type B than type A. Typically a bead necklace is worn. Usually the eyes are realistically modeled to show the lids and eyeballs, although a variant type has round eyes. One specimen is shown grasped in a giant hand as though it were a doll.

The features are on the whole rather realistic and in proportion, as contrasted with types A and B, which suggest caricatures (pl. 15).

_Type D_—These are semisolid and moldmade. They are of heavy clay with a small hollow, or cylindrical, hole in the center. The eyes are of the coffee-bean type, or oval with horizontal slits. The ears extend from the sides of the head and are decorated with three circular tabs arranged in the form of a triangle. The nose is arched and moderate in size, with a nose ring. They also wear bead necklaces.

The arms are represented as akimbo, but in the form of a loop.

There is a small, circular ventilation hole in the center top of the head.

They were sometimes rather gayly painted with red, yellow, black, and white paint.

Some type C figurines resemble type D in that they are semisolid (pl. 16, a).

_Type E._—These are hollow moldmade figures which vary considerably in size (pl. 16, b). Typically they are larger than type B, but this is not always so. These figures are the most abundant type at the Tarqui site. As a rule, the features are modeled more realistically than in the preceding types, but the legs and feet are carelessly done.

The ears are shown with small circular tabs on the rims and a small circular ear spool in the lobe of the ear. Frequently nose rings are represented. The faces are sometimes painted in red, yellow, black, and white, and several fragments have negative paintings on the legs and body. Perhaps all were painted originally, but most of them apparently have lost the paint. A fairly common type is shown holding a baton diagonally across the chest.

A curious and particularly diagnostic internal structural feature consists of two perforated cylindrical supports joining the buttocks and abdomen, leaving two holes on the exterior of the figurine, both front and rear. The internal cylinders are also perforated laterally with small holes. These may have acted as supports to keep the body from collapsing while the clay was soft before firing. Estrada illustrates a figure from Choné which apparently has this feature (Estrada, 1957 c, fig. 92).
Type F.—These are large, heavy, hollow, and handmade figures, some almost one-quarter life size. They were elaborately decorated with applique and further ornamented with red and black paint.

Although we recovered nine pieces, they were too fragmentary to give a good idea of the nature of the complete specimens. The one human head fragment found was wearing a large well modeled circular ear spool, painted red. There was also a portion of a jaguar or puma head with projecting fangs, the only representation of this animal that we found (pl. 11, a).

Aberrant figurines.—A few specimens were found which do not fit in with the above-described types. On the surface of the site was found the example illustrated in figure 4 and plate 19, a, 3. It is brownish buff in color, polished, and decorated with incised designs. It appears to represent an anthropomorphic deity rather than a person.

In the deepest level of the trench were found two solid, rather flat torsos, jet black and highly polished. The ware of these is similar

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Figure 4.—Polished and incised figurine.
to a purchased specimen brought to us by a workman, which is illustrated in plate 19, a, 12.

Some figures with punctate eyes from the nearby Estero site are also illustrated (pl. 19, b). These are usually modeled under the rims of narrow-necked jars.

**MISCELLANEOUS POTTERY ARTIFACTS**

*Stemmed cups.*—One of the most abundant as well as one of the most puzzling artifacts at the Tarqui site were these curious little objects which we called "golf tees" because of their form. They consist of a small hemispherical cup from 2.5 cm. to 4 cm. in diameter, mounted on a pointed, bulbous stem about 2.5 cm. long (pl. 11, b). The majority are of buff ware, but some are black or gray.

It has been speculated that these are ear ornaments but this does not seem likely. The ear tabs shown on the figurines are considerably smaller and appear to be flat.

The "golf tees" are sometimes painted red or yellow, but they are not particularly well made or decorative. We recovered 108 from our excavation, so it would appear that they had some commonplace use.

*Ocarinas.*—A simple conical whistle or ocarina with two projecting hollow arms at the upper part was a characteristic artifact. These ocarinas are of unpolished buff ware and vary in length from 2.5 cm. to 6.5 cm. More than a dozen were found in our trench. Their appearance and construction are shown in figure 5.

![Figure 5](image)

**Figure 5.**—Typical ocarina, showing internal construction.

*Pottery "cradles".*—Parts of seven platformlike objects with raised, notched sides and four supports were found. At each end these objects have a perforated tab as though for attaching a string. One-half of a specimen had an arched loop extending from side to side.
One was painted with red and yellow paint. They vary from about 12 cm. to 20 cm. in length (pl. 11, a).

Estrada has speculated that these were cradles for figurines. We have no better suggestion to offer.

*Textile-impressed lumps.*—Three or four lumps of burned clay were covered with textile impressions, as though they had been wrapped in a fabric and burned.

*Miniture goblets.*—A few miniature vessels about 5 cm. in height, shaped like a stemmed champagne glass, were found. They were of thin unpainted buff ware.

*Pottery disks.*—Circular, unperforated disks 2 cm. to 5 cm. in diameter were made from potsherds.

*Finger-grooved grater.*—A single sherd of buff ware, representing this type of artifact, was found at a depth of 145 cm. This type of grater, which occurs abundantly at the nearby Estero site, is supposed to belong to a much later period (the Manteno), but we feel that its presence here should be mentioned (pl. 3, a).

**STONE ARTIFACTS**

Objects of stone were not particularly abundant. The most common were rather small rectangular whetstones made of fine-grained sandstone, and grooved abrading stones of the same material, evidently for awl sharpening (pl. 11, b).

Miscellaneous artifacts consisted of two small stone borers, several rubbing stones, two pieces of pumice, and a bright-green polished serpentine tubular bead. Obsidian flakes were fairly common, and there were a few flakes of white chalcedony and brown flint. A bright-blue waterworn pebble had evidently been picked up because of its color.

One fragment of well-carved, hard, fine-grained stone evidently was part of an animal figure. This single piece demonstrated at least real skill in stone carving.

**SHELL ARTIFACTS**

Among the shell artifacts were 3 or 4 small shell adzes or axes and 12 pearl shell rings which varied from 3.5 cm. to 6.5 cm. in diameter.

There was also a well-made disk-shaped shell bead 2 cm. in diameter which had been perforated by a conical drill operating from both sides, a perforated rectangular fragment of pearl shell, and an olivella shell sawed in half with a ground-planed surface on the upper portion through which a hole had been drilled.
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Total or average: 20,850 47.3 15,320 34.6 5,166 11.7 1,508 3.4 355 0.8 417 0.9 278 0.6 295 0.7 10 44,197

1 Tenths of percent were dropped in coarse, smooth, and polished to simplify chart. Percentage under 0.5 not entered.
The apex of a conch shell had been ground into a disk and two holes drilled in the upper portion. These holes penetrated only halfway through the rather thick shell. There were also several sawed-off sections of orange-colored spondylus shell (pl. 18, a).

**BONE ARTIFACTS**

A few bone awls, round in cross section, were found (pl. 18, a). There were also a polished bone tubular bead and a polished round piece of bone with a pointed stem attached which may have been a cheek or ear plug.

**Table 2.—Stratigraphic occurrence of figurines, ocarinas, and stemmed cups**

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<th>Stemmed cups</th>
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<td>Type B, mold-made</td>
<td>Type C, mold-made</td>
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BUREAU OF AMERICAN ETHNOLOGY

[26] [Bull. 186]
APPENDIX

DESCRIPTION OF POTSHERDS FROM THE CERRO DE HOJAS SITE

In the process of making a small excavation for the purpose of obtaining charcoal at Cerro de Hojas, a small collection of potsherds was obtained. These were identified by Emilio Estrada as belonging to the Manteño culture. The type and number of each potsherd recovered are listed below:

102 Playas Plain Polished. Thin black, light weight, kaolinite tempered, 3-4 mm. thick, finely polished on one side, medium on other, gray to black. Biconical ollas with outflaring neck.

57 Manteño Polished. Gray core, reduced firing; same as Playas but thicker. Ollas and compotes.

56 Manteño Plain. Coarse, sandy ware, oxidized. Hardness 2.5.

8 Manteño Burnished. Lost line on Playas Plain or Manteño Polished.

4 Manteño Incised.

56 Chanduy Polished. Polished on inside and rough on outside, fine sand and grit tempered, reduced firing, 5 mm. thick.

1 Chanduy Red Banded. Fine tempered kaolinite ware.

40 Cerro de Hojas graters. Finger-marked graters found in Manteño culture. Same paste as Chanduy Polished.

5 (Similar to) Valdivia Brushed.

1 Playas Engraved. On Playas Plain.

(See Estrada, 1957 c.)

REFERENCES

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ESTRADA, EMILIO.
1934. Ensaya preliminar sobre la arqueología del Milagre. Editorial Cervantes, Guayaquil.


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EVANS, CLIFFORD, and MEGGERS, BETTY.

HUERTA RENDÓN, F.

IJÓN Y CAAMANO, JACINTO.

SAVILLE, MARSHALL.
a, View from Estero site looking west toward Manta.  
b, Beginning of the stratigraphic trench at the Tarqui site.
a, The west end of the stratigraphic trench showing the caliche layer with moist sand above and below it, and sloping layering of the deposit. b, Test trench on Cerro de Hojas.
a. 1, 2, 3, 4. Horizontal grooved ware; 5, 6, red on white; 7, 8, 12, faces modeled on shoulders; 9, pseudo-coiled; 10, finger-grooved grater sherds; 11, zoned red on buff. b. Modeled rim modifications.
a. Engraved red ware.  

b. Engraved gray or black ware. The two lower right-hand pieces have polychrome pigmentation in the lines.
a. Incised coarse plain ware.  b. Incised red on buff pedestal bases.
*a.* Perforated and deeply indented rims.  
*b.* Striated, or pebble polished ware.
a. Luster painting.  

b. Dull black on polished black.
a, Types of polypod supports.  b, Polypod supports.
Pottery "cradles," and fragments of monumental figures.

b. Stemmed cups, obsidian flakes, stone hammers, and whistling stones.
a. Type A figurines.
b. Profiles of figurines in a.
a. Type C figures.  
b. Miniature type C figures; most perforated for suspension.
a, Objects of shell and bone.  
b, Figurine from the tube burial at La Tolita, which yielded charcoal giving a radiocarbon date of $1690 \pm 200$ (A.D. $267 \pm 200$).
a, Miscellaneous purchase figurines from the vicinity of Manta. b, Punctate-eye figurines from vessel necks, Estero site.