

THE HUASTECA



Culture, History, and Interregional Exchange

EDITED BY KATHERINE A. FAUST AND KIM N. RICHTER

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The Materials of Tamtoc

A PRELIMINARY EVALUATION

Gerardo Alarcón

Guillermo Ahuja

Tamtoc is located on the coastal plain of the northern Gulf of Mexico, along the winding course of the Tampaón River, in the municipality of Tamuín, San Luis Potosí. The archaeological data recovered there between 2001 and 2008 have opened several lines of investigation, providing a more nuanced understanding of the pre-Hispanic history of the Huastec culture, as well as that of neighboring peoples settled along the Gulf of Mexico in northeastern Mesoamerica.¹ The Huastec culture has been classified as marginal to Mesoamerica and as one that was heavily influenced by other groups, such as by intrusive cultures from the southeastern United States. Nevertheless, based on the new data obtained from the excavations at Tamtoc, we can assert that these classifications, resulting from a lack of archaeological investigations in the region, are vague and overly simplistic and do not properly characterize this particular cultural manifestation of ancient Mexico.

Huastec culture constitutes a very particular expression of northeastern Mesoamerica and is defined by a particular artistic style, which is one of its most recognizable characteristics. This culture existed since at least 900 B.C., shared by different linguistic and ethnic groups with diverse cultural traditions that crystallized into a recognizable unified regional identity.

Archaeologically, we associate Huastec culture with a group of Mayan language speakers during the Preclassic period, whose material productions closely resemble those found along the Pacific coastal plains of Chiapas. During the Classic period the Huastec tradition flourished, then became highly distinctive by Postclassic times, manifesting unique sculptural traits, a particular ceramic tradition, and a singular iconographic style. The Huasteca is a physiographic area encompassing the eastern part of San Luis Potosí, southern Tamaulipas, northern Veracruz, northern Puebla, northeastern Hidalgo, and northeastern Querétaro. At present, people of diverse ethnicities inhabit this region, mainly Nahuas, Pames, Tepehuas, Otomis, and Huastecs. The Huastecs are speakers of the Teenek language.

At present, only a modest bibliography on diverse aspects of the pre-Hispanic Huastec civilization exists, and numerous questions have yet to be answered. Greatly contributing to this dearth of information is the fact that few archaeological excavations have been undertaken in the Huasteca (e.g., Du Solier 1947; Ekholm 1944; García Cook and Merino Carrión 1989, 2004; Meade 1942; Merino Carrión and García Cook 1987, 1989, 1991, 2002; Stresser-Péan, Stresser-Péan, and Ichon 2001). To date, a few excavated sites have brought to light important sculptures that are

characteristic of Huastec culture. Nevertheless, the majority of sculptures have been recovered during isolated instances of discovery and therefore lack the contextualizing information obtained from associated ceramics, lithics, systems of construction, architecture, and the like.

Data from our recent investigations at the archaeological site of Tamtoc establish the Huastec culture's long history in the region, and for the first time we are beginning to understand the synchronic and diachronic complexity of a single Huastec city. Tamtoc makes an excellent case study for analyzing the process of social development in this region of Mesoamerica because it was continuously occupied for more than 2,000 years, from the Middle Preclassic into the Postclassic period.

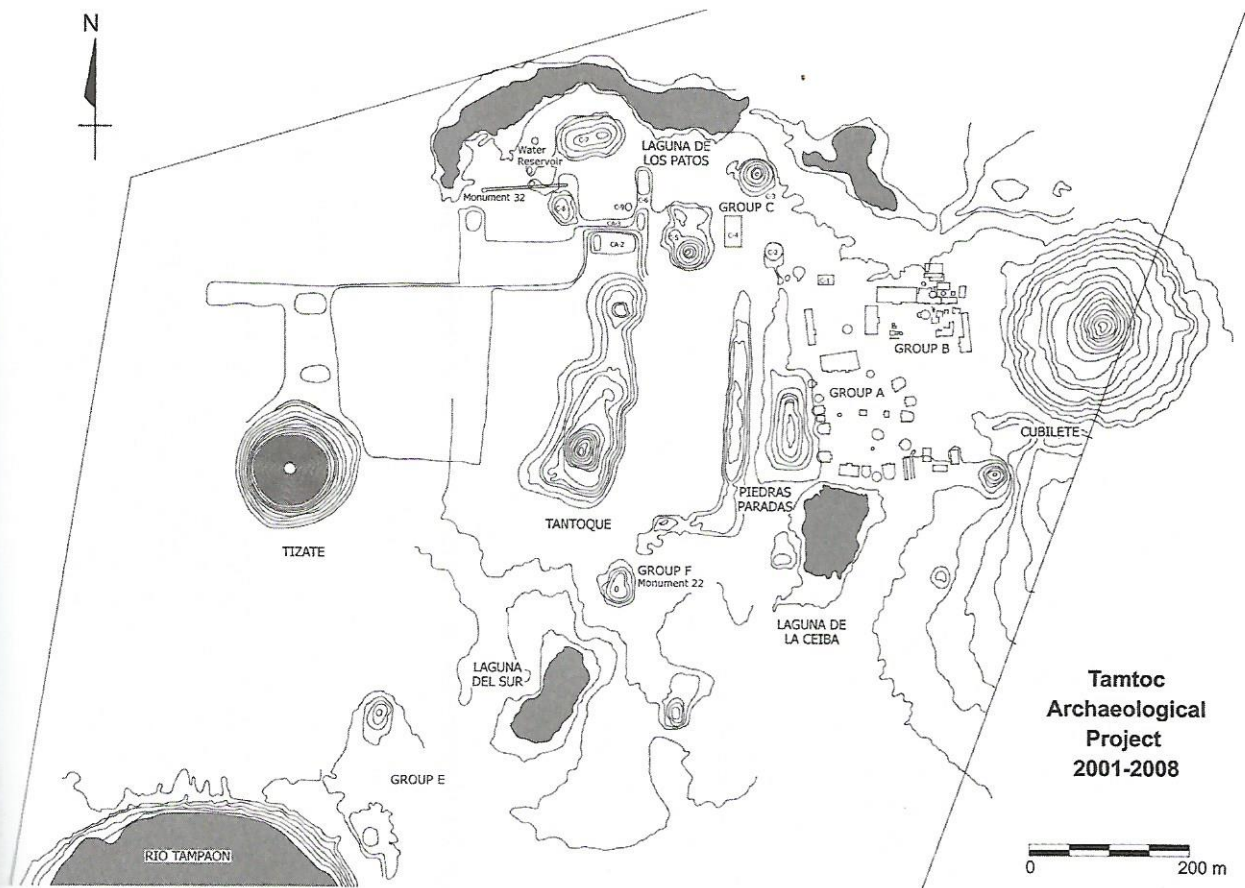
Systematic excavations at Tamtoc have revealed the distribution of buildings in public places and the location of monuments inside the large city. These data and the iconography of Tamtoc's sculptures are also shedding light on Huastec cosmology and calendrical systems. The similarity of ceramic forms and surface finish observed from our excavations reflects a continuity of material traditions, which may have had antecedents in the Chiapas region during the Middle Preclassic period. These interregional similarities may indicate social processes of migration and political reorganization, pointing to systems of communication and long-distance commercial interchange. The excavations have also generated insights on craft specialization and social divisions within Tamtoc's social structure.

Archaeological data resulting from excavations taking place between 2001 and 2006, and analyzed in 2007 and 2008, have yielded a great deal of information about an important hydraulic system developed by the ancient inhabitants of Tamtoc and have supplied evidence of the significant status of women within pre-Hispanic symbolic and sociopolitical systems in the region. We suggest that women's influence extended beyond the domestic sphere. For example, women played a fundamental role in the management of specialized knowledge regarding time keeping, thereby gaining control over the agricultural means of production.

Tamtoc: History and Investigations

Tamtoc was inhabited by a group related to the contemporary Teeneks from at least 900 B.C. until it was abandoned sometime before A.D. 1500. The first references to Tamtoc were made in 1939 by the local scholar Joaquín Meade (1942:174–179), who compared it to great Mesoamerican cities such as Teotihuacan. Between 1962 and 1964, the first explorations were undertaken by the Mission archéologique et ethnologique française au Mexique.² Only in 2001 were efforts to explore the site renewed; the government of San Luis Potosí, the Instituto Nacional de Antropología e Historia, and the Fomento Cultural Banamex created an archaeological trust for Tamtoc in order to purchase 133 hectares (of the approximately 380 hectares once occupied by the ancient city of Tamtoc) and open it to the public. This initiative made possible the protection and investigation of Tamtoc's ancient core.

When we began work at the site we retained Stresser-Péan's system of nomenclature for the seven architectural groups, established in the 1960s: Groups A through G in counterclockwise order, with Group A in the eastern quadrant (Stresser-Péan, Stresser-Péan, and Ichon 2001:93). In the following discussion, we describe the basic characteristics of the excavated groups according to this order (fig. 2.1).



Group A

Of the different architectural groups in the archaeological zone of Tamtoc, only four have been excavated thus far. Objects excavated from Group A (fig. 2.2) have been dated to A.D. 482–662 on the basis of carbonized shells deposited as part of an offering and related to ceramic materials.³ This date may correspond to the earliest occupation of this sector of the site. Group A consists of twenty-three structures distributed around an oval plaza. Evidence suggests that this area likely functioned as the economic center of the city during the Classic period. It was a gathering place where the population conducted business related to land rights, taxation, commerce, and other daily activities, as well as ritual ceremonies related to the calendar.

The elevated foundations of the structures in this group are circular in plan, which is typical of Huastec architecture. Over time, the fronts of the buildings were modified with additions, resulting in horseshoe-shaped foundations. Most constructions, especially those of the rectangular type, have rounded corners. The platforms are composed with different strata of black earth, clay, gravel, and sand, which were compacted and interspersed with a stratum of burned vegetation. Round river rocks face the bottom-most levels of the structures' exteriors. On some platforms, remnants of stucco coating are still visible, sometimes revealing red, blue, black, or ocher paint. The great majority of constructions had architectural profiles defined by a slope and cornice and a balustrade staircase.

Circular structures with stucco coating and plinth constructions made of earth and gravel correspond to the Coy phase (A.D. 200–650; see table 2.1 for ceramic correlation). In contrast, structures combining quadrangular and circular plans that

Figure 2.1. Tamtoc site plan (drawing by Guillermo Ahuja, digitized by María López).



Figure 2.2. Areal vista (northeast to southwest) of Group A. The spatial relationship—a concentric distribution of circular and quadrangular earthen platforms—is characteristic of Group A by around 650 B.C. Modifications of the structures reflect continual inhabitation until the final occupational phase (photograph by Gerardo Alarcón).

are faced with rocks, covered in stucco, and painted with murals appear during the Tanquil phase (A.D. 650–900). This latter type of structure was in use until the Late Postclassic period; over time it was perfected and became more complex in design (García Cook and Merino Carrión 1989, 2004; Merino Carrión and García Cook 1987, 1989, 1991, 2002).

Tamtoc also features a unique type of structure consisting of a low banquette or walkway that extends from the bottom step of an elevated platform and terminates in a round, semiconical platform. Ritual deposits of human remains have been encountered in the fill near the central part of these elongated walkways.⁴ These remains may belong to a complete individual or consist of separate body parts. In one instance (Structure BC-1), the remains of as many as twenty-three individuals were interred.

Other recurrent architectural elements in this plaza are small benches and altars that flank several of the balustrade staircases. In the case of Structure AN-2, one of largest structures in the group, the bench actually adjoins one of the staircases. An offering of fifty-four miniature vessels, deposited lip-side down, was excavated from the area directly in front of this feature in 2002, suggesting that it functioned as an altar.

Group B

Consisting of twenty-five structures, Group B was constructed at a later moment in history than Group A and was inhabited until the final period of Tamtoc's occupation. In comparison with Group A, a change in style and form of the structures

TABLE 2.1. TAMTOC CERAMIC CHRONOLOGY

Phase	Diagnostic types
Chajil (1700–1400 B.C.)	Jabalines Gris, Progreso Metálico, Granular, Café Esgrafiado, Rojo Hematita
Pujal (1400–1150 B.C.)	Progreso Blanco, Altamirano Naranja, Café Ceroso, Altamirano Blanco y Negro, Heavy Plain, Gris Nebuloso, Café Pulido, Negro Pulido, Negro Acanalado
Chacas (1150–900 B.C.)	Altamirano Naranja, Altamirano Blanco y Negro, Gris Nebuloso, Café Pulido, Negro Pulido, Negro Acanalado, Ponce Negro, Altamirano Rojo
Tampaón (900–650 B.C.)	Ponce Negro, Aguilar Gris, Aguilar Rojo, Chila Blanco
Tantuán I (650–350 B.C.)	Prisco Negro, Café Paredes Delgadas, Aguilar Gris, Aguilar Rojo, Chila Blanco, Heavy Plain
Tantuán II (350–100 B.C.)	Prisco Negro, Café Paredes Delgadas, Pánuco Gris
Tantuán III (100 B.C.–A.D. 200)	Pánuco Negro Burdo, Pánuco Pasta Fina
Coy (A.D. 200–650)	Pasta Fina, Prisco Negro, Café Paredes Delgadas, Pánuco Gris, Pánuco Negro Burdo, Zaquil Negro, Zaquil Rojo
Tanquil (A.D. 650–900)	Pasta Fina, Zaquil Negro, Zaquil Rojo, Las Flores
Tamul (A.D. 900–1200)	Zaquil Rojo, Zaquil Negro, Las Flores, Negro Sobre Blanco
Tamuín (A.D. 1200–1500)	Negro Sobre Blanco, Tancol Policromo, Tamtok

is evident (fig. 2.3). Whereas the buildings in Group A are circular or horseshoe-shaped, in Group B they are rectangular, with a staircase at the center of one of the long sides. Two additional types of constructions are present in Group B. One unique structure has a double perimeter, circular plan, and four entrances, each oriented toward one of the cardinal directions. This characteristic suggests the observation of astronomical phenomenon.⁵ The second type consists of small rectangular platforms that vary in height between 30 and 40 cm. In most cases, the original floor is preserved beneath the grass, giving us an idea of the footprint of those buildings that no longer stand. The archaeological objects that have been found include bone and metal needles, spindle whorls, small spindle bowls or containers, and mural fragments depicting geometric designs.

Three periods of construction are distinguishable in this plaza, which account for modifications and reconstructions that are especially apparent in the eastern sector of the group. In some cases the original size of a structure was maintained; in others it was enlarged. Since Tamtoc is located on terrain surrounded by the Tampaón River, it is likely that these modifications were undertaken as a result of inundations.⁶ The inhabitants of Tamtoc would have had to raise the level of the city by enlarging the elevated platforms in order to protect their houses and belongings. This would

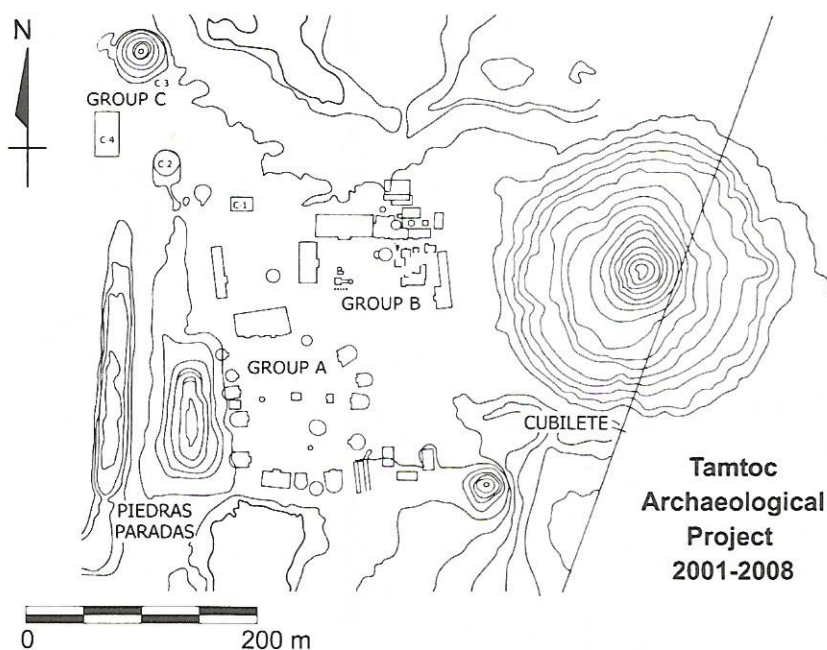


Figure 2.3. Detail of 2005 site plan. Note the distinct distribution pattern of the platforms as well as the predominantly round foundations that characterize Group A and the rectangular format of Group B foundations (drawing by Guillermo Ahuja, digitized by María López).

metate and comal fragments indicate domestic subsistence activities.

As mentioned above, the remains of as many as twenty-three individuals were interred in a grave measuring one meter in diameter and located within the walkway associated with Structure BC-1, excavated during the 2001 field season. Significantly, these individuals were not buried with votive objects apart from some green stone items, which probably implies that the human remains constitute the actual offering. For now, it appears that these walkways had an astronomical or calendrical function because they are variably oriented to the east, northeast, or southeast. Although their specific function remains unclear, it is possible that they served as markers in the constructed landscape associated with the rise of the sun, the moon, or one of the planets usually related to the Mesoamerican calendar.

Group C

Group C is located in the northern sector of the archaeological site and is integrated with the western side of Group B. This group has a plaza with twelve structures, including a platform (registered as C-9) that contained funerary deposits of cinnabar-covered human remains. In another structure (CW-1), a large number of ritually broken vessels were interred alongside the decapitated head and body of two distinct female individuals. CW-1 is further noteworthy for its fragmentary mural painting.

These assemblages, along with the human remains, are likely to be the material indices of termination rituals performed at CW-1. These rituals may well be associated with the end of a calendrical cycle, since the cyclical completion of time was commonly memorialized by the metaphoric “killing” of vessels in Mesoamerica. The presence of the two decapitated women in this offering may additionally point to the vital role women played in the social, ritual, and political organization of Tamtoc.

also have held true for ritual and administrative spaces that were established as part of this pre-Hispanic city's development.

The structures in the northern part of this group likely functioned as elite residences combined with public and administrative zones. This hypothesis is supported by the materials found in this area and by the particularities of the buildings. For instance, needles and spindle whorls scattered about these structures' room floors are evidence of specialized artisanal activities, and large quantities of obsidian debitage and



Figure 2.4. Runoff water collected in the water reservoir would cascade over a series of bas-relief designs adorning the northern edge of the stacked slabs leading down into the canal. The symbolic significance of these geometric motifs, which include points, volutes, circles, semicircles, and ovals, is likely to be associated with coursing water (photograph by Gerardo Alarcón).

LA NORIA

The subgroup denoted “La Noria” is situated within Group C at the northeastern extent of Tamtoc. Evidence of Tamtoc’s earliest occupation has been detected in three independent sectors of La Noria. These early features are independent of the six structures in the subgroup, which are located in the upper occupational level and date to the site’s final period of history. These stone wall and stucco-covered structures were erected atop an artificially elevated surface created after the area was filled in with earth to elevate the level of the terrain. This fill covered the earliest constructions at the site, which are characterized by the use of large slabs of sandstone.

THE WATER RESERVOIR

A stone-faced water reservoir is an exceptional, unique architectural element found at La Noria. The internal walls of this large receptacle are faced with round river stones and the floor is paved with large stone slabs. This feature was likely used to collect rainwater run-off, which was then conducted to one of the three artificial lagoons that served as Tamtoc’s main sources of water. The reservoir could equally supply the city’s inhabitants with water for consumption as well as irrigation.

The reservoir floor is composed of sizable stone slabs, the visible edges of which, in turn, form the walls of the drainage canal that channels water toward the lagoon. These walls are adorned with a series of abstract motifs (including ovals, circles, lines, and volutes), which have been eroded by the continual flow of cascading water (fig 2.4). The location of the designs implies an association with water, rain, and fertility. In addition, these motifs reflect cosmological ideals that remain vital among present-day Teeneks.

A ceramic cache, covered by the large floor slabs, contained fragments of Prisco Negro, Aguilar Rojo, and Aguilar Gris, which are diagnostic of the Tantuán I phase

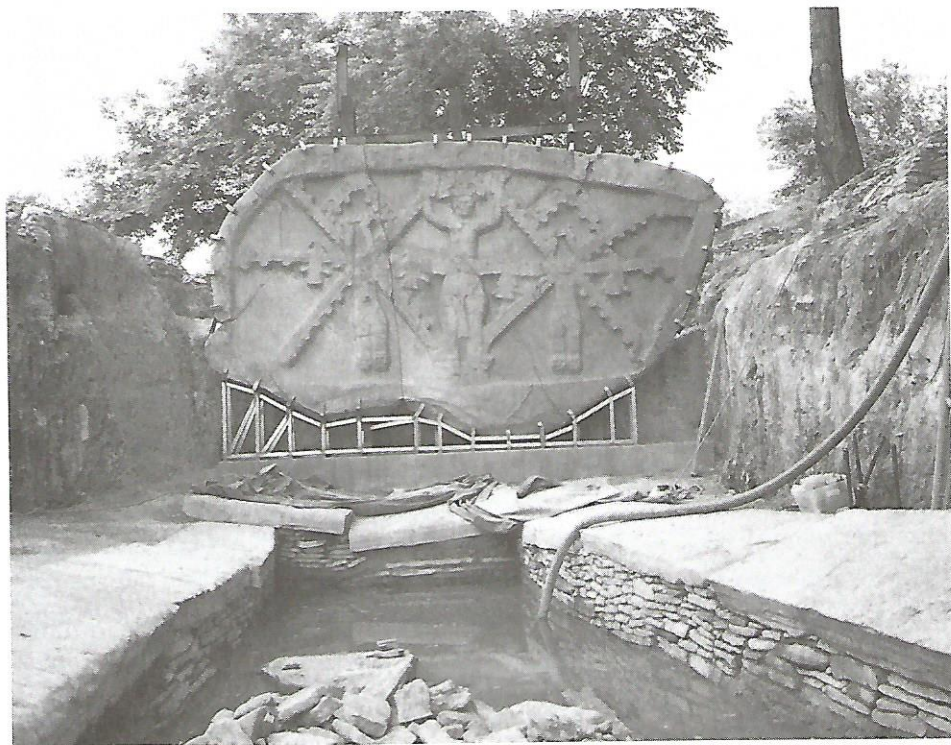
(650–350 B.C.). These ceramics are from a sealed context and establish at least the latest chronological phase during which the water reservoir would have been used. However, considering the distribution of the artifacts and the order in which they were found, these materials may likewise be related to the earliest use of the reservoir. This ceramic cache enabled us to establish the relative date of the water reservoir's use and of Monument 32, described below.

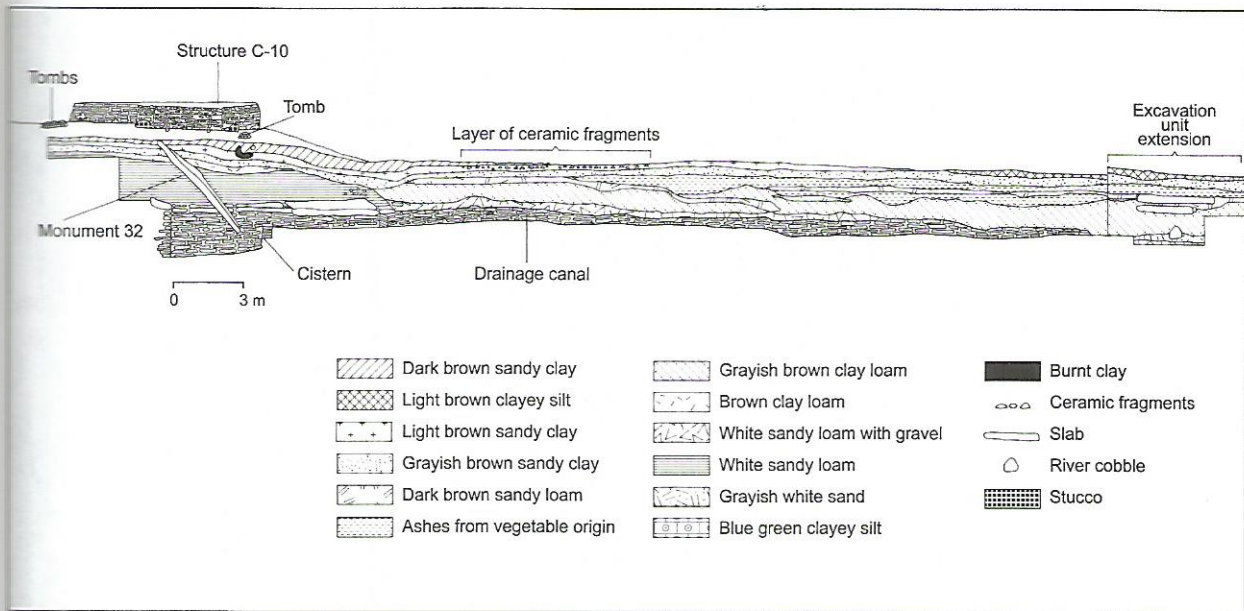
Similar constructions—cisterns that captured rainwater—have been reported for other archaeological sites in the Huasteca and elsewhere on the Gulf Coast, for example, in the zone of Tuxpan, Veracruz. These instances, however, date to much later periods (Ekholm 1953:419). The existence of this water reservoir is therefore particularly significant because it is evidence that a hydraulic infrastructure of great complexity developed along the northern Gulf Coast lowlands as early as the Preclassic period. This hydraulic infrastructure is, moreover, an example of early megalithic architecture that reflects a high degree of economic specialization.

MONUMENT 32

Weighing 27 tons and measuring 4 m in height, 7 m in width, and 40 cm in thickness, Monument 32 is a poly-mineral sandstone slab that came from the Sierra de Tanchipa, probably near the canyon of the Tampaón River, located about 10 km as the crow flies or 30 km if following the meandering course of the river. It is likely that the slab was transported to Tamtoc via the river. This sculpture was discovered in La Noria. Once excavated, it was repositioned in its original location, at the head of a hydraulic system, directly in front of one of the freshwater springs that supplied the inhabitants of Tamtoc with drink and irrigation water (fig. 2.5). Ritual activities associated with life and fertility probably were carried out in this area.

Figure 2.5. Monument 32 repositioned in its original setting. The monument was erected at the southern end of a water reservoir constructed around a natural spring. The bottom of the reservoir is constructed from large rectangular-cut stone slabs, and the internal walls are made of stacked flagstones. A canal opens from the northern side of the water reservoir, into which excess water flows (photograph by Gerardo Alarcón).





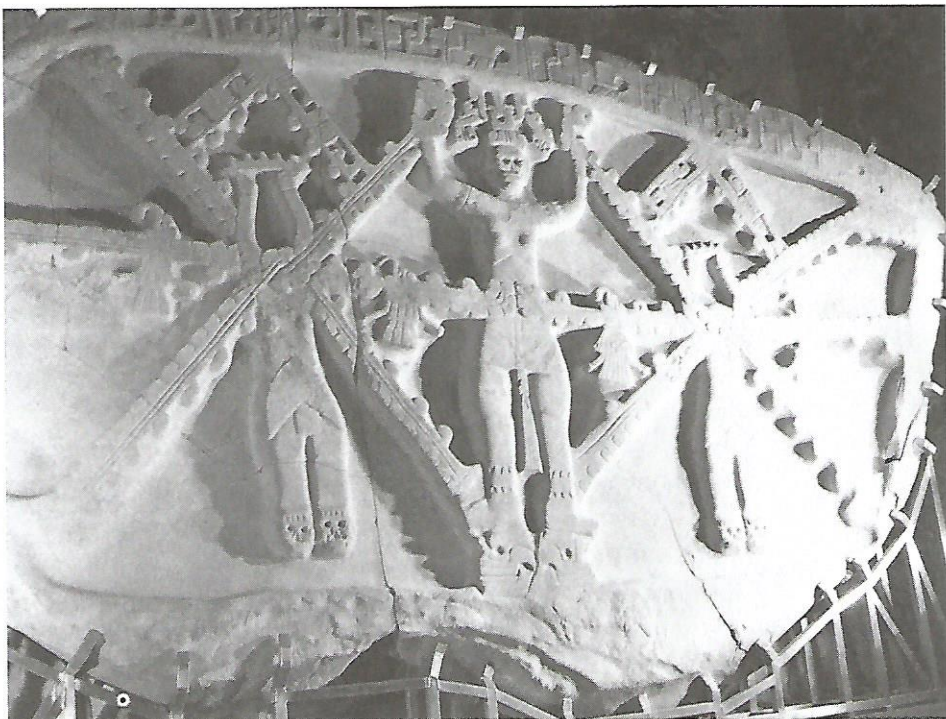
This hydraulic system consists of a water reservoir measuring 3 m by 4 m and 2.5 m deep. It is built with internal walls of flagstones atop which great sandstone rock slabs are placed. Throughout the excavation of this feature, we observed how the water from the phreatic mantle gushes up through the walls, filling the reservoir. Once the water reservoir overflows, water empties into a drainage canal. The walls of this channel are faced with flat sandstone slabs and the floor is made of irregularly shaped slabs. Extending from south to north, it measures 43 m long, 0.9 m high, with a width fluctuating between 0.9 m and 1.2 m (fig. 2.6). This structure drain discharges into the largest body of water at the archeological site. The latter was definitely integrated into the city's urban landscape, supplying the pre-Hispanic population with water and aquatic food resources.⁷

Originally, Monument 32 was monolithic and was supported by an embankment made of compacted limestone sand, which maintained its upright position and northern orientation above the level of the water reservoir and the canal. In the area where the supportive contour for the lower part of the monolith is visible, an accumulation of alluvium in the stratigraphy reveals that the Tampaón River had flooded at some point during the Late Preclassic period. This alluvial sediment of sand and gravel undermined the monument's foundations, causing it to topple. At the same time, it prevented the monument from fracturing into more pieces by cushioning the fall; as a result, the monument broke into only two large sections. With the passage of time, each of these two large fragments further fractured into three parts each, due to the weight of sandy sediments that were built up after the flood in order to create large earthen platforms. Then plinths were constructed and the area was reoccupied, transforming the appearance of the site until it was abandoned during the Postclassic period.

Monument 32 represents three female human figures carved in high relief, now well worn (fig. 2.7). The scene is visually divided into three sections. In the lower part, three pairs of human crania upon which the three figures stand are depicted. The crania flanking the central pair are in frontal view; the latter are represented in

Figure 2.6. Western stratigraphic profile of the excavation unit of Monument 32, showing its fragments in situ. The overlapping sequence of fills over the drainage canal, the location of tombs, and Structure C-10 provide evidence that the ground over the main hydraulic system of Tamtoc was intentionally elevated to maintain occupancy in this sector of the pre-Hispanic city (drawing by Gerardo Alarcón, digitized by María López).

Figure 2.7. Monument 32, depicting a scene in which two decapitated females flank a central figure wearing a cranial mask. Undulating lines as allusions to flowing blood surge from the necks of the lateral figures to the extremities and navel of the central character (photograph by Gerardo Alarcón).



profile with a curved element emerging from the nasal area and reaching the forehead. Following Mesoamerican cosmovision, this level may be interpreted as the border to the underworld and as the place inhabited by skeletal beings.

Three female figures occupy the central section. Their gender can be identified by the morphology of the accentuated hips and the representation of breasts. The figure to the left of the central personage and corresponding to the monument's western side is decapitated and six lines flow from her neck. They form parallel bands with volutes, representing flowing liquid and, more specifically, blood. Along the horizontal bands appear two bird heads with curved beaks. Below the spurts of blood, only the plumes of the bird's folded wings, tail feathers, and feet are visible. The hands of the human figure are raised, holding a semicurved element with five triangular protuberances, which is centered above the figure. Further up are two rectangular bands of symbols arranged in a triangle. On the inner side are volutes, again symbolizing flowing liquid; the orientation of the curves indicates that the spurts are flowing upward to the top part of the scene.

The central figure stands on two skulls shown in profile view. A curved element emerges from each skull's maxilla and terminates in front of the nasal area in the shape of a hook. The figure wears ankle-high boots or socks. Each foot is turned outward and shown in profile. A horizontal line with four pointed elements at the top and at the bottom is depicted atop each ankle. The representation of the legs, which are also turned outward, emphasizes their thickness and corpulence, apparent in the curved outline of the knee, thigh, and calf muscle. A vertical element that hangs between the legs is divided lengthwise by two lines, suggesting that it is composed of three bands. The upper part of this element has a design resembling a knot. This detail is placed just below a skirt-like garment, which also has a pair of vertical lines at the center. These lines may be part of the vertical band between the

legs mentioned above. At the waist and covering the upper part of the skirt, two streams of blood converge at the navel, having originated at the severed necks of the figures to either side. The abdomen is indicated by two diagonal lines joining at the center of the chest. The figure raises her arms, which are decorated with a vertical line with four pointed elements on each side resembling the elements seen on the lower legs. The position of the hands is significant; each hand grasps a stream, which again originates from the neck of one of the decapitated figures.

The central figure's face is discarnate, exposing the teeth, mandible, nasal cavity, and eye sockets. In contrast to the skeletal state of the face, the ears are fleshy, indicating that the personage may be wearing a mask. A design placed above this figure's head closely resembles the glyph for a cross-cut vase, common in other Mesoamerican cultures, or possibly a cross section of a canal. Two lateral scrolls characterize this glyph. On either side, two additional scrolls resembling those denoting vital liquid or a current of water form a horizontal bar, to which three perforated rectangular elements attach. Over the glyph's center are two vertical bands, which we interpret as a plant growing from the earth represented by the sectioned vase, which in turn is nourished by life-giving water.

The third figure, to the right of the central personage and in the east sector of the relief, is also beheaded. Like the first figure, six lines of blood spurt from the neck. Once more, we see two bird heads with curved beaks emerging from the horizontal streams of liquid and facing east. Their bodies are identical to the other pair of birds. This figure too raises the arms, holding up an element that is slightly curved and has seven triangular protuberances. An arrangement of bands forms a triangle above the figure but, in contrast to the symbols seen over the figure on the right side, the direction of the scrolls on the bands' inside indicate that the liquid is flowing downward.

Over these three personages appears a third register with a sequence of thirteen symbols. The majority of them correspond in form to the symbols found on the water reservoir, that is, they are geometric forms between which broken lines, scrolls, and circles are included. These symbols associated with the three female figures may refer to the thirteen lunar periods of the solar year, which is why we are tentatively identifying the monument as a lunar calendar. This way of time keeping is consistent with the Mesoamerican ritual calendar of 260 days, which results from combining twenty day-signs with thirteen numbers, grouping the days in thirteen periods (López Austin 1980:223).

We interpret this monument as a representation of the life cycle, which is generated by water, the vital liquid that nourishes the earth to generate plants, flowers, foods, animals, and so on. The streams of vital liquid join at the central figure's navel, while she grasps two other streams, receiving the liquid to generate life. The central personage has a skeletal face and wears an emblem or glyph that may allude to her calendrical name. Representing a sectioned canal or vase with a plant emerging from it, this glyph likely refers to agricultural production.

THE PRIESTESS OF TAMTOC

When Monument 32, which collapsed into the interior of the water reservoir, was lifted, the slabs forming the floor of the area with the spring had to be reset into their original location. During this process, we observed that the lateral walls continued



Figure 2.8. Naturalistic sculptural representation of a life-size female figure. These fragments of the incomplete sculpture were deposited at the bottom of the water reservoir associated with Monument 32 (photograph by Gerardo Alarcón).

Along with this ceramic material we found fragments of a female sculpture made of greenish gray, metamorphosed limestone (fig. 2.8). This sculpture was ritually sacrificed prior to being deposited; that is, it was intentionally fractured, as is evident from the breaks caused by blows carried out with stone instruments. This piece was dispersed throughout the offering, reinforcing the inference that the sculpture was ritually sacrificed during its deposit. The sculpture is unusually volumetric and has refined anatomical features, of which the collarbone, the navel, and the phalanges of the hand placed on the left thigh are some of the outstanding details.

The sculpture has a series of circular raised marks arranged in lines on the breasts and thighs, referring to the custom of scarification. These marks are grouped in a set of 52 protrusions along the right shoulder and breast and another of 104 on the left thigh. There are also marks on the left arm and breast and the right thigh; they are incomplete due to the fractures, but it seems evident to us that the corporal modifications were arranged symmetrically. Although we can only hypothesize about the meaning of the body markings (related to the knowledge of the calendrical cycle), it is noteworthy that there are exactly 52 and 104 (twice 52, where 104 is related to the difference between the Mesoamerican calendar and the solar cycle of 365 days) markings on different loci of the body. We are thus inclined to suggest that

below the paved area. Once the paved level was removed, it was possible to recover an offering deposited at the heart of the spring. Located at a depth of 2.5 m and in an area of 3 m by 4 m, this deposit contained a great quantity of ceramic materials, including fragments of containers as well as pots with representations of human faces. In addition, there were deep bowls, ladles, cups, globular pots, neckless jars, anthropomorphic female figurines, as well as quantities of calcite and fluorite, black obsidian flakes, and round hand-grinding stones, among other artifacts. We have been able to compare the morphology of these materials with pieces from Chiapa de Corzo and Izapa, Chiapas, as well as from Kaminaljuyu and Uaxactun, Guatemala, which has allowed us to attribute a very early date, 900–650 B.C., to this feature. Some of the objects also correspond to the ceramic types of the Gulf Coast cultural sequence, including Prisco Negro, Altamirano Blanco y Negro, and Progreso Blanco, all diagnostic of the Middle Pre-classic period.

this sculpture was associated with the Mesoamerican calendrical period of fifty-two years, associated with agricultural production and the earth's fertility.

The ceramic types most frequently identified in this deposit are Prisco Negro, Progreso Blanco, Heavy Plain, Café Paredes Delgadas, and Altamirano Blanco y Negro (fig 2.9). Based on the frequency and juxtaposition of these diagnostic types, we infer that the female sculpture was manufactured and deposited in the offering during the Tampaón phase (900–650 B.C.) and that Monument 32 was carved and set in place around the same time.

We have dated the ceramic material, the creation of Monument 32, the votive offering, and the canal system to the Tampaón phase (900–650 B.C.), the period when the first regional towns and primary centers arose. During this period, the number of civic-religious structures increased and plinths with circular or horseshoe-shaped plans were constructed of compressed earth. The areas where earth was extracted were used as water tanks for collecting rain. All of these developments conform to the cultural sequence defined by Merino Carrión and García Cook (1987, 1989, 1991, 2002) and García Cook and Merino Carrión (1989, 2004).

A great similarity between the ceramic forms of this early context in Tamtoc and those of the floodplains of Chiapas has been observed, corresponding with the ceramic complexes Conchas (900–800 B.C.) and Duende (800–700 B.C.), following the descriptions for the region of Soconusco of Clark and Cheetham (2005:342–348, 359–366).

THE CEMETERY

After the collapse of Monument 32 at the end of Preclassic period, the residential area was reconstructed. The alterations involved elevating the terrain and constructing earthen platforms, on which structures were built and residential, civic, and funeral spaces were established. From then on, the site was continuously occupied from the Classic to the Postclassic period. During the time of reconstruction, a cemetery and site of funerary cult activity was established in the sector where Monument 32 was erected. Individuals, the great majority women, were buried in tombs that were usually shaped as truncated cones, resembling small circular plinths measuring approximately 50 cm in diameter. A flat stone was placed vertically at the center of each tomb, resembling a commemorative tablet. Each of the more than eighty tombs was aligned and contained human remains deposited in a seated position. They were positioned primarily in the southern sector of a road measuring 80 m long and 3 m wide that begins in the western sector of Group C and ends at the staircase of a circular structure constructed in the area that was elevated after the collapse of Monument 32. Stratigraphy and associated materials indicate that this cemetery may have been used since the Early Classic period. Furthermore, it presents a stratigraphic sequence of osseous deposits; a single tomb could have been reused up to three times, containing a total of three individuals, each interred at a different time period.

El Tizate and El Cubilete

Southwest of La Noria in Group C is one of the highest mounds of the archaeological site. Known as El Tizate, it is an earthen platform with a conical elevation on top that has a staircase constructed of flat and reused stones, including fragments of



(a)

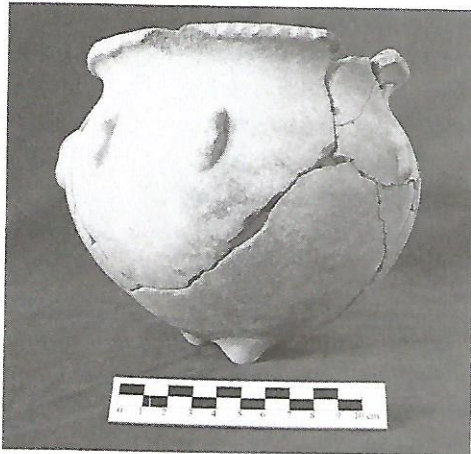


(b)

Figure 2.9. (a) Prisco Negro tripod bowl with straight-divergent walls and basal flange; (b) Prisco Negro globular olla with restricted mouth, in the form of a tecomate; (c) Progreso Blanco jar with convex base, in-slanted walls, and flared rim; (d) Progreso Blanco globular tripod olla with flared rim and longitudinal applied relief fillets on the body; (e) Altamirano Blanco y Negro bowl fragments with flat base and in-curved walls (photographs by Gerardo Alarcón).



(c)



(d)



(e)

sculptures and grinding stones. Its fill is composed of silt and black dirt; several layers evidence the burning and compacting of earth required to raise the construction to 39 m in height. Atop the mound is the foundation of a circular construction, which was erected in two phases: the newer phase, which we can see today, was built over the older phase; we did not expose the latter for reasons of conservation. Although it has not been possible to date El Tizate, it probably was constructed between 100 B.C. and A.D. 200, considering the great volume of diagnostic ceramics. Its structure consists of compacted earth faced with gravel. Furthermore, ceramic types diagnostic for that period were among the fragmentary ceramic materials in the constructive fill.

It is important to emphasize that El Tizate is one of the two highest hills at Tamtoc. The other tall mound, known as El Cubilete, is located on the eastern border of the archaeological zone, whereas El Tizate is located in the west, delimiting the area with monumental architecture. El Cubilete is 37 m high and is formed by two overlapping platforms that sustain a conical structure on top that measures 80 m in diameter at its base and 17 m in height. This platform was also built in two phases, probably corresponding to the two construction phases of El Tizate. From the upper part of El Tizate and El Cubilete, it is possible to observe the course of the Tampaón River and the entirety of the archaeological zone as well as its surroundings; consequently, these mounds certainly must have functioned as surveillance points from which to observe the Tanchipa mountain range and a great part of the coastal plain that extends toward the Gulf of Mexico.

Monument 22

Southwest of Group A and east of El Tizate is Group F, near one of the lagoons of the archaeological zone. These bodies of water were used to raise fish as well as to store and control water for the entire area. In this group, at the center of a plaza enclosed by six structures, we discovered the sculpture known as Monument 22 (fig. 2.10). The monument represents the inferior part of a nude man's body; the only visible adornment is a penis protector. The figure's penis is perforated, which brings to mind the Mesoamerican myth relating the creation of man. According to this myth, Quetzalcoatl descends to the underworld to collect the bones of a previous generation. He then takes them to Tamoanchan and gives them to the goddess Quilaztli, who grinds them up.



Figure 2.10. Close-up view of the anthropomorphic figure and two symbol subsets adorning Monument 22 (photograph by Gerardo Alarcón).

Quetzalcoatl then pierces his penis and mixes his blood with the bones in order to create a new generation of man, that of the fifth sun. It has been proposed that the Huasteca was thought of as Tamoanchan—the place of life and fertility (López Austin 1994). It is therefore possible that the sculpted figure, which likely represents one of Tamtoc's governors, is shown with the mark of penis sacrifice in order to commemorate the myth, which would have been reenacted through rituals, and to legitimize the governor's ideological and political control.

On the monument's right side is carved a series of symbols, which can be divided into two parts; on the left side is a triangular space filled with scroll elements including what may be a place sign, such as a house or temple. Moreover, on one side a current of water is represented that could symbolize the course of the Tambaón River surrounding the archaeological zone. There is also a series of scrolls that project

upward toward a half-open rectangular element, which may represent a vessel. These scrolls may convey the concept of clouds rising up from the earth, corresponding to the ancient name of the site: Tamtokow, "the place of water clouds" (Meade 1942:291). To the right of this triangular space filled with scrolls is a vertical strip that may be related to the calendrical name of the personage. Near this sculpture we found large quantities of calcite beads and crystals. These were deposited under the toppled sandstone slab, and in the general area surrounding the monument, thus explicitly linking the carved motifs with the pre-Hispanic surface of occupation.



Figure 2.11. Anthropomorphic effigy vessel (Negro Sobre Blanco) representing a female. Her torso is partially covered with an article of clothing, termed *quechquémitl* by Nahuatl speakers in the Huastec region, which allowed the breasts to remain exposed. Suggestions of corporal modifications include cranial deformation and perforations in the earlobes and septum (photograph by Gerardo Alarcón).

chronology of the culture in this pre-Hispanic city. These materials include whole ceramic vessels and figurines, ornaments of shell, bone and igneous rocks, as well as other ornamental and utilitarian artifacts made of metal and stone.

The Group A and B plazas are primarily characterized by the presence of ceramic vessels that belong to the types known as Las Flores, Huasteca Negro Sobre Blanco, Pánuco Pasta Fina, and Tancol Policromo.⁸ These types imply an Early Postclassic occupation of the associated architectural features, coinciding with the Tamul phase (A.D. 900–1200). Transformative and adaptive processes of the urban center can be detected to the north of Group A, even by the Early Postclassic period. For example, Structure AN-3 was destroyed in order to construct a circular platform with a southward-facing stairway. A ritual deposit was excavated from within this structure, which included an exceptional black-on-white effigy vessel with handle and spout (fig. 2.11). The vessel represents a woman with corporeal decoration upon her arms and face that is likely indicative of tattooing or scarification. The painting on her torso suggests that it is partially covered by a *quechquémitl*, with the breasts exposed. This vessel corresponds to the Huasteca Negro Sobre Blanco ceramic type. Likewise located to the

The Archaeological Materials of Tamtoc

The archaeological materials recovered during the excavations at the site of Tamtoc have proved fundamental to inferences regarding the corresponding

north of Group A is Structure AN-2. On the southeastern side of the eastern staircase, a ritual offering comprising fifty-four miniature vessels of both the Las Flores and Huasteca Negro Sobre Blanco types was deposited. They were placed in an inverted manner, lip down, and stacked one atop the other in numerous layers.

One funerary deposit encountered east of the entrance to structure AC-5 contained a Las Flores tripod bowl, an effigy vessel with a spout handle and a modeled face on opposite sides, and a tecomate with curved converging walls. The latter two vessels belong to the Huasteca Negro Sobre Blanco type. Other ceramics including diverse variants of Pánuco Pasta Fina as well as Zaquil Negro, Zaquil Rojo, and Tamtok types.⁹ The ceramic figurines that date to the earliest occupation of the site are primarily anthropomorphic representations. These were made using the techniques of modeling and molding. Both types are further embellished with the application of various decorative elements representing textile patterns. Other objects such as rattles (and rattle fragments), whistles, and miniature figures have been found in contexts that correspond to occupations from the Tanquil phase (A.D. 650–900) until the Tamuín phase (A.D. 1200–1500). Miniature vessels are especially noteworthy because they replicate the profiles of larger utilitarian counterparts rather than being of distinctive morphology.

Previously we discussed a major flooding incident that occurred sometime during the Late Preclassic period, which occasioned the collapse of Monument 32 and destroyed the associated hydraulic system consisting of a water reservoir and paved canals that drained into the nearby lagoon, Laguna de los Patos.¹⁰ The earliest ceramic types encountered during the excavations of Monument 32 are noteworthy both for their frequency and for their stratigraphic correlation with the inundation phenomena. Specifically, these include sherds of various types of fine paste wares with finely incised design or with engobes, such as Café Esgrafiado, Altamirano Naranja, and Progreso Blanco. These ceramics are diagnostic of the Early Preclassic phases in the region, including Pujal (1400–1150 B.C.) and Chacas (1150–900 B.C.), and also indicative of the transition to the Middle Preclassic period. These ceramics coexist with a large quantity of gray wares that range in their tones to blacks and browns. They demonstrate frequent variations of color due to the differential atmospheres of the firing environment, which is the norm for reduction firing techniques. Their textures are generally coarse, even though there are also examples of fine wares with smooth surfaces, some even exhibiting burnished engobes. The majority of the samples constituting complete and semicomplete objects are of Prisco Negro, which is the diagnostic type for the Huastec region during the Tampaón phase (900–650 B.C.). Even so, fragments of Gris Nebuloso and Altamirano Blanco y Negro are also present.¹¹

Other important artifacts recovered from the ritual deposit within the water reservoir at the base of Monument 32 include polished fluorite beads and their preforms as well as large blocks of fluorite and calcite. The biconical bead perforations aesthetically blend with the crystalline striations. A handful of the translucent green fluorite preforms in the bottom of the ritual deposit were placed within a globular effigy vessel. Anthropomorphic facial features including ears, eyes, nose, and mouth are modeled and incised on the body of the pot. Although this is the only complete example, numerous fragments of this type of effigy vessel were found in the ritual deposit. They are all gray ware and range in paste composition from coarse to medium-fine grain.

Although less common, two polished gilsonite beads were excavated from within the sandy alluvial sediments that covered the canal extending northward of Monument 32 and its associated ritual offering. This sediment is characterized by sherds of Progreso Blanco, Negro Pulido, and fine paste wares as well as an abundance of Prisco Negro fragments.

Evidence for metallurgy consists of a variety of copper and alloy objects unearthed during the course of excavations at Tamtoc. Copper needles and bells, tumbaga beads, and axe preforms and fragments forged much the way bronze is are among the most common artifacts. As is no surprise, metal items were found in Groups A and B with the most recent architectural features, which were occupied during the Tamul and Tamuín phases.

On the basis of the material evidence excavated at Tamtoc, body ornamentation was fundamental to the daily lives of the pre-Hispanic inhabitants of the Huastec region. Polished beads and pendants likely intended to be used in necklaces were commonly manufactured from jadeite, calcite, and shells as well as from the bones and teeth of animals. Adornments made of transversally cut conch shell segments, known as *ehcailacoxcatl* pectorals, are also represented. In the Huasteca, these are traditionally associated with the wind cult (Seler 1963).

Osteological Remains

The osteological remains identified reveal clues about the physical characteristics, daily life, and pathologies of the people of Tamtoc. In general terms, men attained a stature of 1.60–1.65 m, women 1.50–1.55 m. Both men and women were generally robust, with large, heavy bones, underscoring the accumulated history of physical labor invested in productive activities, many of which centered on food acquisition. Furthermore, the territory on which Tamtoc is situated is not easily traversable because of the flood conditions and unstable clays that characterize the soils in the zone. The people living in this area would certainly have needed the physical capacity and endurance required to negotiate this marshland environment prone to frequent flooding.

Certain characteristics of the osteological remains—such as affections on the temporal bone caused by the inflammation of the mucosal lining indicating mastoiditis, which can result from untreated ear infections commonly brought on by retention of water in the ears—suggest that throughout its long history of occupation the people of Tamtoc engaged in a fishing industry based in part on underwater swimming or diving.¹² Other features, such as protuberances where muscles attach to the humerus and the tibia, imply that these people also gathered and transported heavy loads, such as wood, to be burned in braziers or hearths.

Dental cavities were quite usual because of the composition of the available sources of potable water. Amoebiasis, an infection that can lead to amoebic dysentery, and a type of syphilis (frambesia) were also frequent, resulting equally from sexual relations and general conditions of overcrowding, at least for the latest occupations corresponding with the Tamul and Tamuín phases. Although parasitosis was exceedingly common, the human remains indicate that people did not usually succumb to the associated diseases. The average lifespan at Tamtoc oscillated between 36 and 40 years of age. In a few cases, however, remains demonstrate that some individuals did reach considerably older ages (50–60 years).

Conclusions

The site of Tamtoc experienced continuous occupation from the Middle Preclassic through the Early Postclassic periods. We propose that by around 900 B.C. the inhabitants of this city possessed an intricate knowledge of calendrics, were adept in the construction of hydraulic systems, and were skilled lapidary artisans. These people represented an influx of foreigners who integrated with extant local groups at an early date. With the passage of time, this fusion resulted in the florescence of what is today considered to be the pre-Hispanic Huastec culture.

So who were these newcomers? Although only an initial hypothesis, pending further evidence, we think it likely that either these groups were themselves from the Pacific watershed or even the floodplains of Chiapas or Guatemala or they were otherwise responsible for transporting goods or ideas from that region. The materials excavated in context with Monument 32 indicate that there had indeed existed a Middle Preclassic relationship between the coastal plains of the northern Gulf Coast of Mexico and the Pacific watershed and the floodplains of Chiapas and Guatemala. The existence of this cultural relationship is also reflected in one of the most commonly spoken languages of the Huastec region, Teenek, which belongs to the Mayan language family. According to Barbara Edmonson's (2004:299–301) linguistic analysis of the Teenek language, the origin of this proto-Mayan branch can be traced to highland Guatemala. Similarly, Norman McQuown (1964:69) has hypothesized that this is the region where a migration initialized sometime around 1800 B.C., finally reaching the Huasteca between 1500 and 1000 B.C.

We consider the morphological relationship between the ceramic objects from the sealed archaeological context, excavated from the bottom of the water reservoir associated with Monument 32, and the diagnostic materials of the floodplains of Chiapas as material culture indicators that corroborate the chronological assumptions about the monument and support the hypothesis for the Gulf Coast presence of the Mayan Teenek language by this time.

After the inundation that caused the collapse of Monument 32, the occupation of Tamtoc continued nevertheless. From this moment onward, the site is characterized by an increase of mound constructions, which remained above the water level during times of flooding. These large-scale earthen platforms, such as the mounds El Tizate and El Cubilete, underwent their major constructive phases during the Classic period. By the Early Postclassic period, stone floor foundations and stone walls covered in stucco were constructed atop these elevated spaces, which similarly typified the architecture of Groups A and B. These buildings were likewise modified on numerous occasions, both in terms of the aforementioned foundations as well as the perishable frameworks that completed the structures, which were destined primarily as residential areas and administrative centers.

During the Classic period and in the aftermath of the flood event, a funerary area was established in the site sector associated with the hydraulic infrastructure and Monument 32, suggesting that this continued to be a ritually significant precinct for the inhabitants of Tamtoc. Indeed, the most recent archaeological features excavated here date to the Early Postclassic period and are associated with the final occupational stages of the site, demonstrating continuous human activity in this zone throughout Tamtoc's occupational history.

Both before and after the collapse of Monument 32, the modified landscape of Tamtoc reflected conformity to environmental conditions that took place on a much larger regional scale, throughout the coastal plains. Perseverance in such frequently inhospitable environs clearly required a high degree of technological development in terms of managing a hydraulic infrastructure and calendar, given that most settlements in this area required continuous structural modification of the earthworks in order to avert inundation of the population centers.

The local economy of Tamtoc was integrated within a wider interregional commercial economy that underscored interaction with the Pacific watershed and the floodplains of Chiapas and Guatemala since the Preclassic period. The nature of this interaction is apparent in the material culture, particularly ceramics obtained by commerce or other modes of exchange, and in the circulation of ideas and technological concepts accompanying this tangible commercial trade.

The inhabitants of Tamtoc were clearly in contact with other Mesoamerican peoples. It is likely that their systems of knowledge were more widely diffused, being shared with people of the mountainous regions and the central plateau to the west as well as those in the eastern coastal areas. Thus, it is clear that the Gulf Coast was home to intense social, cultural, political, and economic activity from the Preclassic period through the Early Postclassic period.

Notes

1. The excavations carried out between 2001 and 2008 were directed by Guillermo Ahuja.
2. The explorations carried out between 1962 and 1964 were directed by Guy Stresser-Péan. During these field seasons, he excavated the structures in Group A, but in 1965 they were covered up again following Román Piña Chán's recommendation (Stresser-Péan, Stresser-Péan, and Ichon 2001:38, 40).
3. Stresser-Péan, Stresser-Péan, and Ichon (2001:93–94, 292). The date A.D. 482±50, Cal. 482–662 (GIF 8577), is published by Stresser-Péan and Stresser-Péan (2005:682).
4. At the nearby site of El Consuelo, or Tamuín, a skull was interred in the round altar portion of a similar architectural structure (Du Solier 1947:210).
5. Jesús Galindo, of the Institute of Aesthetic Research at UNAM, conducted research on astronomical phenomenon at Tamtoc in addition to several other sites in the Huastec region and throughout Mesoamerica.
6. The Tampaón River is part of the large Pánuco River hydrologic system that flows from the Basin of Mexico to the Gulf of Mexico; in its floodplains, the watercourses are abundant and easily overflow.
7. In stratigraphic pits excavated in the lagoons during the dry season, ceramic fragments and perforated pebbles were found; these were probably used as fishing weights and sinkers.
8. The identification of the diagnostic ceramic types at Tamtoc is based on the regional investigations and ceramic typologies developed by Ekholm (1944), Stresser-Péan, Stresser-Péan, and Ichon (2001), Stresser-Péan and Stresser-Péan (2005), and Merino Carrión and García Cook (2005).
9. Tamtok ceramics are a particular type established for the site of Tamtoc. In the text, Tamtok is spelled with a "k" when these materials are indicated, whereas Tamtoc spelled with a "c" always refers to the archaeological site.
10. Laguna de los Patos is part of a major network of tributary streams that would have functioned as a drainage basin of the principal waterway of the Tampaón River

during the rainy season. It is reasonable to consider the implications of such constructions for large-scale irrigation systems and for navigation routes into the interior of pre-Hispanic settlements from the Preclassic onward as analogous to other areas with early settlements in the coastal plains of the Mexican Gulf Coast.

11. The chronology and typology referred to here are based on those established by the Proyecto Arqueológico Huasteca and the Proyecto Definición del Formativo en la Cuenca Baja del Río Pánuco (Castañeda 2005; García Cook and Merino Carrión 1989, 2004; Merino Carrión 2005; Merino Carrión and García Cook 1989, 1991, 2002).
12. This argument is based on the opinion of the physical anthropologist Ruth Olvera, who analyzed the osteological material excavated by Ahuja and his team.

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