Cacaxtla: an example of pre-Hispanic grandeur

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espite the fact that only the area around the Great Base, or central palace, of Cacaxtla has been explored¹, it is one of the best excavated archaeological sites in Mesoamerica. Its importance lies in what it reveals of pre-Hispanic Mesoamerican architecture and city planning.

Cacaxtla was built over several periods of time. Originally, it was thought to have existed between the 7th and 15th centuries. However, more accurate information now dates it from the 3rd to the 16th centuries, when its population decline began.

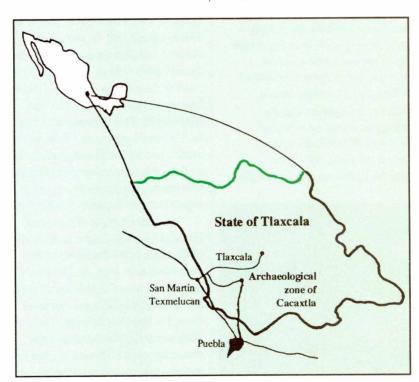
Currently, an interdisciplinary research team composed of architects, restorers, archaeologists, historians and, as in-house specialists, the site's custodians, is studying and doing conservation and restoration work in the archaeological area. It has been covered by a huge 10,300 m² roof to protect it from the weather and preserve the structures and decorative elements, such as paintings and sculpture, integral to its architecture.

One of Cacaxtla's main characteristics is that it was a fortress

inhabitants built on top of their previous edifices, constructing new ones for the beginning of the new era. Foundation elements were repeated and, in some cases, new walls were built to support later ones.

Cacaxtla was a perfectly planned and organized city, requiring considerable knowledge of urban planning, the use of space and of constructions methods. Its geometric layout aided experts in making their discoveries. Palaces, priests' quarters and living areas could be located mathematically.

New excavations on the site have advanced our knowledge about Cacaxtla and its architecture, murals, social organization and lifestyles. For example, the location of neighborhoods



or defensive site constructed over several periods. Fifteen years of work by technicians from the National Institute of Anthropology and History have solved some of the great mysteries of the site's pre-Hispanic architecture. Because of a belief in the cyclical renewal of life, Cacaxtla's populated by craftsmen was recently corroborated by the presence of kilns, ceramics and lower-class dwellings, characterized by living quarters and patios, adobe structures with stucco walls and floors. This type of dwelling

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Some 10% of the archaeological site has been explored.

always had access to plazas and streets, and stairways to terraces, demonstrating the inhabitants' skill in the use of terraces and split-level areas for fortified centers, in addition to their social functions.

Some elements lead to the belief that there were main avenues connecting specialized neighborhoods. In built-up areas such as plazas, they used compacted landfill with structural cells and stone retaining walls. The stone, various in origin, was combined with tezontle and tepetate stone, and whitewashed to lend beauty and harmony to the area. Runoff flowed through drainage ducts and aqueducts, possibly to storage tanks located at the ravine's edge.

Just as in Teotihuacan and Cholula, main avenues were lined with religious and/or public edifices. Built with *tepetate*, their panels were lined with sculpted pumice stone as ashlar. Ramps and stairways were covered with lime and river-sand stucco.

The central palace and the buildings surrounding it display perfect spatial distribution. For example, the plaza with three pyramidal bodies on one side of the



Bird-Man (detail).



Bird-Man (detail).

Great Base, follows the contours of the land, with a facing retaining wall. This lends not only an architectural element, but also integrates it into the natural surroundings. There are signs relating the measurements and their bearing toward the volcanoes and Xochitecatl. This demonstrates that the builders were aware of the golden section and its use in architecture, as well as of how to integrate buildings into nature, an extremely important aspect for pre-Hispanic city dwellers.

Another example of how new findings have shed light on the history of Cacaxtla is the discovery of the cuexcomates or granaries. Not only do they reveal how the problem of corn storage was solved in pre-Hispanic times, but their social function as well. They are hollow ovoid structures protecting up to 1 1/2 tons of grain from rodents, insects and weather. Access holes are in the upper section and on the side at the base. They measure 2.5 m high, 2 m in diameter at their widest and were set one meter apart. A single cuexcomate stored enough grain for a nuclear family for a year².

Restoring them and verifying this data was possible because *cuexcomates* are still used by families in the region. Since several of them were found lined up on the Great Base and their storage capacity exceeded a single family's needs, they were probably used to supply a dominant group and for storing surplus production for a certain sector of the population.

Precise layout, knowledge of scale, and efficient employment of materials produced a safe place for the inhabitants to live in. For example, in spite of torrential rains typical of the area, polished floors over compacted soil with a tezontle base facilitated all-weather movement and could withstand heavy loads without collapse.

Judging by the maintenance applied to the floors of the second body, the Patio of the Altars, the structure was densely occupied, saw heavy use and considerable traffic.³

Analysis of the Great Base explains its method of construction. It shows thorough knowledge of the use of regional building materials and broad experience in building cities. Just as in the area surrounding the metropolis, the palace area is a fortified complex, with palaces in

Due to the fact that it was not one of the main structures.



Jaguar-Man.

the center, facing North, South, East and West.

The layout shows lateral access by stairs. Landings are made of tezontle, covered with a thick layer of stucco, and both tread and height are on a human scale. Access was always through passageways, indicating the importance they gave to privacy and to controlled access. Behind the stairways and around the perimeter are passageways and rooms, perhaps for service personnel. They had smooth stucco floors and walls, with outward-facing pillars. This was possibly used to create a chiaro-oscuro, resembling a niche, a classical pre-Hispanic element, mainly in Teotihuacan and Cholula, though possibly influenced by the Petén region.

Of all the passageways, the most noteworthy is the one along the Latticework, with paintings of a man and a woman displaying animal duality on each of two different pillars.

Mural painting is another typical feature of Cacaxtla. In the painting above, the man has a scorpion tail and the woman a short jaguar-skin skirt. Both figures wear a circular belt, a symbol of Tlaloc; winged elements on their bracelets; and claw-like gloves

holding starfish. Both figures are barefoot, poised on an aquatic border with marine fauna below including herons, fish, snakes and sea horses. Both wear shell necklaces and feather masks.

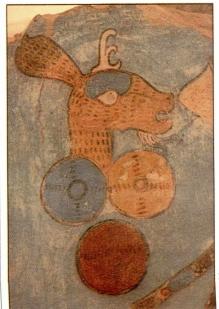
Recent excavations at the Great
Base of the palace have shed new
light on them. They revealed the
Man-Scorpion, Woman-Jaguar and
Old Man (trading) figures,
accompanied by flora and fauna, as well
as marine and land animals guiding
them; pavements decorated with
maguey plants, turkeys and cacao,
dismembered and integrated into
white-skinned personalities. Together
with the birth of corn with human faces,
they represent a path to a new life.

The pillars supporting these paintings are made of *tepetate*, mud and stucco. First, clay is interlaced with *tezontle*, then burnished with lime and fine sand, and finally topped off with grout and mineral-based tempera paints. Behind the passageways are stucco stairways leading to the upper floors. Most important, there is a central vestibule. It had a portico with

half-standing columns and two more facing the outer courtyards.

Thanks to the second excavation, an arched patio was revealed in the middle of the structure. Made of tepetate covered with mud stucco, it was finished with a fine layer of lime. A noteworthy vermillion-red frieze, partially retains only a lime burnish. There are buildings with murals in the central patio, such as the The Battle; a stairwell mural (Feathered Man and Feathered Jaguar) leads up to priests' quarters; passageways; niches; and, possibly under the sunken patio, the palace's central patio. Just like the lateral patios, it must have had sculptures and decorative elements in niches and panels: raw clay relief figures and circles decorating the jambs.

With respect to the meaning of the Battle murals, the presence of unopposed single and dual aspects simultaneously lead to the belief that they represent an ideological justification for warlike incursions by the inhabitants of Cacaxtla. The pictorial complex exhorted its inhabitants to conquer the men to the South and the land of plenty



South jamb.

UNAN,

This technique differs from that used in Building A, where fresco painting was used.

associated with life, jade and quetzal plumes, the cardinal point where mythical Tlalocan was to be found.

This was ideologically justified. In a dual universe, as one group consciously and deliberately assumes it belongs to one half of it, its subsistence and the immutability of the cosmic order can only be achieved by controlling the other half. In the world of humans, this would be like starting a holy war in which, ethnocentrically, they assumed they were on the deity's side.



Jaguar-Man (detail).

Therefore, Lord Three-Deer, as leader of the group whose mission it was to retake control of what was part of "their" universe, was ideally represented with his warriors, achieving their entirely justifiable victory.

The new discoveries in the underlying layers of the central patio reveal signs of a mural painted passageway depicting a marine border with personalities new to the life of Cacaxtla: turtles, snails, frogs and ears of corn with faces, as well as a jaguar protected by a tortoise shell (animal-animal duality), whose claws hold a shell with an unidentified fanged animal inside, piercing the marine border.



War mural.

IIE, UNAM

The mural's personalities are an old merchant with his wicker crate (cacaxtli), hovering over a feathered serpent, seemingly guiding it, with his knowledge and wisdom, toward a new life. Important personalities are painted on the floor, and the life of flora and



Unbaked clay relief.

IIE, UNAM

fauna on the surrounding framework. It is all painted directly on a layer of mud and lime stucco⁵, over composite or compacted-mud walls.

Interior living quarters can be clearly seen on the upper-level (Patio of the Rhombuses) but a division was built somewhat later in this structure, possibly to support another no longer extant. Their coverings and decorations, both interior and exterior, were perfectly planned to resist the elements and survive to our day⁶.



Bird-Man (detail).

Cacaxtla is testimony to the ingenuity, structural calculations and sublime artistry of its creators. The more we learn about it, the more we realize the talent and knowledge of pre-Hispanic man. Notwithstanding the many excavations, this archaeological site remains full of questions and enigmas, every discovery adding more to our knowledge of Mexico's pre-Hispanic peoples and their social, political and cultural lives.

The Cacaxtla archaeological site is located in the state of Tlaxcala, some 126 km from Mexico City M

- A totally different technique.
- 6 Its influence on regional building methods has yet to be studied.