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Olmec Ritual Behavior at El Manatí: A Sacred Space

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The cerro manatí juts from the otherwise flat floodplains of the lower Coatzacoalcos River basin in southern Veracruz and is distinctly visible from the Olmec center of San Lorenzo, 10 km to the west (Fig. 1). The Cerro Manatí was created by a deeply buried salt dome, a geologic feature common to the region (Coe and Diehl 1980: 11–13). Springs emerge from the base of the *cerro*. Those on its east side produce salty water, while clean fresh water flows from the western springs.

In 1987, villagers at the small modern hamlet of El Macayal selected one of the western springs as the location for two fish ponds they planned to construct (Fig. 2). As they excavated those ponds out of the mud of the spring area, they unexpectedly began to uncover an amazing quantity of wooden objects, human bones, greenstone axes, ceramics, and other artifacts interred within the mud. They reported their discoveries to the Veracruz Regional Center of Mexico's Instituto Nacional de Antropología e Historia (inah), and in 1988 we traveled to this isolated area of rural Veracruz to verify the reported finds. Upon arriving at the village of El Macayal, much to our surprise, we were shown three extraordinarily preserved carved wooden busts. To our further astonishment, it was clear that these magnificent wooden sculptures were attributable to the ancient Olmec culture (1200–500 b.c.). Not only were the busts remarkable for their beauty and preservation, but they were also some of the oldest Pre-Hispanic wooden objects ever found in Mexico. The ceramics found associated with the heads helped verify their antiquity, for they were typical of the San Lorenzo (1000–900 b.c.) and Nacaste (900–700 b.c.) phases at San Lorenzo (Coe and Diehl 1980).

Late that same day, as dusk approached, we were taken to the site of the

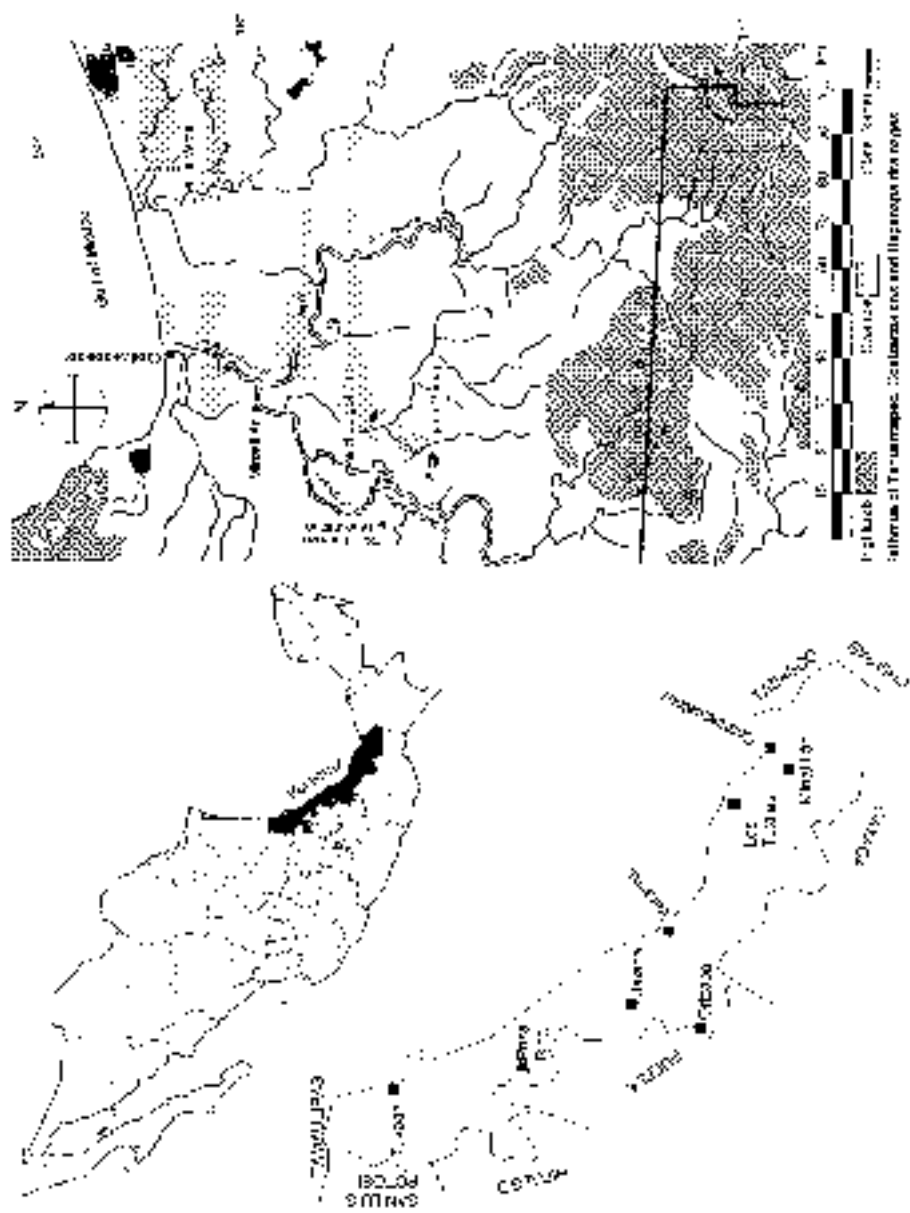


Fig. 1 State of Veracruz and Coatzacoalcos River basin, showing location of El Manatí. Drawing by Paul Schmidt.

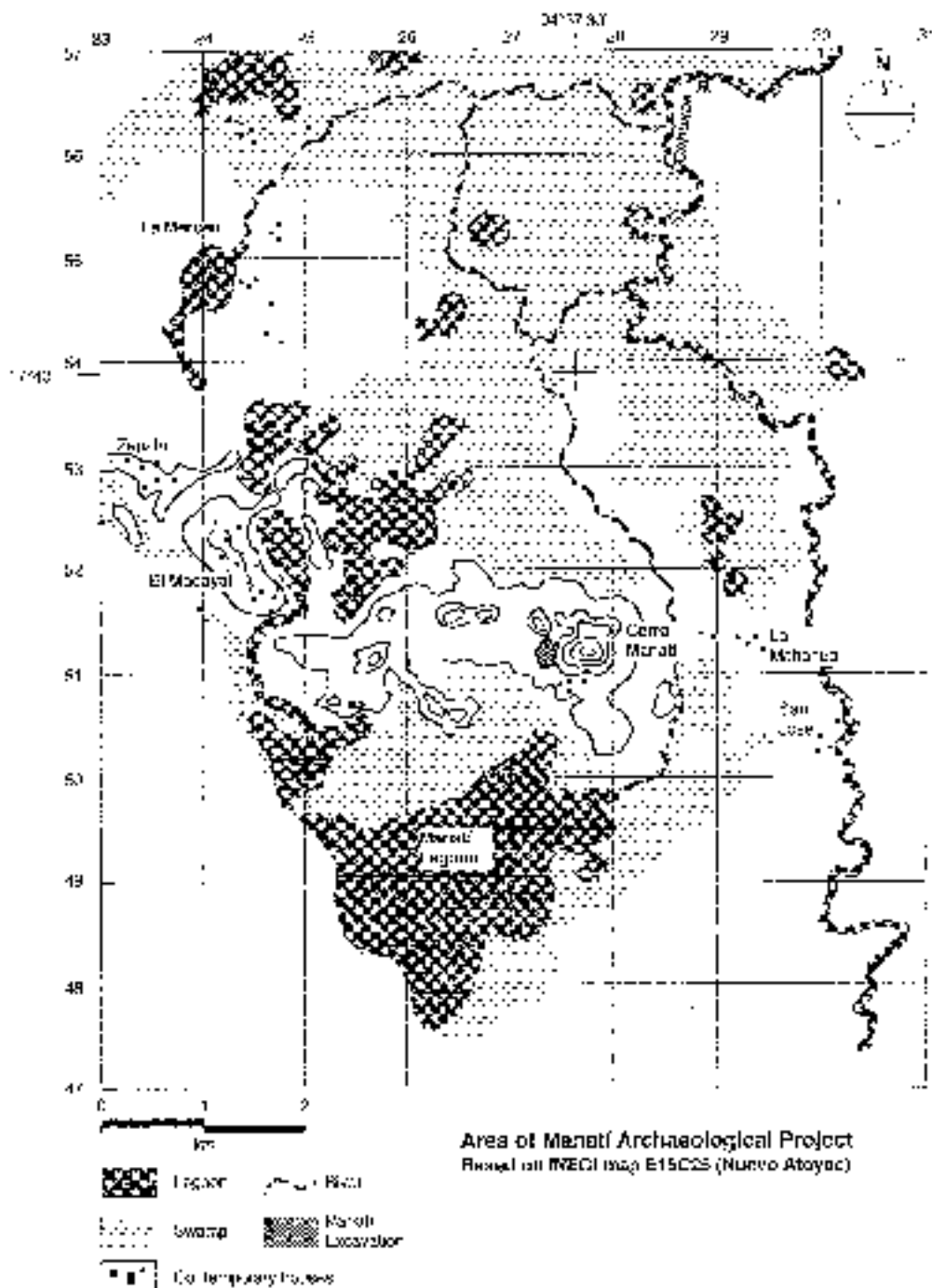


Fig. 2 El Manatí and environs. Drawing by Paul Schmidt.

discovery, a trip involving a canoe journey across lagoons and a long walk through savannah grasslands. The fish ponds, built to utilize water from the spring at the foot of the Cerro Manatí, measured 24 by 21 m, and 10 by 9 m. Both were filled with water at the time we first saw them, thus concealing from our view the areas that had yielded the unusual artifacts. We began excavations at El Manatí in 1988, and that research continued for several years thereafter. Although the spring deposits preserved the wooden busts and other organic remains, they also created extremely difficult excavation conditions, for rather than working on solid ground we were essentially excavating in gelatinous mud.

The springs, the mountain, and several other characteristics made El Manatí a sacred place and the scene of the ritual behaviors demonstrated by the archaeological record there. Our data suggest that the ritual use of the springs began as early as 1600–1700 b.c. and culminated about 1200 b.c. We believe that three phases of use occurred (Fig. 3). The first, Manatí A, is evidenced by stone axes, ceramic material, rubber balls, jade beads, and ground stone objects found dispersed across what we interpret as the bed of the spring. During the second, Manatí B, phase, axes occur in particular groupings of 2 to 11 pieces that were laid out along north-south and east-west axes. The final Macayal phase, about 1200 b.c., corresponds to the period of interment of the wooden busts. In this chapter we discuss some of the objects and patterns uncovered by our excavations. Details of the actual excavations, stratigraphy, and a plan view of the excavation units showing the location of Sculptures 1–9 has been published in Ortíz and Rodríguez (1989). In this chapter we report our results from the field seasons of 1988–89 and 1992, and reflects our data and analyses through the latter season.

THE HISTORY OF RITUAL USE OF A SACRED SPACE

Manatí A Phase

The earliest archaeological evidence for offerings at El Manatí is found in the area that we interpret to be the bed of the pond created by the spring. That bed is marked by sandstone rocks, the largest of which are positioned on a general north-south axis and have been modified with V-shaped (“ax-sharpening”) grooves and ground circular depressions. The artifacts of this phase occur within Level X, a deposit of sandy sediment above and around the rocky bed (see Fig. 3). A sterile stratum of gummy yellowish clay underlies Level X. Two radiocarbon dates are associated with the earliest deposits: one 3740 ± 90 rya (Beta-637332), or 1790 ± 90 b.c. uncorrected; the other 3710 ± 110 rya (Beta-63735), or $1760 \pm$ uncorrected.

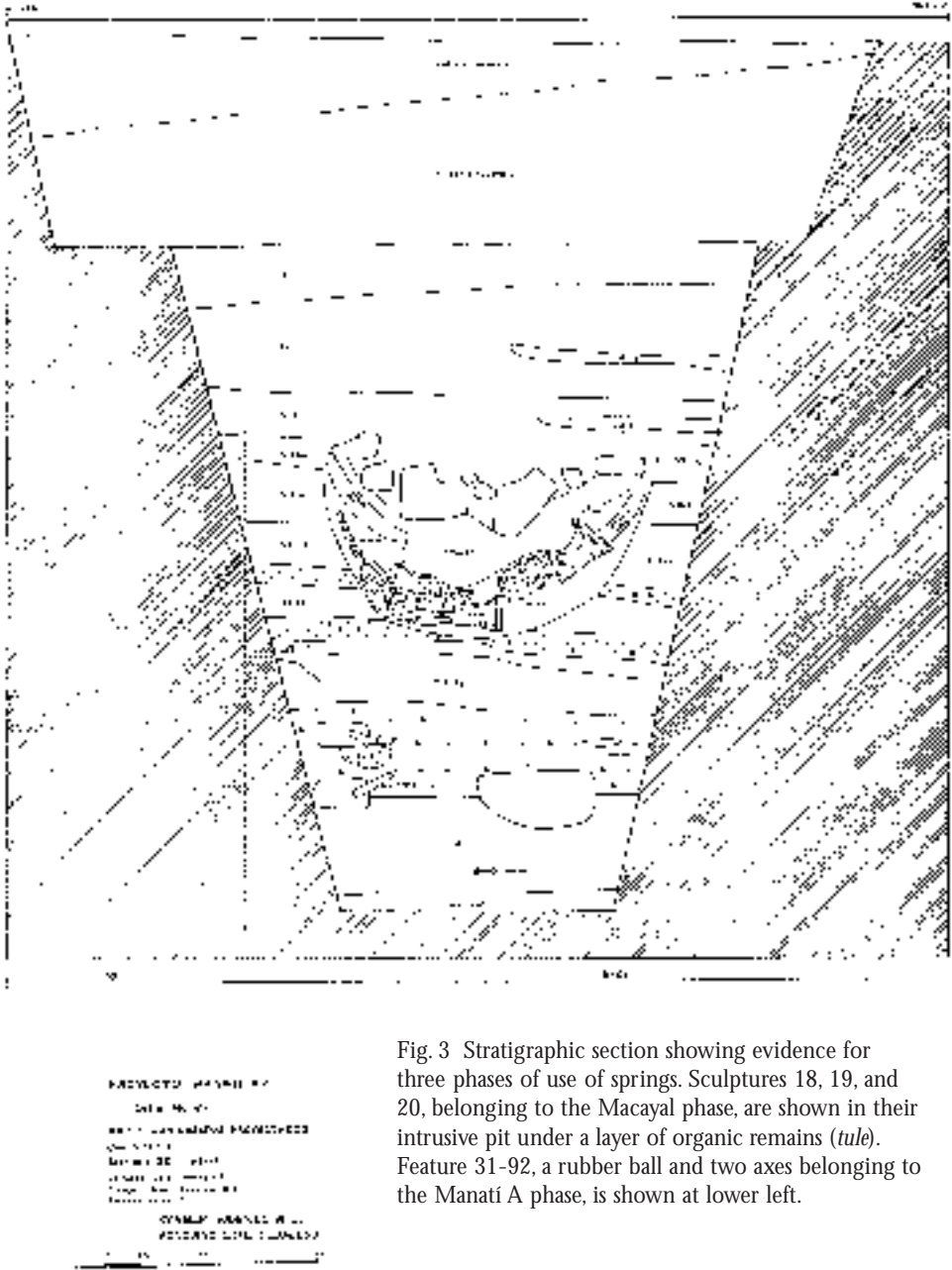


Fig. 3 Stratigraphic section showing evidence for three phases of use of springs. Sculptures 18, 19, and 20, belonging to the Macayal phase, are shown in their intrusive pit under a layer of organic remains (*tule*). Feature 31-92, a rubber ball and two axes belonging to the Manatí A phase, is shown at lower left.

The ceramic assemblage found within Level X is quite standardized, consisting basically of light cream-colored slipped tecomates with polished exteriors and extremely reduced mouths, and light cream-yellowish slipped flat-bottomed bowls with straight outslanting walls (some have a slight incised line on the interior). There are also fluted tecomates, red and dark reddish-brown slipped tecomates and flat-bottomed bowls, brushed and plain tecomates, smoked black tecomates and flat-bottomed bowls, and bichrome bottles. Some of these vessels still have traces of soot or carbon on their exteriors. We believe all of this assemblage is contemporaneous with the Bajío, Ojochi, and Chicharras phases at San Lorenzo (Coe and Diehl 1980) and that it exhibits many similarities to the ceramics of the Barra and Locona phases of Chiapas (Ceja 1984; Clark 1991, 1994; Lowe 1975).

“Domestic” artifacts in this level include fragments of shallow stone mortars and flat footless metates with rounded corners. The presence of fire-cracked rounded river rocks suggests particular food preparation practices. In addition, fragments of human and animal bone were found dispersed in this level. Only a few obsidian blades and one figurine fragment were found in this level, and obsidian artifacts and figurines are otherwise notable by their absence.

Isolated polished stone axes were found dispersed around the bed of the spring. Some seem to form groupings (although without forming patterns as in subsequent phases), and these we labeled “Features.” Some of these are described below to provide an idea of the type of artifact clusters found in this, the deepest cultural level at El Manatí.

Feature 3-92 consists of a grouping of five highly polished green petaloid stone axes that were laid out side by side in a northeast direction with their bit edges all pointing west. These axes may be associated with two other axes that had been placed slightly further south. Feature 5-92 is composed of six axes laid horizontally, five of them with their bits oriented to the east, and the sixth set on its side with its bit facing south. Two isolated axes north of this group may also be part of the same feature. A third such ax group is Feature 25-92, four axes positioned horizontally, three with bits facing west and the fourth facing in the opposite direction. The smallest of the axes, 10 cm long and 4 cm wide, is a light cream color with dark veins, and the largest is of highly polished greenstone, 18.5 cm long and 5.5 cm wide. A third, measuring 15.5 cm long and 6.4 cm wide, is light green in color with dark green veins and well polished except for the butt. The fourth is also of light green color with dark green and white veins, and measures 13 cm long and 4.5 cm wide.

Two other ax groupings are highly significant, for they are each associated with another important artifact, a rubber ball. Feature 8-92 is composed of six

axes above a rubber ball. The arrangement of the axes is irregular: the largest ax points to the south, another to the southwest, and yet another to the northeast; the next is located beneath the largest, placed on its side with its bit pointing west; the fifth is also on edge and facing west; and the sixth, with bit toward the north, lies beneath a large sandstone rock. The globular rubber ball (Fig. 4) is 10 cm in diameter and has small surface irregularities due to encrusted gravel. A rubber ball and two axes comprise Feature 31-92 (see Fig. 3). One of the axes lay above the rubber ball, with its bit pointing east. The other ax was nearby, oriented with its bit to the west. The rubber ball measures 22 x 18 x 10 cm. Its present flattish ovaloid shape was probably caused by the weight of overlying objects and deposits.



Fig. 4 Rubber ball from Feature 8-92, Manatí A phase.

Greenstone bead “clusters” also occur in Level X. During the 1989 field season, 56 jade beads were found in the same area as Feature 31-92. They were dispersed among the mud and sand in an area of approximately 2 sq m in association with the sandstone rocks of the spring bed. Each bead is distinct in terms of its size, quality of workmanship, and shape (rounded to semicylindrical), but all are perforated with a conical drill hole. More beads were recovered in the same area in the 1990 field season. These were jade and serpentine with different sizes and finishes. Their quantity indicates that they must have belonged to at least two different strands of beads or necklaces that had been thrown into the spring as an offering, and they may be part of the same 56-



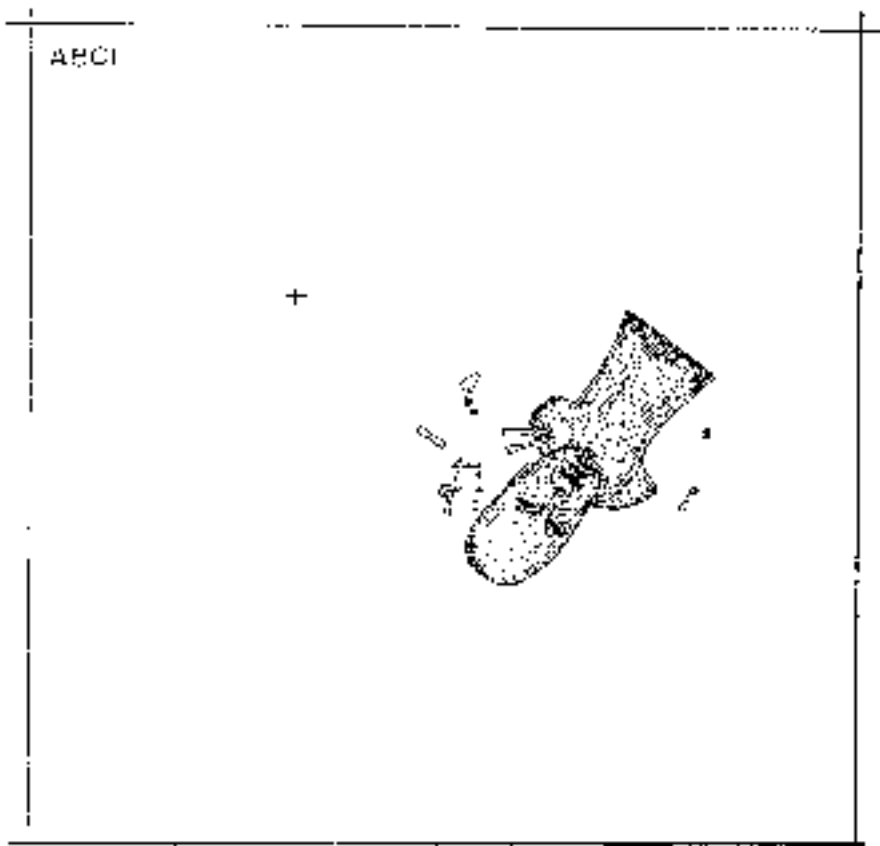
Fig. 5 Six axes arranged in a flowerlike circle, Feature 11-92, Manatí B phase.

bead group excavated the previous season. The majority were found concentrated between the roots of an ancient tree that marks an old surface and around and beneath a large sandstone boulder within the sandy stratum of Level X.

A solid clay “baby-face” figurine fragment was found in association with the beads. The figurine head depicts cranial deformation, and some postfiring angular cut marks at the level of the ears suggest that this piece was reused, possibly as a pendant or pectoral. Its association with the beads suggests that it may have been part of a bead strand. A human molar and some human bone fragments were also found near the beads. Furthermore, this same area of the spring bed yielded fragments of what we originally believed to be highly overfired clay nodules, because of their similarity in texture to the scoria formed in kilns that reach high vitrifying temperatures. However, under inspection in the laboratory, we ascertained that these droplike fragments are apparently sandy concretions formed by water filtration in an open space or cave. They may indicate the existence of a cave or a rock shelter nearby in antiquity.

Manatí B Phase

The offerings and artifacts of this phase occur within Level VIIIb, a stratum separated from Level X by a muddy deposit, Level IX, which extends like a



**PROYECTO MANATÍ 82
SITIO MANATÍ**

Planta, huesos, infante y elemento 17.

Cuadro ABCI

Elemento 15 Miva. 1900-220

Excavado por Zoraida Guzmán S.

Ub. de la zona Bacarril M.P.

Respo. de obra: Carlos Rodríguez Mtz
Benigno de la Cruz C.



Fig. 6 Sculpture 17, with associated bones of infant, as found.

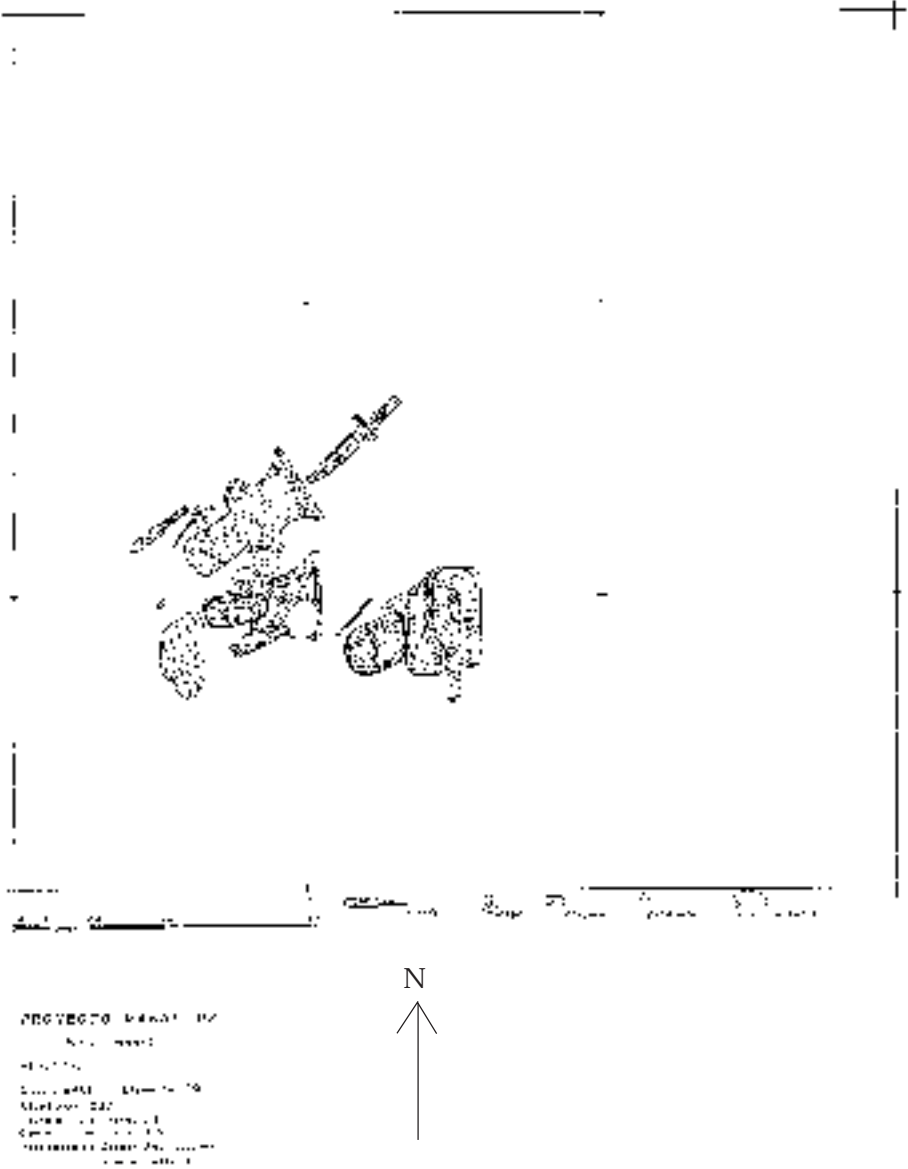


Fig. 8 Sculptures 18, 19, and 20, with associated ornaments and scepters, as found.



Fig. 9 Detail of Sculptures 19 and 20, showing the face of Sculpture 20, the round organic pectoral ornament of this sculpture at lower left, and traces of the earpool of Sculpture 19.

carpet over Level X and the rocky bed of the spring. Level IX was apparently created when the spring began to clog and fill with sediment. The ritual deposits of the Manatí B phase are principally characterized by more complex patterns in the arrangement of ax groupings. Several are described below.

A flowerlike arrangement of five axes, Feature 25-90, occurred 50 cm above the rocky spring bed in Level VIIIb. The axes had each been stuck into the mud at an angle, butts downward, to form a circle, as if each ax was the equivalent of one petal of the flower. All five axes are 13–15 cm long. Four of them were made from the same type of gray stone, and the fifth is dark green. A second flowerlike grouping of six polished axes, Feature 11-92, was also found (Fig. 5).

Feature 27-90 is a “square” created by five axes laid horizontally, one in each “corner” and the fifth in the center of the square. Two of the corner axes are oriented with bits to the southwest, the two other corner axes are oriented to the northwest, and the central ax has its bit to the south. Another cluster of five axes, Feature 29-90, occurs nearby. In this grouping, four were laid out horizontally together, and the fifth was 50 cm west and slightly higher. Of the four,

three were side by side, touching one another, two with their bits to the east, the third to the west; the fourth was positioned facing southeast. The isolated ax was also laid flat, but with its bit to the northeast. It is possible that this feature, and the previously described Features 25-90 and 27-90, are somehow related, and they perhaps pertain in some manner to concentrations of greenish clay found slightly southeast of all of them.

The largest ax grouping is Feature 7-92, which consists of 12 axes occurring together as if they had been deposited as a bundle, although no organic remains that would suggest a wrapping were noted. The axes were positioned irregularly; taking into consideration the orientation of the edge, seven were placed with their bits to the west, and the others to the north, south, and east. While the features described above contain multiple axes, others such as Features 10-92, 16-92, and 29-92, consist only of ax pairs. Interestingly, within these pairs one ax is usually light green in color and the other dark green. Directionality of the bits in the ax pairs shows no consistent pattern.

Macayal Phase

The most spectacular artifacts found within the spring deposits at El Manatí are related to the Macayal phase and Level VIIIa. We refer specifically to the preserved wooden objects—busts, knives, staffs, and scepters—that make El Manatí unique among Mesoamerican sites (Figs. 6–9). Because all these wooden pieces are fragile and were in need of immediate conservation, they and other organic materials were frequently removed within a block of the surrounding clay matrix, and thus the field measurements and observations used in this chapter are at times incomplete. We have one radiocarbon date (GX-14765) for this period, 2990 ± 150 rya, or 1040 ± 150 b.c. uncorrected, obtained on wood from Sculpture 2, discussed below.

Sculpture 1 and Feature 1-88. The first wooden sculpture that our excavations uncovered, Sculpture 1, seems to represent a female and we nicknamed it Vicky (throughout this chapter we will refer to the sculptures by their field nicknames rather than feature numbers). When found, at a depth of 2.2 m, the sculpture was within a large block of clay that was part of a slowly collapsing sidewall, but we believe that this slumping did not alter the carving's original position by much more than 5 cm. The bust was lying horizontally, face upward, head oriented to the southwest. As we carefully cleared the facial area we observed that the mouth area was painted red. For fear of damaging this piece we did not remove the clay matrix from the remainder of the mouth nor the right side of the head, but left that delicate task to the INAH restoration laboratory.

An extremely unusual artifact, a carved wooden staff, was found to the right of Vicky's head, set in a vertical position. This was the first of many staffs to be recovered during our research (compare Figs. 7–9). The top of the staff reached above the height of the head, but we do not know how far below the base it continued since the bust and staff were removed together in the block of clay matrix. In addition a dark green ax, oriented east-west, lay just beyond the wooden staff.

A significant aspect of the Vicky bust is the evidence that it had received special treatment. Close inspection revealed that the bust had been wrapped in a woven fiber mat (or *petate*) of palm leaf or similar material and then tied with a string also of plant fibers (*ixtle*). The knots of that string could still be distinguished in the best-preserved sections of the bust. Unfortunately, most of this covering has disintegrated, and in general only dark green discolorations remain.

Sculpture 2 and Feature 15-88. Sculpture 2, which we nicknamed Fello, was found only 1.5 m east of Vicky, at a depth of 2.43 m. The Fello bust lay face down with the head oriented east. Unlike the Vicky carving, Fello was not associated with a wooden staff or stone ax, but instead had a large obsidian flake placed near its left ear. Slightly north of the obsidian piece was a concentration of red ochre or hematite that had significantly stained the clay around the bust in that area. Within the stained area there were small pieces of red ochre or hematite and smaller quantities of small balls of fine greenish-gray clay of obvious human manufacture. We could also ascertain purposely placed piles of leaves and plant bundles, and found some fragments of double-strand cord that had tied those bundles. Dispersed within this area were some fragments of human infant bones (see Fig. 6 for a similar association of infant bones with Sculpture 17). The bones were stained with the same red hematite pigment that also colored the surrounding clay matrix. Slightly beneath all of this was a hematite ball about 30 cm in diameter with the remains of a cord of two strands around its exterior, indicating that it too had been tied.

Fello was associated with a manmade feature common to a number of other sculptures, a pile of sandstone rocks that reached almost to the surface of the deposit (see Feature 16-89 below). To the east of this feature was the primary burial of an infant (possibly newborn), whose bone structure was similar to the bones described above.

Sculpture 4 and Feature 16-89. Toño (Sculpture 4) was discovered 2.3 m east of Fello associated with a stone pile (2.1 m high) similar to that adjacent to Fello. In similar stone piles throughout this phase, large stones (50–70 cm in diameter, weighing up to 100 kg) occur in the upper portions of the pile, and stone size

decreases at the pile's base (to 10–20 cm in diameter). Toño was buried near the western base of the associated rock pile. Interestingly, this bust had been interred with its face to the east, but upside down. Between Toño and the stone pile, slightly higher than the sculpture, we uncovered a section of an unburnished flat-bottomed bowl, an ax, a seed fragment, and two small concentrations of fine greenish clay.

The Toño, Vicky, and Fello sculptures, and their respective rock piles—as well as the primary infant burial in the area between those rock piles—occur in an east-west alignment. It is therefore possible that they are essentially contemporaneous.

Sculptures 5, 6, 7 and Feature 17-89. The El Manatí sculptures not only occur individually but were interred in groups as well. This is exemplified by the grouping of three busts, Lulú (Sculpture 5), Chispa (Sculpture 6), and Poc (Sculpture 7). These sculptures were laid out on their sides, forming a crude semi-circle, all facing toward the interior of the circle. These carvings were associated with organic material composed of branches and leaves, scattered human infant bones, and an incomplete wooden staff (see Figs. 7 and 8 for similar arrangements of Sculptures 14 to 16 and 18 to 20).

A cranium fragment was found near the center of this semicircular grouping together with pieces of plant stalks similar to a cane known as *junquillo*. Next to these we detected traces of dark organic remains from leaves or other plant materials. Associated with these were remnants of double-strand cord. This suggests that the junquillo canes and other plant remains had been tied in bundles that had been placed above the cranium and next to the sculptures as part of this ritual offering.

Furthermore, the remains of a covering or mat (*petate*) of reeds, along with cord fragments, could be detected around the face and part of the torso of Lulú, suggesting that this sculpture had also been wrapped as a bundle. Similar decomposed organic material occurred under the head and along the sides of Chispa. The third sculpture of this group, Poc, lay slightly deeper than Lulú and Chispa, and was found only these two had been removed. At Poc's neck we found an unusual pendant: a bead that had been made from tar. Indications of plant remains were also found around Poc's head and chest area, as were fragments of double-strand cord.

Sculptures 8, 9 and Feature 19-89. The busts that we nicknamed Nacho (Sculpture 8) and Polo (Sculpture 9) were found associated with another pile of sandstone rocks. Although this pile was smaller than those previously described, it nevertheless exhibits the same pattern, with smaller rocks near the base and larger stones at the top. A white slip, flat-bottomed flaring wall bowl (Coe and

Diehl's [1980: 177] Mina White) was associated with the stone pile. While there was no evidence with either Nacho or Polo of associated artifacts, plant bundles and cords, or skeletal remains, the sculptures do appear to have been covered by a layer of reeds and plant stalks (compare Fig. 3 for a similar feature found with Sculptures 18 to 20). The Nacho sculpture had been placed on its right side, head to the west and facing south, while Polo had been interred face down, head to the west.

Sculptures 12, 13 and Feature 28-89. We uncovered two additional wooden busts, Cruz (Sculpture 12) and Güicho (Sculpture 13), which were associated with yet another stone pile. The stone pile extended from a depth of 1.48 m to 2.4 m. The Cruz sculpture was buried south of the pile at a depth of 2.48 m. It had been interred in an upright position, facing east, and exhibited no evidence of having been wrapped or covered. To its east was a vertically positioned wooden staff with a lanceolate-shaped head and undulating tapered serpentlike body.

The Güicho bust was found beneath the stone pile, and the left side of its face was seriously indented by one of the stones. This sculpture was also positioned upright and facing east. Unlike Cruz, Güicho had been protected with reeds. This was particularly evident along the back of the head, where some woven reedlike fibers could be seen. These gave the appearance of having perhaps been a "hat" with curved rim, something not observed with the other sculptures. As with the Cruz bust, a serpent-shaped wooden staff, with lanceolate head with three angular cuts and rounded undulating body, was found just east of Güicho.

An infant burial was found beneath some stones slightly northwest of Güicho. The infant had been buried in a flexed position, on its right side, face to the east. All the bones were in anatomically correct position, indicating that it was a primary burial. Bone morphology indicates that the infant was newborn. Plant remains occurred above the burial, perhaps having served as a covering or an offering. The infant burial, Güicho sculpture, and the associated stone pile had been interred together, for they all occur within the same clearly identifiable intrusive pit. Although Sculpture 12, Cruz, occurs at essentially the same level as the former feature, it had been buried within a separate pit, and thus we cannot ascertain whether or not it is contemporaneous.

Sculptures 14, 15, 16 and Feature 6-92. This is a grouping of three wooden sculptures (Fig. 7) laid in a semicircle, an arrangement similar to that of the Lulú, Chispa, and Poc carvings of Feature 17-89 (see above). Sculpture 14 (Simon) was placed face down, head to the west. To the left of the head there was a wooden "dagger" with a north-south orientation, while another wooden dagger on the right side of the head and slightly lower pointed west. Sculpture 15

(Marti) lay on its left side, facing west, the head almost touching the base of the Simon sculpture. Another serpent-shaped staff, in poor condition, was found beside the head. Sculpture 16 (Mundo) was buried slightly deeper than the other two busts. It lay horizontally, with its face upward, and a large lanceolate staff lay across its chest and right shoulder, pointed to the east. A sandstone rock had been placed over the sculpture, and several other rocks lay around the carving. Both Marti and Mundo exhibit red and black paint around their mouth areas. This entire grouping had been covered by a thick layer of well-preserved organic material, *tule*, a treatment found with many carvings already described (see Fig. 3).

It is important to note that this grouping is in line with Sculptures 12 and 13 found in the 1990 season, and further indicates the existence of a pattern to the interment of the sculptures.

Sculpture 17 and Feature 12-92. Sculpture 17, Chico (Fig. 6), was found beneath a stone pile similar to those described above. Chico had been laid flat, face up, head toward the southwest. Black and red paint occur around Chico's mouth area, and *tule*-like organic material overlay the sculpture. Beginning about 20 cm above the sculpture, we found infant long bones, skull fragments, ribs, and vertebrae, all in association with organic remains. Among these were three infant crania, including one that exhibits an intentional U-shaped cut from which a double-strand cord hangs. Ribs and long bones continued as deep as the sculpture and also to its west, giving us the sense that body parts of several infants had been part of this offering. Lacking from the Sculpture 17 interment is a wooden staff, while included with the associated plant material were two small branches similar to those found with Sculpture 2 (Fello) and the Sculptures 4, 5, and 6 group.

Sculptures 18, 19, 20 and Feature 30-92. This group is composed of three sculptures, three wooden staffs, a ball of hematite, and 11 greenstone axes, all of which occur below a cluster of stones and within a pit intrusive from Level VIIIA into Level VIIIb (Fig. 8). A large number of thin layers of *tule* covered the sculptures, separating them from the stone cluster placed above them (Fig. 3). Sculpture 18, Fabian, was lying in a semi-inclined, head-down position facing west. On the left side of the chest was a rectangular object about 6 cm long, apparently a seed, which may have served as a pectoral. At each side of Fabian's face was a small "inverted t-shaped" pendant made from tar. Above the base of this sculpture was a wooden staff, butt pointing south.

A group of 11 axes were found below Fabian. Nine lay horizontally and two were positioned vertically. Of the former, one pointed east, six west, and two laid out north-south touched bit to bit.

Sculpture 19, Dani, was placed face down, with the head toward the west. On the chest area of the bust we found a circular pectoral of organic material, perhaps the base of a gourd. Dani was adorned with two circular earspools (material as yet unidentified). A bead of organic material was found by the left earspool. Both earspools hung from some sort of tar objects that had been stuck onto the earlobes. In addition, two wooden staffs were associated with the Dani carving. One lay above and to the west of the head, and the other had been placed at the base of the bust. Both staffs point toward the southwest. Sculpture 20, Macario, lay face up at the base of the intrusive pit, head to the west. Red paint occurs around the mouth area. As with the Dani sculpture, a circular (gourd base?) pectoral occurs on the chest, and earspools were noted at both sides of the head (Fig. 9). A plant stem, perhaps part of a larger bunch of vegetation, lay across the pectoral and right earspool. Finally, a 30 x 20 cm chunk of hematite lay just beyond Macario's head.

OTHER RITUAL OBJECTS AND OFFERINGS

Some objects found during our excavations do not appear to have had a direct association with the wooden sculptures, yet are worth noting.

Rubber Balls

The rubber balls recovered at El Manatí are extraordinary in and of themselves but are also important because many predate the offerings of wooden sculptures. We uncovered five such rubber balls within the Manatí A phase deposits along the rocky bed of the spring, and two of those, discussed earlier (Features 8-92 and 31-92; see Figs. 3, 4), were associated with polished greenstone axes. In addition, an isolated group of three rubber balls (Feature 21-89) was also unearthed. These balls vary in size from 8 to 13 cm in diameter, and were placed side by side in a southwest-northeast alignment. They lie atop Level IX, but within Level VIIIb, and are located essentially at the middle of the "rectangle" formed by Sculpture 2 (Fello), Sculpture 4 (Toño), Sculptures 5, 6, and 7 (Lulú, Chispa, Poc), and Sculptures 8 and 9 (Nacho, Polo) (see Ortíz and Rodríguez 1989: map 1). We know that during the construction of the fish ponds prior to our research, villagers found at least five other small rubber balls, presumably from Manatí A levels.

So far we have recovered only two rubber balls from Macayal phase deposits, and those were found in association with two wooden staffs (together Feature 24-89). The balls had been placed in an intrusive pit above one of the large worked stones that occur on the bed of the spring. This stone has extensive "ax-sharpening grooves" on its upper surface, as well as a ground "cup mark" 20 cm

in diameter and 15 cm deep. However, we believe that the balls were only circumstantially associated with this worked stone.

The balls, both slightly oblong in shape (22 x 18 cm and 20 x 15 cm), lay side by side, touching, in an east-west orientation. A wooden staff pointing in a northerly direction lay above the west ball, and a second staff, also pointing north, lay beneath the same ball. The balls were covered by thin layers of a fibrous organic material, not as if they had been wrapped in the fibers, but rather as if the fibrous material was part of the offering. The fiber was highly decomposed, and only a small sample could be taken for identification in the laboratory.

Significantly, the excellent preservation of the balls has enabled us to ascertain their production technique. They were created by the layered wrapping of multiple strips of rubber, a technique similar to that used today to manufacture balls of string cheese. These rubber balls have a firm, compact texture. If we include the five balls found by local villagers, a total of 12 rubber balls have been found at El Manatí. One notable difference detectable in that sample is that the oldest rubber balls, those of the Manatí A phase, are generally smaller, from 10 to 14 cm in diameter, while balls of the Macayal phase measure 20–22 cm in diameter. Nevertheless, the presence of a dozen rubber balls among the offerings at El Manatí indicates their importance in the ritual activities that were carried out there.

Scepters

The largest wooden object recovered is Special Object 2, a long rodlike large wooden scepter or ceremonial staff, 110 cm in length and tapering from 3.5 to 2.5 cm in diameter. Protruding from the scepter's ovoid knoblike tip is a shark tooth. The knob is reminiscent of a bird's head with the beak represented by the shark tooth. In addition to its unusual knob, the scepter is of further interest because it had been painted a red-orange color, and at the moment of discovery the color still maintained an enamel-like shine. The color, most clearly seen on the knob, continues at least halfway down the scepter. Because this rare wooden object was encrusted with a hard sandy coating, we did not attempt to clean it. It is possible that the scepter has engraved designs, but we will not know until it is completely cleaned by the INAH conservation laboratory.

The scepter occurred between Levels IX and X, with the top (knob) resting on the layer of organic material that represents Level IX, while the other end was within the sandy deposit of Level X. The scepter was oriented to the north and had been placed midway between Sculptures 5, 6, and 7 and Sculptures 8 and 9 (Ortíz and Rodríguez 1989: map 1), as if separating the two groupings. It

is therefore possible that it had been placed at the same time that both groupings were interred and that it is part of the same ceremonial complex.

Special Object 6 is a fragment of a wooden staff that is decorated with white and red paint. The remnant is 25 cm long with a maximum diameter of ca. 4 cm. The staff is unusual, for it is octagonal in cross section, and the lengths of each of its eight sides are decorated with excised rectangular depressions. These sides were painted in red, and the rectangular excised depressions were filled with a white pigment, creating an interesting contrasting decorative finish. One end of the staff fragment is thicker and ends in a flattish shape. This latter is the best-preserved section of the staff and was probably the handle. This object was found at a depth of 2.3 m, handle downward, penetrating into the *tepetate* below the spring bed and extending upward through Level X. It was an isolated object with no associated artifacts.

Ritual Knives

Excavations also uncovered a group of three unique stone knives (Feature 9-89) each consisting of a bifacial blade point embedded in a tar handle. Two of the blades are of a milky gray obsidian and the other of flint or chert. The latter knife occurred on the west side of the group. None of the knives shows evidence of use. All three lay pointing south atop a block of fine-textured yellow clay that was different from the yellow clay of the matrix.

Near to the knives, and in possible association (although 10 cm deeper) were two concentrations of obsidian flakes. In both concentrations the flakes were laid out in a triangular shape that pointed north. One concentration was composed of 27 fragments of gray obsidian, all possibly from the same core and all probably reduction flakes from blade core preparation. All of the flakes exhibit simple retouching that gave them projectile point shapes. The flakes were deposited directly on a layer of greenish clay, but the excavation profile of this concentration suggests that the flakes had been held in a gourd bowl or some other concave object of perishable material. The second concentration of flakes was located 1 m to the southeast, and consisted of seven fragments of milky gray obsidian, possibly all from the same core (since two pieces could be re-joined). One of the fragments shows simple bifacial retouching, to give it the shape of a projectile point. Directly north of the seven fragments was a small concentration of yellow clay identical to the yellow clay of the block underlying the three knives.

Clay Blocks

Twenty-six clay blocks were found in the El Manatí deposits, indicating that

these were another important type of artifact used there. The blocks are rectangular in shape, 20–30 cm long, and all have a very plastic consistency and vary from cream to greenish-gray in color. One two-section block gave the impression of having perhaps been a modeled bust, but there were no signs of a face. Eleven of the blocks each had a small serpentine ax embedded in their center, bit upward. We also have noted that some blocks were laid out in north-south lines. These blocks date to the same time as the sculptures, the Macayal phase, but occur as well in Level III, the stratum that covers the sediment in which the busts were interred.

BEHAVIORAL PATTERNS AND PERSISTENCE OF THE FEATURES

It is important to note several behavioral activities that seem to be constant in the rituals associated with the busts. First, it is clear that there is a pattern to the placement of the sculptures. Groupings were interred in north-south and east-west alignments, indicating that the ceremonies were carefully planned and executed. Furthermore, both the single sculptures and those buried in groups had been covered by plant materials similar to tule, and most of them were further protected by sandstone rocks.

Among the notable objects associated with the sculptures were wooden staffs. These occur in two general forms, serpentine and lanceolate, and their position vis-à-vis the busts varies. In addition, the skeletal remains of infants are associated with most, but not all, busts. Analysis suggests that these were probably newborns. Only one, below Sculpture 13, was a primary burial. A second, unassociated, primary burial was found in the area between Sculptures 2 and 4. The majority seem to represent infants whose bodies had apparently been dismembered and/or cut into sections (some with the extremities still articulated). These fragmentary infant remains occur dispersed around certain sculptures. In some instances the bones had been covered with powdered hematite. The most exceptional of these discoveries is the infant cranium found near Sculpture 17, with its manmade U-shaped cut and attached cord (Fig. 6).

Greenstone axes are rare in Macayal phase offerings, but 11 were found with the Sculptures 18, 19, and 20 group, and one was found with Sculpture 1. The Sculptures 18, 19, and 20 group was also associated with a ball of hematite, as was Sculpture 2. Finally, branches and bundles of plants were associated with Sculpture 2, with the Sculptures 5, 6, and 7 group, and with Sculpture 17 and thus form another group of objects sometimes associated with this ceremonial behavior.

While most of the sculptures seem not to have been decorated, 10 exhibit facial paint around the mouth area—red paint delimited by a black stripe. Sculp-

tures 1 and 7 had wooden earspools that hung from an asphalt pendant, while Sculptures 18, 19, and 20 had circular earspools possibly made from a gourd and circular pectorals made of the same material (Fig. 9).

OBSERVATIONS AND DISCUSSION

The El Manatí site was located at a special place. The absence of ceremonial or domestic architecture, and the association of the cultural phenomena we uncovered there with natural features (the hill, the spring), allows us to consider this place a sacred space at which a series of religious practices were carried out. These practices varied in form and complexity over time (Ortíz and Rodríguez 1994).

We have not yet been able to determine the complete spatial extent of the area in which the ritual practices were carried out. Manatí A phase artifacts are found throughout practically the entire area excavated to date, and from test excavation data we believe that Manatí A phase ritual activities extended at least 30 m further north, 20 m west, and 18 m south (as measured from our central datum). It is highly probable that those activities encompassed an even larger area.

The axes characteristic of Manatí A phase offerings have a dispersed distribution across the spring bed. Although axes are sometimes near the edges of the ancient pool, most of the single isolated axes seem to be concentrated near its center, suggesting that they had been intentionally tossed into the deepest part of the pool. This suggests that they were offerings of an individual nature.

Another source of evidence for the ceremonial use of this area by the Olmec, beginning with the Manatí A phase, is the sandstone rocks found at the bottom of the bed. The rocks are generally the same size and have cuts or grinding marks on them. It is significant that the largest ones are aligned along a north-south orientation, indicating intentional placement. We initially postulated that the grinding marks on these stones were merely for sharpening axes. However, the data now lead us to believe it more likely that the grinding marks were related to a religious practice with the objective of obtaining the *mana* or magical power of the place. Similar grinding marks are found on two colossal heads and several other monuments at San Lorenzo (Coe and Diehl 1980: 298, 300–365) and on all four LaVenta colossal heads (Clewlow et al. 1967: 71–76).

In addition to the axes recovered within the Manatí A phase level, we recovered domestic artifacts. Similar domestic artifacts were also recovered in excavations of shoreline areas beyond the spring. Because we have also carried out excavations of Olmec period houses at the nearby site of El Macayal, we have a good idea of the range of typical household artifacts used in daily lifeways, and

thus note that certain types of domestic artifacts are absent in these early deposits at El Manatí. For example, domestic cutting instruments for preparing animal meat are absent. We note that many of the ceramics found are tecomates, the majority having extremely small mouth openings and lids. These could have been used as containers and may also have been used to boil tubers and seeds or to ferment fruit.

There are a number of explanations that could account for the types of domestic refuse found in the deposits at El Manatí. For instance, if these materials pertain to priests or special persons who were caretakers of this sacred place, the refuse suggests that they had dietary customs somewhat different from those of the rest of the population. In their search for closer ties with nature, their diet may have been more vegetarian—vegetables, tubers, and plants—thus eliminating the need for meat-cutting utensils. Alternatively, the domestic materials may have been brought by pilgrims who threw some of these objects into the pool, while materials occurring around the spring could have resulted from the occasional ritual preparation of foods. Whatever the case, it is clear that the El Manatí site had been a sacred place from at least the time of the Manatí A phase (1600–1700 b.c.).

In the following Manatí B phase, after the formation of Level IX at a time when sediment began to be deposited in the pool, ritual activities included the placement of groupings of axes following well-established patterns. These purposeful groupings varied in size from 2 to 12 pieces. In our final field season, in addition to east-west alignments of grouped axes, we found some interesting variations, including a “flower” created from 6 axes (Feature 11-92; Fig. 5) and a group of 12 stacked axes (Feature 7-92). These groupings immediately bring to mind the ax clusters and alignments found in Complex A at La Venta (Drucker, Heizer, and Squier 1959: 133–187) and at San Isidro, Chiapas (Lowe 1981). The Manatí B phase groupings obviously represent a purposeful patterned placement of axes, as opposed to the dispersed phase A axes that were apparently tossed, rather than carefully placed, in the pond. These purposeful ax deposits suggest a more developed form of ritual activity in phase B, one that would culminate in the offerings of a large number of sculptures carved in wood.

We have named the period of the ritual burial of wooden sculptures the Macayal phase, and associated ceramics and other artifacts indicate that it is contemporaneous with the Early Formative occupation of the nearby El Macayal site and with San Lorenzo A and B phases at San Lorenzo. The Macayal phase ritual area does not seem as extensive as earlier. We know, however, that it did probably extend somewhat farther north and south of the area we have excavated. In fact, our 1992 excavations found the Sculptures 18, 19, and 20 group

some 12 m south of our central datum.

The majority of the wooden sculptures, in spite of their apparent individuality, follow the same formal model. This indicates that they were an ideological image, that is, a religious symbol, that was conceptualized following essentially the same pattern, a phenomenon also common in other religions of the world. At the same time, the individuality of the busts could indicate that they were representations of chiefs, rulers, or personas who achieved a high level of prestige, leading to an attempt to immortalize them with images. It is also possible that the wooden staffs associated with some of the busts were the insignia of the power the individuals enjoyed during their lives. Finally, the surface wear of the sculptures suggests that they must have served a specific function in ritual prior to their burial.

The bundles of leaves, plants, and reeds also clearly played an important role in the magico-religious ceremony of sculpture interment. Everything appears to indicate that the sculptures received a special burial treatment similar to that given to people: they were wrapped to form a funeral bundle, and they were buried in a careful and sophisticated ritual. One constant pattern to their placement, both singly and in groups, is that they seem to form three west-east alignments, toward the direction of the Cerro Manatí to the east.

The association of dispersed infant bones and two primary infant burials with the sculptures is also worthy of emphasis. We originally believed the bones to be those of monkeys and other animals that perhaps represented the spiritual animal companion of each sculpture. However, the bones have recently been identified as those of newborn (and possibly unborn) human babies (Valentin Maldonado n.d.). That identification elevates this cultural phenomenon to a higher level of complexity, as it is evidence of the human sacrifice of children and possibly of ritual cannibalism as well. We know from various examples of Olmec monumental art that infants played a fundamental role in Olmec religious ideology. We await the additional information that physical anthropologists can glean from these skeletal remains, for example, whether there are dismemberment cut marks or evidence of anthropophagy, and whether these had been healthy children or show signs of some pathology.

From the Spanish chroniclers (Durán 1967; Sahagún 1981), we know that at the time of Spanish contact, child sacrifice was a common practice and was especially associated with the worship of water and fertility. The recent discoveries at the Templo Mayor of Tenochtitlán (Román Berrelleza 1990) are particularly relevant in this regard. However, we have no way of ascertaining if the infants at El Manatí were dead (sacrificed?) prior to being interred with the wooden busts, or if they drowned in the pit dug to deposit the offering of

sculptures. Whatever the case, it is interesting that these infant interments always take a secondary position in these offerings of sculpture and were not important on their own.

It is also interesting to note that rubber balls occur in offerings in both the earliest (Manatí A) and latest (Macayal) phases, showing continuity in the custom of offering these particular objects. The major change in the rubber balls over time seems to be in their size: as already noted, the earliest are also the smallest. The two rubber balls from the Macayal phase were associated with wooden staffs, indicating that they are contemporaneous with the busts and clearly formed part of the paraphernalia associated with this ritual complex. The fact that a total of nine balls were found indicates the importance of rubber balls in these offerings. It is the first time in the history of Olmec archaeology that overwhelming evidence is found for the use of this material and its importance in Olmec rituals.

While we had originally thought the rubber balls were simply another category of object associated with the rituals, a stone “yoke” was recently given to us by the villagers, and they assured us that it had come from El Manatí and had been associated with burials that they had uncovered. If that is indeed true, the yoke adds another interpretative possibility—a possible relationship of the El Manatí offerings with the ball game (Ortíz, Rodríguez, and Delgado 1992).

Many questions remain unresolved, which we hope to answer with further research at El Manatí. For example, we do not know if the offerings were the product of one single community or if there were various communities that worshiped at this place. The relative closeness of San Lorenzo, Tenochtitlán, and other important centers offers the possibility that various peoples or pilgrims used this sacred spot. Furthermore, although the data appear to us to indicate that the sculpture interment was carried out at essentially one period in time, we cannot discard the possibility that the site may have been used subsequently for other offerings and that what we have excavated corresponds to only one ritual moment.

It appears obvious that the offerings at El Manatí were related mainly to the worship of the water and the hill. El Manatí was clearly a sacred place, for several elements important to Mesoamerican concepts of sacred geography are found united here. Johansson (1992: 15) says of such sacred places:

Son . . . los espacios naturales, donde la epifanía formal del relieve o de la vegetación revela los lugares predilectos del culto, y *los recintos sagrados* que, por una parte, traen la naturaleza a la urbe, y, por otra, marcan los límites que separan el espacio sacro de su homólogo profano. . . . los primeros ritos serán esencialmente *miméticos*, ya que buscarán imitar las

manifestaciones naturales según el cuadro cultural del grupo.

These are natural spaces where the formal epiphany of the relief or the vegetation reveals the favored places of worship and the sacred precincts that, on the one hand, bring nature to the city and, on the other, mark the limits that separate sacred space from its profane counterpart . . . the first rites must have been essentially mimetic, since they sought to imitate natural phenomena according to the cultural frame of the group.

The springs emerging from the base of the Cerro Manatí fed a pool of water into which axes, jade beads, and pottery were thrown. A similar phenomenon, an Olmec offering of jade objects in water, was also found at Arroyo Pesquero (Beverido n.d.). The Cerro Manatí itself would have been an important geographic feature, and the site's location at the foot of such a prominent hill is analogous to Chalcatzingo (Grove 1987), Las Bocas (Coe 1965), and Teopantecuanitlán (Martínez Donjuan 1986), where the communities settled on the west side of an important elevation in their respective areas. Furthermore, the Cerro Manatí is apparently a source of red pigment (possibly hematite), an important natural resource for both local and regional exchange. A reason for the economic demand for that pigment is that red color almost certainly symbolizes blood. That symbolic importance may have been yet another factor making El Manatí a sacred place.

CONCLUSION

The data obtained at El Manatí allow us to highlight some actions that later became an important part of the religious ideology of the Classic and Post-Classic peoples, up to the Spanish Conquest according to the chroniclers. We see these similarities as analogous, and it is not our intent to make direct comparisons between the Formative period ritual behavior at El Manatí and rituals carried out in later periods in Mesoamerica, for we realize the pitfalls (e.g., Kubler 1962; compare Diehl 1989).

The objects recovered at El Manatí are obviously the material reflection of important ceremonial activities, of which only some objects or paraphernalia remain preserved. We will probably never know what prayers, songs or music, or food and drink were included in the rituals. These objects undoubtedly had a semiotic meaning as signs or icons obviously charged with symbolism. But how can we interpret them if, for the most part, we lack the knowledge of Olmec social, political, and economic organization, which is precisely what gives substance to these manifestations? Perhaps it would be best to avoid sub-

jective speculations and to merely describe these offerings while awaiting more information, for in archaeology there are few other alternatives.

It is clear that we have at El Manatí the remains of activities associated with the worship of natural elements, especially of water in the form of springs, of the hills as attractors of the clouds and the rain, and the possible linking of these with communication with the ancestors, here represented by images carved in wood (compare Chalcatzingo Relief 1; Angulo 1987: 133–141). One can also consider the possibility that the sculptures were like the assistants of Tlaloc, that is, the *tlaloques*, *chaneques* or dwarfs, inhabitants of the hills and springs, who provided and controlled the rains and who hit the clouds with their staffs so that the clouds would unload this vital element, perhaps represented by the small figures with staffs surrounding the personages on La Venta stelae 2 and 3 (Drucker 1952: fig. 49; Drucker, Heizer, and Squier 1959: figs. 67, 68). Personages carrying staffs are common on later stelae and their staffs have been interpreted as symbols of authority. That suggests, as we noted earlier, that the wooden busts might be images of chiefs.

A further analogy is found in the cult and tradition of child sacrifice in ceremonies associated with water and the worship of fertility that continued until the Spanish Conquest. The cries and tears of these sacrificed infants propitiated the rains. We know that children occupied a central role in Olmec iconographic representations. For this reason, some researchers have suggested that “child gods” born of the mountains, the hills, and the caves reflect an Olmec origin myth. As Joralemon speculates (1971: 19), some Olmec ceremonies possibly sought to bring the infantlike “rain god” back to the human world and “may have marked the beginning of the Mexican rainy season and [were] almost certainly accompanied by the sacrifice of infants and small children.” The greenstone axes may have symbolized the drops of rain, the crystalline waters that reflect the verdant vegetation or even the sea.

The piles of stone above some offerings may also have had major significance, possibly symbolizing the sacred hill where the gods of water and the *tlaloques* live and/or can be found. Piles of stone were important and venerated at the time of Spanish contact, and as Landa (1978) reports for the Maya area, were related to the cardinal points and to roads.

In the Olmec area of southern Veracruz and Tabasco, including in the Coatzacoalcos Basin around El Manatí, the problem was not a scarcity of water but rather of fresh water such as that found in springs, as opposed to the unhealthy waters of the marshes. The inhabitants of these areas battled the marshes and the long rainy season that threatened to flood the villages and devastate cropland, causing serious crises due to the lack of basic resources. For this rea-

son, springs and their supply of fresh water were both important and sacred spaces. What objective would ritual activities and ceremonies at El Manatí, charged with elements of worship of fertility, water, the hills, and so on, have had? Were they to incur favor or to ask for clemency against the constant floods? At this time, while we are evaluating our data, we continue to be struck by the abundance of water in this region and all its great threats to the peoples of the area, and believe that the ritual activities must have been a great plea that the gods of water be more benevolent to the people.

The El Manatí offerings imply elaborate ritual behavior involving the participation of many people and a great quantity of magical objects. The rituals were carefully planned and executed, and various communities may have participated in the activities. It is difficult to know the motive that drove these people to carry out this grand rite, the burial of dozens of wood sculptures, human infants, jadeite or serpentine axes, animals, and other sacred objects. The offering certainly surpassed the mere eagerness of propitiatory rites. It must have corresponded to an exceptional event. The discovery is extremely interesting, not only for the variety and artistic quality of the recovered objects, but also because a careful analysis of the context of the offerings and of the site will allow us to delve into the magico-religious thought of the Olmec communities, their beliefs, gods, mythology, and other almost unknown aspects of this enigmatic culture.

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