

# **AZTEC ARCHITECTURE -Part 1**

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## INTRODUCTION

Aztec architecture reflects the values and civilization of an empire, and studying Aztec architecture is instrumental in understanding the history of the Aztecs, including their migration across Mexico and their re-enactment of religious rituals. Aztec architecture can be best described as monumental. Its purpose was to manifest power, while at the same time adhering to strong religious beliefs. This is evident in the design of the temples, shrines, palaces, and everyday homes.

The capital city of the Aztec Empire was Tenochtitlán, located in present day Mexico City. Tenochtitlán was an overwhelming, monumental city that was built on top of small islands and marsh lands. It was the third largest city in the world, after Constantinople and Paris, housing 200,000 inhabitants at its height. Tenochtitlán was the city where the most impressive and monumental Aztec architecture was to be found. After the Spanish conquest, the city was looted, torn down, and its materials were used to build present day Mexico City. From archaeological and various historical documents, such as Spanish Chronicles and codices written by friars, Indians and other historians, the extent and significance of the Aztec architecture can be deciphered.

Although Tenochtitlán was the most impressive of the Aztec cities, there were other cities and archaeological sites that represented Aztec architecture, daily life and ritual. The Aztecs had a long migration history, during which time they split several times. The people who founded Tenochtitlán, however, remained united and devoted themselves to the worship of Huitzilopochtli, the sun and war god. Because the Aztecs migrated for several hundred years and split several times, they adopted various gods, customs, architectural styles, and techniques. The final migratory split occurred in Coatepec (near Tula), where Huitzilopochtli, one of the most important Aztec deities, was born. Half of the Great Temple of Tenochtitlán was built in his honor.

The Great Temple of Tenochtitlán contains the history of Huitzilopochtli in sculpture (see section below: Great Temple for more details). The Great Temple was the sacred place where the Aztecs worshiped Huitzilopochtli and sacrificed human beings in order to appease him. To fully understand Aztec architecture, an extensive examination of Aztec cosmology, mythology and culture is required because most Aztec structures were religiously charged. This is evident in the various temples and shrines that were built in order to worship Aztec deities and offer human sacrifices. (See Chapter 6: Religion, Cosmology and Mythology for more details).

Aztec architecture was heavily influenced by the Toltecs of Colhuacan, the Tepanecs of Atzacapotzalco, and the Acolhuas of Tetzaco. Because the Aztec empire was built through conquest, the Aztecs had to find ways to integrate various dominated ethnic groups. Thus, the Aztecs relied on their architecture and artwork to promote their worldview. The massive structures reflected the military might of the empire.

The Aztecs were well organized and had strong infrastructures and systems that mobilized people and material resources in order to build large edifices that met the needs of their population. Tenochtitlán, the capital city, symbolized Aztec power. Aztec architecture, being similar to that of other Mesoamerican cultures, possessed an innate sense of order and symmetry. Geometric designs and sweeping lines were representations of religious tenets and the power of the state. In addition, the Aztecs used bas-reliefs, walls, plazas, and platforms, as media to represent their gods and ideals. During various epochs of their empire, the Aztecs added new techniques and materials to their structures. Examples of Aztec monumentality and grandeur are seen at the Great Temple, where 8,000 people could fit into its plaza, and the market of Tlatelolco that housed 20,000 people on market days. Aztec architectural adaptation and ingenuity can be seen at Malinalco (see section below), where a temple was cut out of the rock and was integrated into a mountain.

### ***Symbolism***

Aztec architecture is deeply embedded with symbolism. The cardinal points are

religious symbols for the four directions and corners of the earth. They are religious entities that have divine patrons, colors, days, and year signs which vary according to different historical versions. For the Aztecs, North was represented by the color black and ruled by Tezcatlipoca, god of fate, destiny and night; it was the region called Mictlampa, meaning the place of death, and its associated symbol was a flint knife. South was characterized by the color blue and ruled by Huitzilopochtli, the solar god and war deity; this was the region called Huitztlampa, the region of thorns, and its symbol was the rabbit. East was associated with the color red and ruled by Tonatiuh, the sun god, Xipec Totec, the god of fertility and vegetation, and Camaxtli-Mixcoatl, the god of hunting; it was the region called Tlapallan, meaning the place of red color and also Tlapcopa, the place of light; its symbol was a reed. West was represented by the color white and ruled by Quetzalcoatl, the god of wind, Venus, and wisdom. The West, where the sun goes down into the land of night and the dead, was the region called Cihuatlampa, meaning the place of the women, where the *Cihuateteo* (deified women who have died in childbirth) escorted the sun each evening after his journey across the sky; its symbol was a house. These gods of the four directions are responsible for fire, sun, the waters, earth, man, the place of the dead, and time. They maintain equilibrium on earth. The Aztecs were aware of the above significance, and for that reason, their City of Tenochtitlán and its structures, specifically the Great Temple, followed those cosmological patterns [Fig. 69]. It can be clearly seen in the *Codex Mendoza* with the Ceremonial Precinct of Tenochtitlán at the center with four sectors emanating from it oriented to the four cardinal points. The Aztecs wished to maintain equilibrium and appease their gods for fear that the earth would collapse like it did during the First to the Fourth Sun time periods (previous creations of the world). Thus, the city's orientation is a result of the belief that when the Fifth Sun was created in Teotihuacán, the diverse gods faced different directions to see from which direction the new sun would rise. According to the *Leyenda de los Soles* (Myth of the Suns), the Great Temple faces west because the first god to see the sun was Quetzalcoatl, whose temple faces east, following the path of the sun.

Other symbols seen in Aztec architecture are: the eagle representing the sun at the zenith as well as the warriors, serpents symbolizing water or fire serpents, each are

linked to Tlaloc and Huitzilopochtli, respectively, and the conch shell relating to fertility, life and creation. Representations of frogs as aquatic creature were reminiscent of Tlaloc symbols.

## TYPES OF ARCHITECTURE

### ***General Construction of Pyramid-Temples***

Pyramid-temples were built to facilitate the Aztec religion and worldview. Building pyramid temples was one of the most important architectural duties for the Aztecs because of their religious significance. They were government sponsored public works designed to create a sense of religious piety and imperial power. They were believed to represent mountains that were the sources of water and fertility, and the home of the spirits of Aztec ancestors. Pyramid-temples, like mountains, also symbolized the concept of *altepetl*, meaning the heart of the city filled with fertilizing water. They also served as important sanctuaries where rituals were celebrated, and important people were sometimes buried within them. More importantly, they represented the celestial order where the cosmos was divided into 13 sections, each associated with a different superhuman phenomenon. For that reason, according to Van Zantwijk, many of the pyramids that followed the blueprint of the Great Temple consisted of four platforms built step like on top of each other, relating to the four cardinal directions. The three lower platforms multiplied by the four sides, consisted of 12 sections (3 X 4); the 13<sup>th</sup> section was the small top platform where the dual temples of Huitzilopochtli and Tlaloc were built [See [Fig. 70](#)].

Most pyramid-temples followed a general pattern that consisted of a platform, a long broad, steep double staircase rising from the center, with balustrades along the sides of the steps. Sculpted stone blocks and skulls were used to decorate the platform and the end of the balustrades. Constructed with cosmology in mind, pyramid-temples always faced west and were cardinally located on the eastern side of the town center/plaza border. The double staircase also faced west, where the sun descended into the

underworld.

The tops of the pyramids had small flat plateaus where a temple or a sacrificial block of a temple would be built. There was an adjoining back room that contained the idol to whom the temple was dedicated and an antechamber for a priest. Most temples' inside walls were ornamented with either sculpture or paint. Temples were also decorated with geometrically carved blocks of stone. Early Aztecs built pyramids in a style similar to the ones of earlier Classic and Post-Classic Mesoamerican people. However, it is important to note there were some differences. Some of the most common features found in Aztec pyramid-temples are: 13 steps along the stairway, staircases with two balustrades with changing slopes at the top, almost becoming vertical, and representations of an eagle that is the *nahual* (disguise or form) of Huitzilopochtli-Tonatiuh. The elements can be seen on temples at Tepoztlan, the Temple of the Feathered Serpent in Xochicalco, the round temple of Cempoala, and the temple of Ehecatl in Calixtlahuaca.

### ***Temples***

A temple was usually found on the top of a pyramid, though there were exceptions, located at the center of the city. Since many state related ceremonies were held inside temples, politics and religion could not be separate. This union of politics and religion increased the emperors' authority and legitimized their respective gods' power. Temples were provided with priests, adjoining residences, schools, and land (as seen with the Great Temple).

The empire's cosmological and religious ideals were manifested in temples. They were the center point for the four cardinal directions, the place where the vertical channel or axis led to heaven and the underworld and where the supreme ruler interacted with the gods [Fig. 70]. Many of the ceremonies held at the temples followed seasonal and festival calendars. According to Aztec beliefs, it was essential to provide the gods with nourishment in order to prevent the end of the world. The nourishment of the gods was the blood shed during human sacrifice. Not all temples were built for human sacrifice. The Aztecs were a polytheistic people who built various temples in honor of different

gods. For that reason, the offerings or honors presented to different deities varied. In addition, temples were places for the renewal of the empire, altars of rebirth and hope.

Temples were constructed in accordance to the four cardinal directions. Temples were normally erected on the eastern border of the town center or plaza, facing west. If a new temple was to replace an already existing temple, the older temple was not destroyed. Rather, builders would add a new structure over the existing edifice. The result would be a new temple that was larger, more extravagant, and more detailed. Enlarging preexisting structures meant adding more stairs and making the sacrificial area more spacious. According to the emperor, layering a preexisting temple was acceptable because the gods had already blessed the original temple. Building a more magnificent temple paid further tribute to the gods.

The appearance of most temples was similar. They resembled truncated pyramids. The outside of the temples had terraces and steps. Some of the most detailed and decorated parts of the temple were the staircases that pointed towards the heavens. Stone serpent heads were frequently placed at the end of the staircases. The serpent heads' signified the representation of Coatepec (Snake Mountain), as the place of birth of the Aztecs' main god Huitzilopochtli. Also, it is believed that by using poisonous or dangerous animals for décor, evil spirits would be warded away.

## ***Types of Pyramids***

### ***ROUND PYRAMIDS***

Round pyramids are predominantly found in Calixtlahuaca, in the Toluca Valley. They are dedicated to the god of the wind Ehecatl, one of the forms of god Quetzalcoatl. The structures were constructed in a circular fashion to facilitate wind flow thereby preventing the structure from acting as a barrier that could hinder the wind god's entrance. According to Aztec and other pre-Columbian beliefs, Ehecatl blew wind in the four cardinal directions so that the earth would be cleansed, enabling Tlaloc to send rain. Gentle wind would be sent to the east, where *Tlalocan* (paradise of god Tlaloc) lived. Wind with gales would be sent in the direction of *Mictlan* (the underworld). Gentle

cold wind blew to the west where the *Cihuapipiltin* (noble women who died while giving birth) stayed, and to the south where the Huitznahua gods (the stars of the south) resided, strong gusty winds were blown [\[Fig. 160\]](#).

### ***TWIN STAIRS PYRAMIDS***

An example of a twin stairs pyramid is the Great Temple of Tenochtitlán. At its summit, it had two temples and a double staircase. The temples were dedicated to Tlaloc and Huitzilopochtli. The temple on the left side honored Tlaloc. Tlaloc was responsible for providing a good rain season and an abundant harvest. If enough rain was not forthcoming, the result was famine. For that reason, Tlaloc was highly revered. His temple was decorated with blue and white, the colors that symbolized water and moisture. The temple on the right side was dedicated to Huitzilopochtli. It was painted in red and white in honor of war and sacrifice. The Great Temple was very steep and high in altitude. The temples on top of the pyramid could not be seen unless a person stood on the platform. Temples similar to the Great Temple were tall in height because the gods lived in the sky and above the people. Being at the summit of a pyramid was the closest a person could be to the gods [\[Fig. 76a\]](#). Other examples of double staircase pyramids are found in Tenayuca and Tlatelolco.

### ***SHRINES (ADORATORIOS)***

Aztec shrines were important religious structures. Since the Aztecs were polytheistic, each shrine that was built was to honor a specific god. Since different shrines worshiped a specific god, their respective appearances were relatively diverse. Although shrines' exteriors varied, their internal structure was more uniform. The interior usually had a circular form with a round table in the middle of the room that was used to hold the offerings to the cult of the god to whom the shrine was built. Since the Aztecs were extremely devout and had many offerings, there usually was not enough room for all the offerings on the shrine. It was not uncommon for an additional building to be added. The adjoining structure consisted of a rectangular building that led to a smaller round room where there was a fire in the center to burn offerings. It was often the case that the second building would burn down because the roof was thatched of grass and

straw. It is believed that the above is the reason why large quantities of shrines were built, and why they were abundant throughout the Aztec empire. These shrines played an integral part in the religious lives of Aztecs who strongly believed that offerings were essential in pleasing the gods. Examples of these shrines are found in Mount Tlaloc and in the *Huixachtepetl* or Hill of the Star (presently Cerro de la Estrella) [Fig. 71].

### ***Early Capital Cities***

The general layout and architecture of Aztec capital cities was formally planned around a center with randomly scattered homes in the outskirts of town. Buildings were cosmologically oriented. At the heart of the city, there was a rectangular public plaza with civic and religious buildings at its borders. Most temples, shrines, and pyramid-temples were found in this area. Beyond the central area there were markets, dwellings, schools, and other randomly scattered buildings.

### ***City-State Capitals***

City-state capitals were cities that had control of provinces, and they were usually planned in a similar manner as the more local capital cities. Like capital cities, city-state capitals were also cosmologically oriented. They had a central plaza with adjoining civic and religious structures. Pyramid-temples were on the eastern side of the plaza facing west. Other important civic or religious buildings had a designated location according to the four cardinal directions. Since the Aztec empire was large and it dominated many cultures, most city-states had little or no contact with the imperial metropolis. As a result, the city-state capitals played a more important role in the daily lives of the people than did Tenochtitlán. City-state capitals were used by peasants to take care of personal, religious, and administrative obligations, like market days and other activities.

### ***Ballcourts***

Ball courts were used to play the famous Mesoamerican Ballgame, and they were generally constructed according to the traditional I-shape [Fig. 72], though there were some variations. The ballcourt was called *tlachco*, and the game played on the *tlachco* was *tlachtli* or *ullamaliztli*. The *tlachtli* was part of an overall early Mesoamerican

tradition that is still played today in some parts of Mexico. For the Aztecs, the ballgame was the main sport that embodied recreation and religious ritual, and whenever the Aztecs settled a site, their first act was to build a shrine for Huitzilopochtli and a ballcourt next to it. Ballcourts were associated to the myth of Huitzilopochtli at Coatepec, where he fought Coyolxauhqui (Moon goddess) and the Centzohuitznahua (the 400 stars), decapitated them, and ate their hearts at the center of the ballcourt called *itzompan* (place of the skull). The myth of Coatepec reflects the daily cosmic fight between the Sun (light and life) and the nocturnal celestial bodies (death and darkness) and the permanent victory of the Sun that allows the continuity of Life in the Universe. The movement of the ball was a metaphor for the cult drama of the moving sun across the sky, and was intended to reflect the celestial events on earth.

### ***Aqueducts and Dams***

The major cities of Tenochtitlán and Tlatelolco were erected on tiny marshy islands along Lake Tetzoco. Those swampy islands had a limited supply of drinking water, so an aqueduct was built to carry fresh water over the lake from springs at Chapultepec on the mainland [Fig. 73]. The Aztecs also created long canals for irrigation of the fields, and in the times of the king Motecuzoma I, the Tezcocan king Netzahuacoyotl built a dyke or dam that protected Tenochtitlán from floods that were very destructive during heavy rainy seasons. These sophisticated hydraulic works were some of the most impressive accomplishments of Aztec technology.

### ***Markets***

All major cities had thriving markets located near or adjacent to the main temple at the center of the community [Fig. 74]. According to Spanish chroniclers, Aztec law required that one goes to the market and bring supplies to town. Nothing could be sold on the way to the market for fear that of the Market god would punish the offender; this was enforced by strict penalties under the law. Markets were important not only for the economic prosperity of the city, but they also served as meeting places for gathering information such as rumors of rebellions or attacks by neighboring peoples, as was the case during the early years of the empire. Although markets and their respective plazas did not contain immense buildings like the Great Temple or palaces, they are important

to the architecture of the Aztecs in terms of their location, layout, and cosmological implications.

### **Gardens**

Many Aztec gardens were modeled after an old garden discovered by Motecuhzoma I in Huaxtepec that once belonged to “the ancestors.” The emperor decided to restore and rebuild the garden and a variety of plants and fauna were brought from other regions and planted. There after, other gardens flourished in cities such as the one founded by Netzahuacoyotl in Tetzcotzinco, several in Itztapalapa, Tetzoco, Tlatelolco, and in the palaces of future emperors (See Tetzcotzinco gardens later in this section). They were well organized and incorporated into the architectural plan of palaces. The gardens were primarily kept for pleasure, but they also held medicinal plants. Most gardens were very similar and can be compared to that of the palace of Itztapalapa that was described by Hernán Cortés (1986) as spaces with many trees and sweet-scented flowers. Bathing places of fresh water with well constructed steps leading down to the bottom allowed rulers a peaceful resting place. There was also a large orchard tree near the house, overlooked by a high terrace with many beautiful corridors and rooms. Within the orchard was a great square pool of fresh water, very well constructed, with sides of handsome masonry, around which runs a walk with a well-laid pavement of tiles, so wide that four persons can walk abreast on it, and 400 paces square, making it all 600 paces. On the other side of the promenade toward the wall of the garden were hedges of lattice work made of cane, behind which were all sorts of plantations of trees and aromatic herbs. The pool contained many fish and different kinds of waterfowl.

## **BUILDING MATERIALS AND TECHNIQUES**

The Aztecs were adept builders and craftsmen who used chisels, hard stones, and obsidian blades as tools. Many of the materials used were the same as those used for about two thousand years in the Mexican central valley. However, in Tenochtitlán’s most recent constructions, the Aztec began to focus on the solidity of buildings due to the ever sinking subsoil. As a result, *tezontle*, a strong and light volcanic stone was extensively used. *Tezontle* was very popular because it was easy to cut and its texture

and color was appealing. It was used in the construction of monumental buildings, filling in walls and roofing. Aztecs attributed the large quantities of *tezontle* stone to the destruction of the world according to the *Legend of Suns*, which explains that during the era of the third sun (*tletonatiuh*) there was a rain of fire that destroyed the world leaving the *tezontle* on the surface. Another popular technique used to prevent the city's sinking was to use platforms as foundations or to drive wooden piles into the earth in close-packed formations. This has been revealed in excavations.

Metal (except copper) was unknown to the Aztecs. Cords, wedges, or other means would be used to cut stone, and sand and water were popular abrasives. Most building materials used by the Aztecs were found in the region or acquired through trade. In Tenochtitlán swamp delicacies such as frogs, fish, and algae were traded for building materials such as rock and fill. Rock and fill were used to expand and stabilize the marshy *chinampas* (land plots that were used for agriculture) [Fig. 75]. Rubble, plaster, adobe, and lime to make stucco were also commonly used. Loose stone and rubble was imported from coastal regions. Outside of Tenochtitlán people used wood from uninhabited forests. Pine and oak were popular for making support beams and door jambs.

The Aztecs were so adept in working and carving stone that the Spaniards, in a later epoch, utilized and combined the Indian artists with their own artists who used metal tools in the construction of colonial edifices, resulting in the *tequitqui* or *mestizo* art of Mexico [Figs. 47 and 48].

## THE PRECINCT OF TENOCHTITLAN

### ***Introduction***

Tenochtitlán was a monumental city that stood for power and endurance, as well as a living metaphor for the Aztec story of migration and the supremacy of their Sun god, Huitzilopochtli. It was an urban island settlement that housed approximately 200,000 inhabitants at the time of the Spanish conquest. Its name is derived from *tetl*, rock;

*nochtli*, cactus; and *tlan*, a suffix signifying location. It is also believed that the city was named after Tenoch, a priest-king that ruled the Mexica when the city was founded in 1325 C.E. Tenoch had led his people through years of hardship in the Mexican central valley, during which time he devoutly followed Huitzilopochtli's signs that led to founding Tenochtitlán. Tenoch predicted that the land where the Mexica should settle would be found *vis-à-vis* an eagle perched on a prickly pear cactus devouring a serpent, a white field, a white frog, and a white willow (some of the same foundational elements that appeared in previous cultural stories, such as those from Tula and Cholula). The heart of Copil, nephew of Huitzilopochtli, would determine the exact location of where the city would be founded. Copil was the son of Malinalxochitl, the goddess sister of Huitzilopochtli. Malinalxochitl was a mischievous sorceress who was abandoned by the Mexica in Malinalco due to her evil witchcraft activities. Malinalxochitl encouraged animosity between her son and brother. When Copil and Huitzilopochtli fought, Copil was defeated and his heart was thrown over the lake of Tetzaco. It landed on the island that would become Tenochtitlán.

When the sacred city was founded, a temple in honor of Huitzilopochtli was immediately erected. The temple was constructed of reeds and straw with a foundation of swamp grass. According to Aztec history, that evening Huitzilopochtli spoke to a priest and advised him to divide the city into four *campan* (major *barrios* or quarters) with a temple dedicated to him at the center [Fig. 76b]. This nucleus became the ceremonial precinct of Tenochtitlán, with the Great Temple in the center surrounded by other temples and shrines that were later erected. The complex was enclosed by a wall and could only be entered through four gates oriented towards the cardinal directions, like the causeways that led outside of the city [Fig. 76a].

Initially, Tenochtitlán was structured in the same manner as other city-state capitals with a planned central area and an unorganized region on the outskirts of the precinct. The above layout changed when Tenochtitlán's population began to grow exponentially. When it was determined that Tenochtitlán would become the capital of the Aztec civilization, it was renovated. The architects of Tenochtitlán borrowed many stylistic attributes (such as the urban grid) from Teotihuacán and Tula. When

the city was reconstructed, the Toltec city of Tula was looted. Many Toltec monuments were incorporated into Tenochtitlán. One of the defining features of Aztec architecture in Tenochtitlán was the massive edifices. Since the structures were massive and on top of a marshy, muddy island, they continuously sank. As a result, new layers were added to pre-existing structures. This is particularly true of the Great Temple located in the central plaza. The early Spanish edifices suffered from the same problem. To assert their dominion the Spaniards built present day Mexico City over Tenochtitlán. In some parts of Mexico City, Aztec structures are literally eight meters below the city streets.

Tenochtitlán was said to have been a magnificent city, the Venice of the New World. According to the Spanish chroniclers, it was the most impressive and beautiful city that they had seen. Shortly after the conquest, plans of the city showing the precinct of Tenochtitlán were drawn. One of them is known as *Map of Mexico-Tenochtitlán of 1550* (Map of Uppsala) and the other was drawn up by Hernán Cortés in his second letter to the Emperor Charles V and published in Nuremberg in 1524 [Fig. 77]. These plans as well as Spanish chronicles and archeological data have been instrumental in documenting Aztec architecture and urbanization. Due to the Conquistadors' systematic destruction and the missionaries' religious zeal, the precinct of Tenochtitlán no longer exists. However, its glory can be retrieved from data archeologists have gathered and the descriptions of the Spanish chroniclers. Each is usually consistent with the other, though there are some discrepancies. Bernal Díaz del Castillo (1963), a Spanish eye witness, wrote that the Spaniards were astounded by the sight of villages built in the water, an enchanted vision like that of *Amadis of Gaul*, a Spanish romance of chivalry published in 1508, of a town rising from the water. Believing it to be a dream, they were surprised when they found friendly lodging in the palace of Itztapalapa. The palaces were very spacious and well built, of magnificent stone, cedar-wood, and wood of other sweet-smelling trees, with great rooms and courts, and all covered with awning of woven cotton." When describing the gardens, Díaz del Castillo continues to recount of a marvelous place both to see and walk in. He was never tired of noticing the diversity of trees and the various scents given off by each, and the paths choked with

roses and other flowers, and the many local fruit-trees and rose-bushes, and the pond of fresh water. Then there were a variety of birds which came to the pond. Another remarkable thing he wrote about was that large canoes could come into the garden from the lake, through a channel they had cut, and their crews did not have to disembark.

When describing the Great Temple, Díaz del Castillo added that to reach it, one must pass through a series of large courts. These courts were surrounded by a double wall masonry wall and paved, like the whole temple, with a very large smooth floor with flagstones. Where these stones were absent, everything was whitened and polished. The temple was so clean that there was not a straw or a grain of dust to be found there. When Díaz del Castillo arrived at the Great Temple, he observed six priest and two chieftains walk down from the top of the temple, where they were making sacrifices; they climbed the one hundred and fourteen steps to the top of the temple, which formed an open square on which stood a platform where the great stones stood on which they placed the poor Indians for sacrifice. On that platform, Díaz del Castillo also saw a massive image like a dragon, and other hideous figures, and a great deal of blood that had been spilled that day.

From the top of the temple, one could see, a great number of canoes, some coming with provisions and others returning with cargo and merchandise. Díaz del Castillo observed that no one could pass from one house to another of that great city and the other cities that were built on the water except over wooded drawbridges or by canoe. All the houses had flat roofs, and on the causeways were other small towers and shrines built like fortresses. The market swarmed of people buying and selling; some of the Spanish soldiers had been in many parts of the world, in Constantinople, in Rome, and all over Italy, and they proclaimed that they had never seen a market so well laid out, so large, so orderly, and so full of people.

### ***Urbanism***

The Aztecs built their capital on a tiny island in the lake Tetzaco that was enlarged by filling in surrounding marshy areas [\[Fig. 76a\]](#). It was divided into four large quarters (*campan*) symbolizing the four cardinal directions and a ceremonial center considered

to be the heart or the fifth direction (Mesoamericans thought that the center, the fifth direction, held the sky and earth together). The quarters were then subdivided into smaller *barrios* or neighborhoods called *calpultin* (sing. *calpulli*). Each *calpulli* had its own central plaza, shrines, patron deities, and administrative buildings, but the major temples were in the ceremonial precinct of Tenochtitlán.

The city was joined by three main causeways and a double aqueduct that brought fresh water from Chapultepec because the lake was salty. To the north lay the road to Tepeyacac (Tepeyac), to the south lay Itztapalapa and Coyoacan, and to the west lay the road to Tlacopan (Tacuba) and Chapultepec [Figs. 76b and 77]. In addition, there was a network of canals that crossed each other at right angles, dividing the city into four quadrants, plus the center that was the sacred precinct (symbolizing the Mesoamerican cosmogram of the four cardinal directions and the center). Each quadrant was further subdivided into the four directions, with a center and its own ceremonial precinct. The city followed the ancient city of Teotihuacán's urban grid-plan system. The pyramids and plazas were a metaphor for the surrounding mountainous volcanic shapes and the plateau of the lake.

Tenochtitlán had three types of streets: dirt roads for walking, water canals that required a canoe, and dirt-water streets which could be walked or canoed. Because the city was on top of a lake, many streets intersected with deep water canals flanked by bridges made of wood beams.

The Aztecs sought to acquire prestige by incorporating stylistic features of past great cultures, as seen in the Red Temples and ceremonial banquettes. The Red Temples were located on the north and south sides of the Great Temple proper. The temples were named after their color of decoration, having dull-red murals painted inside and out. They were raised on low bases and their styles were reminiscent of Teotihuacán. The ceremonial banquettes were identical to those constructed in the Charred Palace of Tula, illustrating a Toltec influence.

There were many sculptures, such as *Coatlicue*, systematically distributed in patios and

temples. Many were destroyed during the Conquest. The ones that remain are at the National Museum of Anthropology (for more information on the stone sculptures, see the section of Aztec Art).

### ***Ceremonial Plaza (Interior of the Sacred Precinct)***

The central ceremonial plaza was the religious and administrative center of Tenochtitlán. The core of the city was the Great Temple which rose at the intersection of the three causeways. It was surrounded by a ceremonial center that formed a quadrangular 400 meter square that was symmetrical in plan. It consisted of 78 religious structures, all painted in brilliant symbolic colors and surrounded by secondary complexes and rows of residencies [Fig. 78a, b, and c]. This sacred area was bounded by the *coatepantli* (serpent wall) and was dedicated to the religious ceremonies celebrated throughout the year. The ceremonial center was placed on a raised quadrangular platform that formed a square where ritual buildings were symmetrically arranged. The area consisted of recurring stairways, platforms, and house like temples laid out in a hierarchy that faced the four directions in a prevalent east-west axis. The ceremonial precinct included diverse pyramid-sanctuaries like the Templo Mayor (Great Temple) dedicated to the gods Huitzilopochtli and Tlaloc, the circular Temple of Quetzalcoatl, the Temple of Tonatiuh, the temple-palaces of the eagle and jaguar warriors, as well as the ballcourt, a *temalacatl* (gladiatorial-stone), the *calmecac* (school), libraries, the *tzompantli* (skull rack), ponds for ritual ablutions, and residences for priests. In the patio of the temple of Xipe Totec or *Yopico* there was an elevated base platform that had a *temalacatl*, a round stone where prisoners were tied during the gladiatorial sacrifice.

The ceremonial plaza was surrounded by the royal palace and the houses of nobles, which were located immediately outside of the *coatepantli*. The homes of the lower class stood at the periphery of the precinct. The major market of Tenochtitlán was adjacent to the south of the central plaza. There were also small markets that served the smaller wards far from the precinct. Some sections of Tenochtitlán's outskirts consisted of cultivated *chinampa* plots that extended on to the lake. Crops were grown on these small marshy floating islands. Their layout is illustrated in the *Plano*

*en Papel Maguey*, an early colonial document [Fig. 75]. The architecture of Tenochtitlán is not to be understood in terms of the design or style of its buildings. Rather, its plans, monuments, and natural settings are expressions of the daily lives and religious beliefs of the people.

Tenochtitlán was a large city with multiple structures. Due to the fact that Mexico City is literally on top of the Aztec buildings and the subsoil is fragile, excavations are limited. In addition, many of Mexico City's structures are colonial in nature, and thus are considered historic. For those reasons, there are limited areas designated for archaeological research. For example, some important structures are believed to be beneath the historic and colonial cathedral of Mexico City. Due to its historic and religious nature, the cathedral cannot be destroyed, although limited excavations are being practiced rescuing interesting materials. Nevertheless, these edifices were an integral part of the architecture and urbanization of Tenochtitlán. For example, the temple of Tezcatlipoca lies beneath the modern archbishop's headquarters. It is believed that it may have been important because it was 20 meters high and it had an 80 step stairway.

On the west side of the precinct was the *tozpalatl*, a structure surrounding the sacred spring used for ritual bathing. This area also contained the *teutlalpan*, a token wooded area for hunting rituals enclosed by four walls. Also there was the tall pole that was adorned during festivals of *Xocotl Huetzi* (Falling of the Fruit) when the sacrifice by fire was performed in honor of the fire god Xiutecuhtli, and prisoners were thrown alive into the flames of a ceremonial fire.

The *coateocalli*, a temple where the captured gods and religious paraphernalia of conquered communities were held, was located directly below the corner of present day Donceles and Argentina Street in the Northwest part of the precinct. Near that area there were other buildings that functioned as lodgings for priests, penance houses, and preparation homes for the youth in service of the temple. The circular temple of Quetzalcóatl was located directly in front of the Great Temple. Behind the temple of Quetzalcóatl, on the western end of the ceremonial center lay the ballcourt for the ritual

ballgame. The Temple of the Sun appears to have been located on the southwest corner of the precinct, and it faced the stone for gladiatorial sacrifices. Other temples in the ceremonial center were: the temple of the goddess Cihuacóatl, the House of Eagle Warriors, which formed one of the most important military orders (this one was found in the excavations of the Templo Mayor Project), the Temple of Chicomecoatl, the goddess of vegetation and corn, and the Temple of Xochiquetzal, the goddess of beauty and love associated with artisans and artists.

### ***The Great Temple***

The Great Temple was one of the finest testaments of Aztec monumental architecture and power. The temple's architectural layout, organization, location, and art work represented the social, religious, and geographical center of the Aztec universe. According to Aztec thought, the central point where the temple stood was where the celestial and sub-terrestrial levels (vertical dimensions) intersect with the terrestrial realm (horizontal dimension). The celestial realm consisted of 13 heavens (where celestial bodies lie and gods live), the terrestrial consisted of the four world directions, and the sub-terrestrial realms consisted of nine levels that the deceased must pass through to get to the underworld [Fig. 70]. The temple was built on the conceptual spot where the vertical channel met with the horizontal. In addition, the Great Temple was built in a city surrounded by water. Aztlan, the Aztec homeland, called *Cemanahuac*, meaning the place in a circle of water, was also in the middle of a lake. Metaphorically, all shores and seas can be called *Cemanahuac*. Thus *Cemanahuac* or *Anahuac* was, by extension, the name that the Aztecs used to refer to the Valley of Mexico and in general to the world. In addition, it was prophesized that the god Huitzilopochtli would lead the Aztecs to a place where they would have power and grandeur. Thus, the Aztecs claimed to be in the center of the universe as the chosen people.

The ceremonial center of Tenochtitlán developed around the temple of Huitzilopochtli. Over time, the temple followed the tradition of other Mesoamerican pyramids as it was rebuilt in enveloping layers. Thus, the original temple with its offerings, sculptures, and related artifacts was completely enclosed by a new superimposed structure, evolving from a humble dwelling to the center of the Aztec Universe.

During the excavations of the Great Temple, its architecture revealed some interesting facts. The first is that the growth of the temple during consecutive imperial reigns was a result of the state patronage, in particular that of Motecuhzoma Ihuilcamina and his son Axayacatl [Fig. 79a, b, c]. The second is that the pyramid was organized as a symbolic man-made mountain. The third is that the pyramid-temple was organized as a dual stage where religious and mythological rites related to the *Tonacatepetl* (Mount of Sustenance associated with god Tlaloc and its shrine on Mount Tlaloc) and the Mount of *Coatepec* (Snake Mountain, place of birth of Huitzilopochtli) were reenacted [Fig. 80b].

The Great Temple is a microcosm for the Aztec worldview. According to Eduardo Matos Moctezuma, the platform that supports the temple corresponds to the terrestrial level due to the fact that sculptures of serpents, symbols of the earth, are located there. There are two large braziers on each side of the serpent-head sculptures at the center of the north and south façades and on the east side on the axis with the central line of the Tlaloc and Huitzilopochtli shrines. The braziers indicate that perishable offerings were given, further evidencing that the platform was the terrestrial level. Four slightly tapering tiers of the pyramid that rise to the summit of the two shrines of the chief gods represent the celestial level. The sub-terrestrial realm (underworld) lies beneath the earthly platform. Many offerings have been found below this floor. Lastly, Nezahualpilli's words to Ahuitzotl, an Aztec emperor, during the commemoration of the completion of one of the temple's construction phases, affirmed its sacredness. He stated that Tenochtitlán was a powerful kingdom, the root, the navel and the heart of the entire world.

### ***Myths Symbolized in the Great Temple***

The Great Temple is a dual pyramid with twin temples on its top platform, representing two sacred mountains: *Coatepec* on the south side dedicated to Huitzilopochtli, and *Tonacatepetl* on the north side dedicated to Tlaloc [Fig. 80a]. The south side of the temple is an architectural representation of the myth of the birth of Huitzilopochtli on the mount of Coatepec (or Hill of the Serpents), symbolizing the Aztecs' rise to power.

Coatepec is a Toltec site near Tula and was visited by the Aztecs in 1163 C.E. during their long migration. It was at Coatepec that Huitzilopochtli, the child of a virginal conception, was born from the womb of Coatlicue and where he fought and killed his jealous sister, Coyolxauhqui (the moon goddess), and his brothers, the Centzohuitznahua (the 400 hundreds stars from the south) [Fig. 81]. The temple is filled with sculptures of serpents, representations that are in accordance with the name of Coatepec that means Snake Mountain. The myth of Coatepec probably had a historical foundation related to a conflict between two Aztec factions trying to gain control over the entire group and seeking to impose leadership during the migration. It is apparent that one group wanted to stay in Coatepec and the other group wanted to continue in pursuit of the Promised Land that Huitzilopochtli had offered to them. The myth was important because it represented the daily cosmic battle between the sun (Huitzilopochtli) and the deities of the night (moon and stars) and his triumph at dawn in the East. It was also a theological justification for the Aztecs settling in the area of Lake Tetzaco and for their practices of warfare and human sacrifice.

According to the myth, after his victory against Coyolxauhqui, Huitzilopochtli remained on the hill of Coatepec. His shrine on the top of the Great Temple is a symbol of his reign. In the same myth Coyolxauhqui was decapitated by her brother and her dismembered body rolled to the bottom of the hill. On the platform of the base of the temple, a large bas-relief sculpture representing the decapitated goddess was discovered [Fig. 27a, b]. The Coyolxauhqui sculpture was found in several of the construction stages/layers, illustrating the continuity of this myth. Some scholars believe that the sacrificial stone at the entrance of Huitzilopochtli's shrine indicates the immolation of his sister and was used in re-enactment rites of human sacrifice. There were decapitation rites that involved female victims during the festival of *Ochpaniztli*, and archaeologists have found female skulls placed as offerings related to the Coyolxauhqui sculpture. In addition to excavation results, the Spanish chroniclers, through their descriptions of rites conducted during festivals, provide data suggesting that the temple was used to recreate the myth of the birth Huitzilopochtli. During festivals, tribute was offered and people were sacrificed at the top of a scaffold, thrown

to the ground, beheaded, and rolled down the stairways ending at the bottom of the pyramid. This ritual reenacted the mythic events at Coatepec Hill.

The northern side of the Great Temple symbolizes the mountain *Tonacatepetl* (Mount of Sustenance) and is dedicated to Tláloc, the god of fertility that provided food through his beneficial waters that form rain clouds on mountain tops. This mountain is also related to the myth of the creation of Aztec man and the discovery of maize. There are two beliefs concerning the association of this structure with Tlaloc. The first is that the temple represents Mount Tlaloc, a hill nearby located between the cities of Tetzoco and Cholula where nobles and rulers from central Mexico made offerings of jewels, valuables, and food to the deity so that he would provide the necessary rain for a good harvest season [Fig. 132a]. The second belief according to another myth, is that it was at the Hill of Sustenance where Quetzalcoatl discovered maize and brought it to the gods, so that they could give it to human beings as primordial foodstuff. But then the Tlaloques, rain deities, assistants to god Tlaloc, seized the maize. However, Tlaloc and the Tlaloques provided the maize and other foods by fertilizing the earth and making the plants grow. This myth shows how the fertility of the earth is controlled by the power of water. Several Spanish chronicles describe the elaborate ceremonies conducted at Tlaloc's temple.

Archaeology and historical accounts show how the temple was the *axis mundi* of the Aztecs, the place where some of their main myths came alive as they were reenacted through ritual. According to Eduardo Matos Moctezuma (1988), Tlaloc and Huitzilopochtli are joined together in architecture, myth and ritual, and these two gods represent water and war, life and death, food and tribute, all fundamental to the very existence of the Aztec people. And so it is appropriate that they are connected to the Great Temple.

### ***Construction Stages Found In the Archeological Excavations of the Great Temple***

The Great Temple was enlarged at relatively short periods, seven times completely and four times partially [Fig. 79a, b, and c]. Each subsequent superimposition was more grandiose because of a need to improve and to surpass the previous construction, as

well as to project a prestige and sense of power of the ruler in position. They reflect the emperors' ambition and personality, which are imprinted in the overwhelming monumentality of Aztec art to create a sense of imperial domination and religious transcendence [Fig. 82].

### *Construction Phase I*

Phase I is related to the first humble temple erected by the Aztecs when they arrived in Tenochtitlán in 1325 C.E. This temple is known only from historical accounts because it is not possible to excavate below Phase II due to the fragile watery subsoil.

### *Construction Phase II*

This phase is consistent with historical accounts of Phase VII that the Spaniards witnessed [Fig. 83]. At the summit, in front of the entrance to Huitzilopochtli's shrine, there is a sacrificial stone (*techcatl*) similar to the one described by the chroniclers [Fig. 84]. Its building material was *tezontle* (volcanic stone). The entrance to the Tlaloc shrine has a colorful *chacmool* used as a divine messenger that took sacrifices of children performed here and offerings from the priest to gods [Figs. 85 and 32]. Some interior murals of both shrines have survived. Representations and colors corresponded to the specific deity. Pine and wood, used for pillars and doorjambs, were also found.

Archeologists believe that Phase II corresponds to the period between 1325 and 1428 C.E. when the early emperors Acamapichtli, Huitzilihuitl, and Chimalpopoca reigned.

### *Construction Phase III*

Not much has survived of Phase III except for the plain pyramidal base with the double stairways. Eight *tezontle* sculptures of life-size standard-bearers were found leaning near the base of the stairs that led to the Huitzilopochtli shrine. They perhaps represent the *Centzohuitznahua* (Huitzilopochtli's 400 brothers) [Fig. 86]. This phase, according to a date carved at the base of the temple may correspond to 1431 C.E. during the reign of Itzcoatl.

### *Construction Phase IV*

Phase IV of construction is considered to be one of the most spectacular because

considerable material and data have been found. During this phase, the pyramidal base was enlarged and adorned with braziers and serpent heads on all four sides [Fig. 87]. Oversized braziers at the rear of the Tlaloc side bear his visage, and the braziers on Huitzilopochtli's side have a large bow, a symbol of the Sun deity. Traces of offerings have been found. Phase IV also included an additional partial enlargement. The west side of the main façade was amplified and adorned. The temple lay on a vast platform with a single stairway. There were large, undulating serpent bodies around the corners [Fig. 88]. Each serpent had an individualized face and traces of paint. The Stairway was broken by a little altar near the base of Tlaloc's shrine that has two frogs (symbols of water). In addition, the middle of the stairway on the platform side of Huitzilopochtli's shrine has a two meter long tablet that is part of the fourth stair and has a serpent engraved on the rise. The base of the platform formed the stairs. Four serpent heads mark the place where the two structures dedicated to Tlaloc and Huitzilopochtli meet. At the foot of the stairway, in the middle of Huitzilopochtli's side, the Coyolxauhqui Stone showing the dismembered body of the moon goddess was found; it is a magnificent carving in low relief [Figs. 87 and 27a]. Many offerings were found beneath this platform [Fig. 89]. It appears that this phase corresponds to the year 1454 C.E. and 1469 C.E. during the reigns of Motecuhzoma I and Axayacatl.

### *Construction Phase V*

Little has survived of Phase V. However, stucco plaster on the Temple platform and part of the floor of the ceremonial precinct was found [Fig. 90]. This phase is associated to the reign of Tizoc (1481-1486 C.E.)

### *Construction Phase VI*

The little of what remains of Phase VI includes the great platform underlying the entire temple structure [Fig. 90]. Part of the stairway is still visible. The principal façade was adorned by three serpent heads and a balustrade. Three small temples designated with the letters A [Fig. 91], B (tzompantli or skull-rack altar) [Fig. 92], and C (Red Temple of Teotihuacán influence) [Fig. 93], as well as the precinct of the Eagle warriors belong to this phase [Fig. 94]. In this last building, once occupied by those brave elite warriors, there is the Eagle Patio [Fig. 95] that is flanked by decorated stone banquettes

reminiscent of Tula [Figs. 96 and 97]. This phase corresponds to the reign of Ahuitzotl (1486-1502 C.E.).

### ***Construction Phase VII***

Phase VII constitutes the last building stage and was the phase of construction seen by the Spaniards in the 16<sup>th</sup> century. The stone flooring of the ceremonial precinct and traces of where the Great Temple stood are all that remain [Fig. 90]. This phase was undertaken during the reign of Motecuhzoma II (1502-1520 C.E.).

### ***Emperors' Palaces***

The Palace of Motecuhzoma II was one of the most elaborate and grand buildings constructed in the Aztec empire [Fig. 98]. It was located on the southern side of the Great Temple, where the Presidential Palace of Mexico stands today. It was two stories tall and had a large courtyard. The emperor's palace occupied an estimated 2.4 hectares (a little more than 5 acres). The royal palace was a large complex that housed 1,000 guards, servants, nobles, cooks, courtiers and members of the king's harem. It was reported that approximately 600 nobles attended the king's palace at all times. The aristocracy's residences were either attached to the palace or located near by. The palace was surrounded by a garden, other minor palaces, residences, military houses, and other structures for military orders and warrior groups. The temples of the precinct were surrounded by similar edifices as the emperor's palace. The palace had many rooms with the largest on the first floor. Columns were placed on the first floor in order to support the weight of the second floor. The staircase that connected the ground level to the second level was made of pure marble and was located directly in the center of the palace. Marble was a luxury in the Aztec empire; only the richest people in the empire had access to this fine good. The wealth of the emperor was manifested in the numerous paintings, gold panels, carvings, and mosaics found throughout the palace. According to Bernal Díaz Del Castillo (1963), Motecuhzoma's dining room had a low wooden throne (*icpalli*) and a low table covered with fine cloths. When the emperor ate, he was hidden by a golden-colored wood screen door so that he would not be seen by those in attendance. The emperor was served by numerous women and was entertained by dancers, singers, and musicians.

There were several main rooms on the first floor. The room in which the emperor received nobles, travelers, and other officials was named the Reception Chamber. The second and largest room (three times the size of the Reception Chamber) in the palace was the Main Meeting Chamber. It was designed to make the emperor appear omnipotent and powerful. For example, the emperor was raised above the people who visited him vis-à-vis an elevated platform with stairs that led to the emperor's throne. Thus, his presence was felt. This was the room where messengers provided the emperor with news about the empire. The last main room on the first floor was the Tribute Room/Store that was used to house the gifts the emperor received from his loyal citizens. The emperor received such large quantities of gifts, that there was usually not enough room in the Tribute Store for all his gifts/goods. Another important section of the palace was the emperor's personal apartments.

Not only was the palace exceedingly large, but it was also highly complex. The structure housed multiple rooms that served specific functions. There was an armory, a tribute hall, special rooms for women that wove textiles for the royal household, artisan workshops, an aviary, a zoo, and a pond. The aviary housed various species of birds from nearby and tropical regions. The zoo contained animals such as snakes, foxes, and jaguars. The special pond contained aquatic birds.

Motecuhzuma II's gardens and baths were an integral part of the overall layout and architecture of his palace. They were modeled after the gardens at Tetzaco. Because the gardens and baths no longer exist, the account of Bernal Díaz del Castillo is very important. He described the gardens as being filled with fragrant flowers and trees, promenades, ponds with fresh water, and canals with running water. He also wrote that the trees were full of small birds bred on the premises and the gardens were full of medicinal plants.

The palaces of previous emperors were also magnificent. The palace of Axayacatl is believed to be located beneath present day Tacuba and Monte de Piedad Streets (it was initially believed to have been below Guatemala and Correo Mayor Streets). The

palace of Motecuhzuma II is believed to be below the present day National Palace. On the west side of the National Palace's main plaza or *zócalo* (where the Aztec market-plaza was) lay the *petlacalco* (great warehouse), the *calpixcalli* (house of the butlers), the *pilcalli* (house of the noblemen) and *cuicacalli* (house of singing).

Cauhtemoc's residency, erected by his father Ahuitzotl is considered to be west of the plaza of Santo Domingo [\[Fig. 78a\]](#).

### **Homes of the Inhabitants**

The royal palaces and the homes of the nobility were built near the main square of the Great Temple while the houses of the *macehualtin* (potters, stonecutters, weavers, jewelers, farmers and fishermen) surrounded the city centers. For the Aztecs, the type of dwelling in which a person lived was an indication of status. The homes of the peasants and nobles were similar in layout and pattern, but different in size, decoration, and construction materials. The nobles' homes were made of stone and white-washed plaster. Their interior walls were of stucco painted with colorful murals. The dwellings of the *macehualtin* were humbler. They lived in different *calpultin*, and their homes were made of adobe bricks (mud mixed with straw or rushes). Wood and straw were also used in the construction of houses and their sloping gabled roofs.

Aztec residences were typically one story high (with the exception of palaces), and consisted of two structures, and housed up to 12 people. The first structure was comprised of a single room with a perfectly level floor divided into four areas. The bed area was where the entire family slept. The kitchen area was where the meals were prepared. In most kitchens, a *metlatl* (*metate*), a flat stone for grinding corn, and a *comal*, a clay dish for baking tortillas, were found [\[Fig. 99\]](#). There was a separate area designated for eating. This is where the family would sit, eat, and discuss the events of the day. The last area is where the family shrine was found.

The shrine area contained figurines of gods. Aztec homes did not have doors because theft was not an issue. The second adjoining structure was a *temazcal* (steam bath) [\[Fig. 100\]](#). According to Aztec doctors, steam baths were therapeutic and all families were advised to have one. Next to the bath area, a chimney and a stove were found.

The hot walls of the stove maintained the room's heat. When an Aztec wished to steam the room, water would be poured on the stove's wall. In order to maintain the stove's walls heat, the furnace had to constantly be burning. Although most Aztec homes contained a steam bath, they were predominantly used by the nobles because they had more leisure time than the peasants.

### ***Chinampas***

The swamps and gardens were on the outskirts of the city. *Chinampas*, known as "floating gardens" were rectangular patches of earth on the swamp used to cultivate food and to build houses [Fig. 101]. They were constructed on the swampy lakebed by staking out long rectangular enclosures of about 2.5m wide and 30m long. Stakes were woven together to form fences which would be covered with decaying vegetation and mud. Another plot would be constructed parallel to the first. The water in between each plot formed a canal. This developed long rectangular *chinampa* patterns. *Chinampas* were stabilized by planting slender willows around their perimeter. The willows' dense roots anchored the retaining walls. In order to irrigate the *chinampas*, a sophisticated drainage system of dams, sluice gates, and canals were installed. The *chinampas* allowed the Aztecs to have productive planting areas.

### ***Ballcourts***

The main ballcourt (*tlachtli*) of Tenochtitlán was located on the east-west axis of the ceremonial precinct's western end, aligned with the Great Temple and the Temple of Quetzalcoatl [Fig. 102]. The east-west axis of the ballcourt is meaningful in the context of sacred geography because the ballgame represents the daily cosmic battle between the day and night, Quetzalcoatl and Tezcatlipoca, and ultimately, Huitzilopochtli and Coyolxauhqui. In the architecture of the ballcourt, ancestral myths are brought to life.

The ballcourt was formed by an I-shaped area with two large sloping walls, tiers, porticos for dignitaries, and boxes for judges. The structure was adorned by skull-racks, *tzompantli* that contained the heads of the decapitated captives from diverse rituals. In many cases the skulls were trophy heads from decapitation rituals linked to the ballgame. The skull-racks consisted of a base with upright wooden posts. The skulls of

the sacrificed were strung on top of bars located between the posts. It is believed that the main skull-rack was located in an area that is now buried under the Cathedral of Mexico City.

### ***Temple outside the Sacred Precinct***

This small circular temple was found during the construction of the Pino Suarez Metro Station in downtown Mexico City, but outside of what was the ceremonial precinct of the Aztec capital Tenochtitlán [\[Fig. 103\]](#). The circular design of its two upper bodies suggests the possible dedication to Ehecatl-Quetzalcoatl, the wind god. It was common in Aztec architecture the construction of this kind of temples in diverse cities and their shape symbolized the whirlpools and free circulation of wind.



**Figure 27a. Coyolxauhqui (photo Fernando González y González).**



**Figure 27b. Older Coyolxauhqui Relief (photo Fernando González y González).**



Figure 32. Chacmool of the Tlaloc Shrine (photo Fernando González y González).



Figure 47. Acolman Cross (Manuel Aguilar-Moreno).

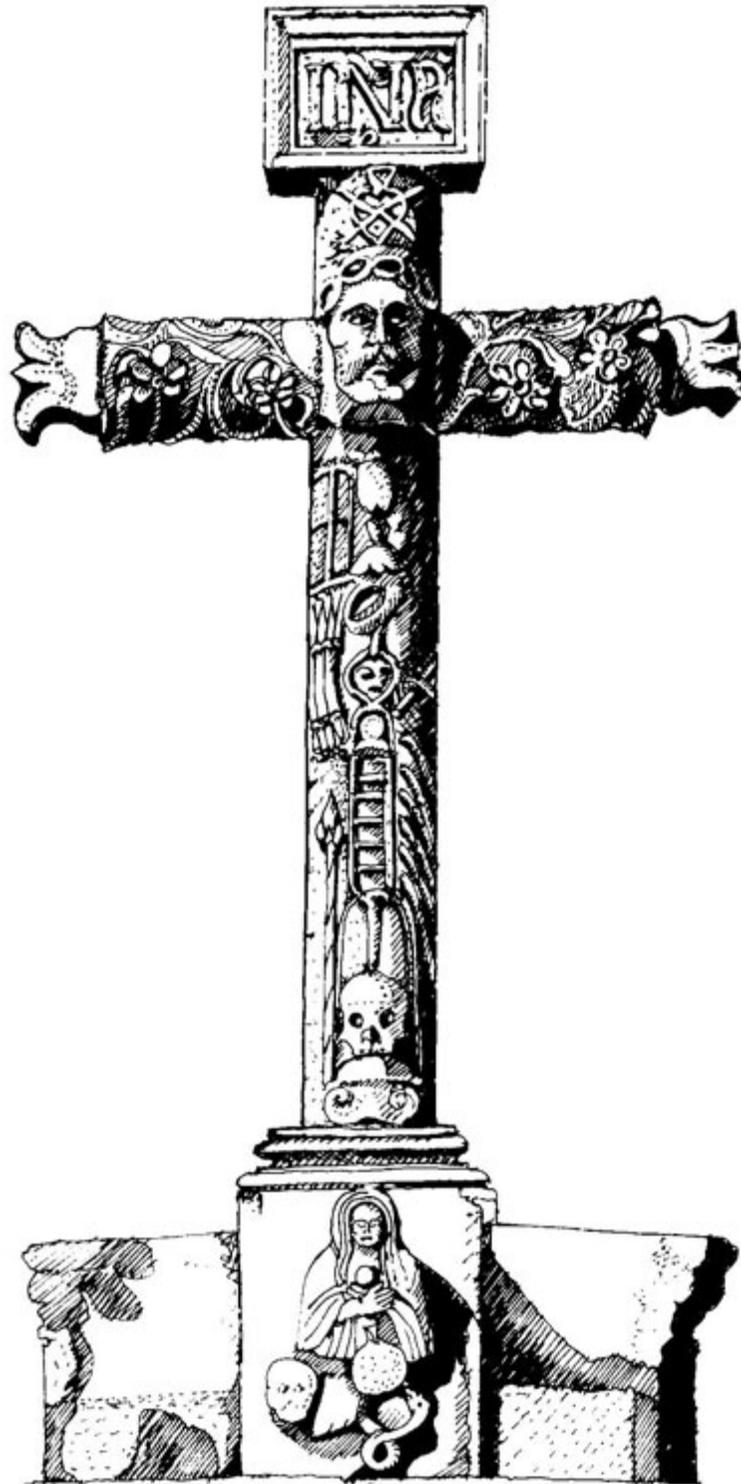


Figure 48. Acolman Cross (drawing Richard Perry).

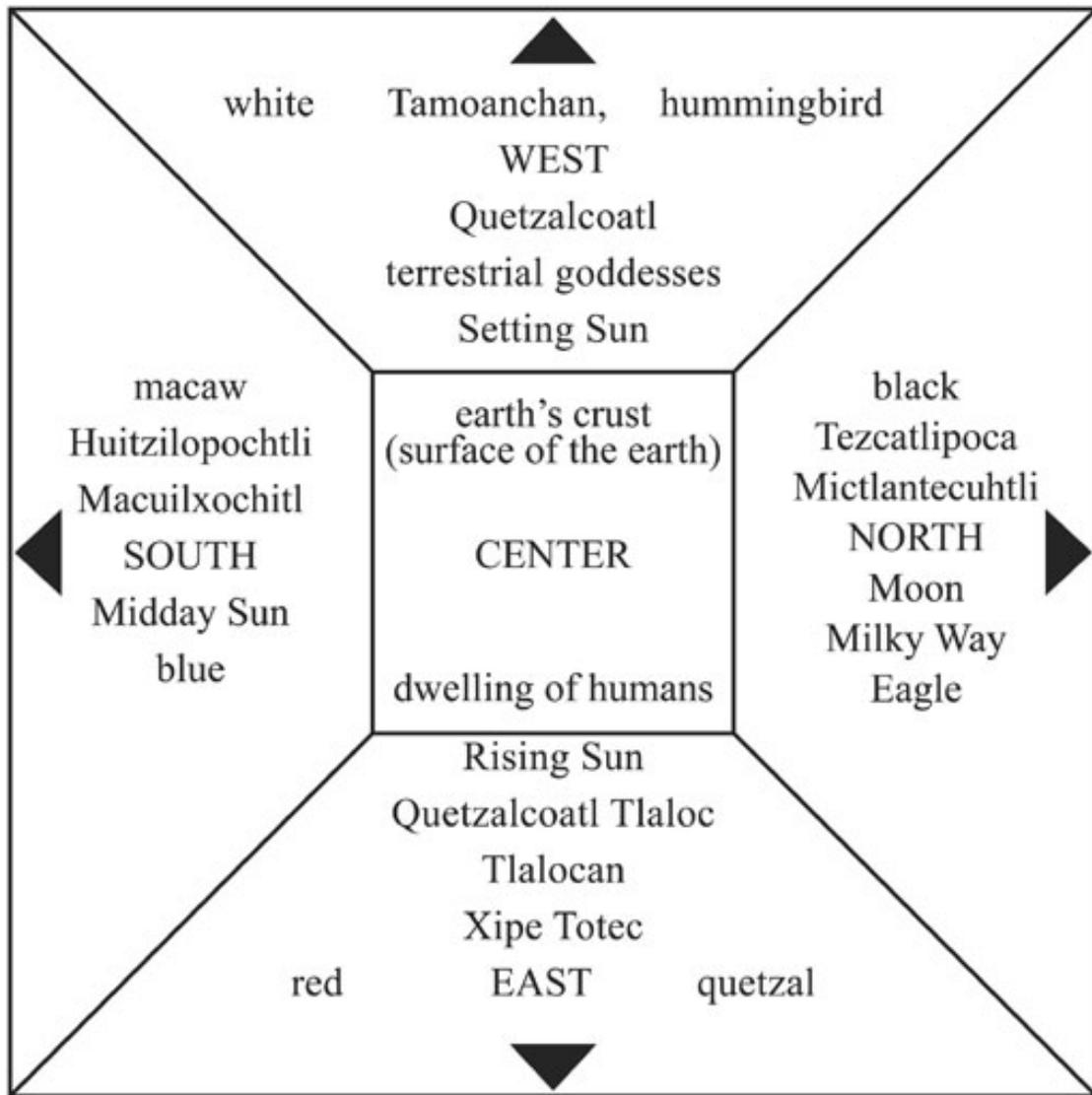


Figure 69. Diagram of Orientation of a Pyramid-Temple (drawing Lluvia Arras).

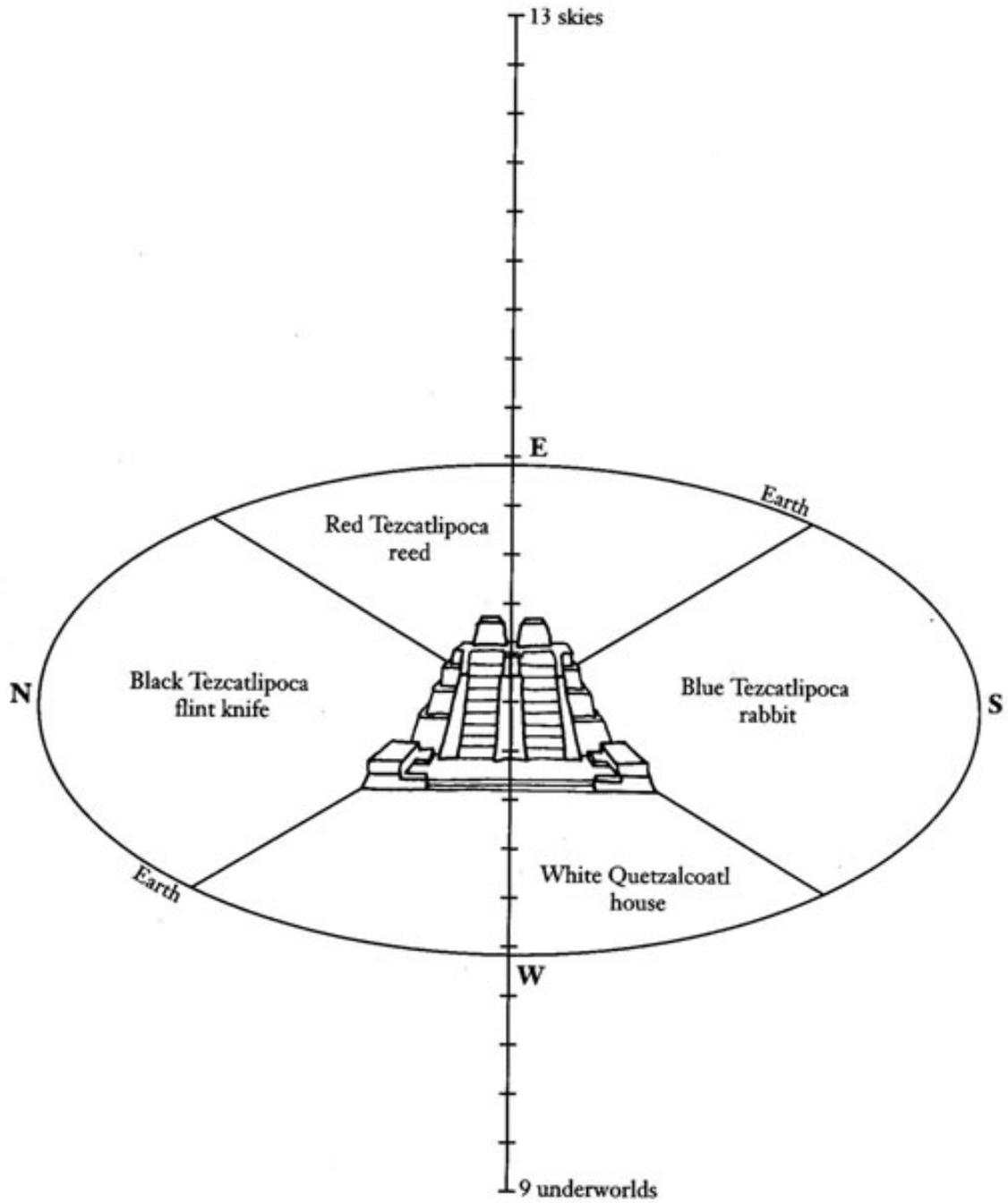


Figure 70. Aztec Cosmogram (drawing by Fonda Portales).



**Figure 71. Shrine in the Hill of the Star (photo Fernando González y González).**



**Figure 72. Ball Court of Coatetelco (photo Fernando González y González).**



**Figure 73. Aqueduct Chapultepec-Tenochtitlan (photo Fernando González y González).**



**Figure 74. Tlatelolco Market (photo Fernando González y González).**



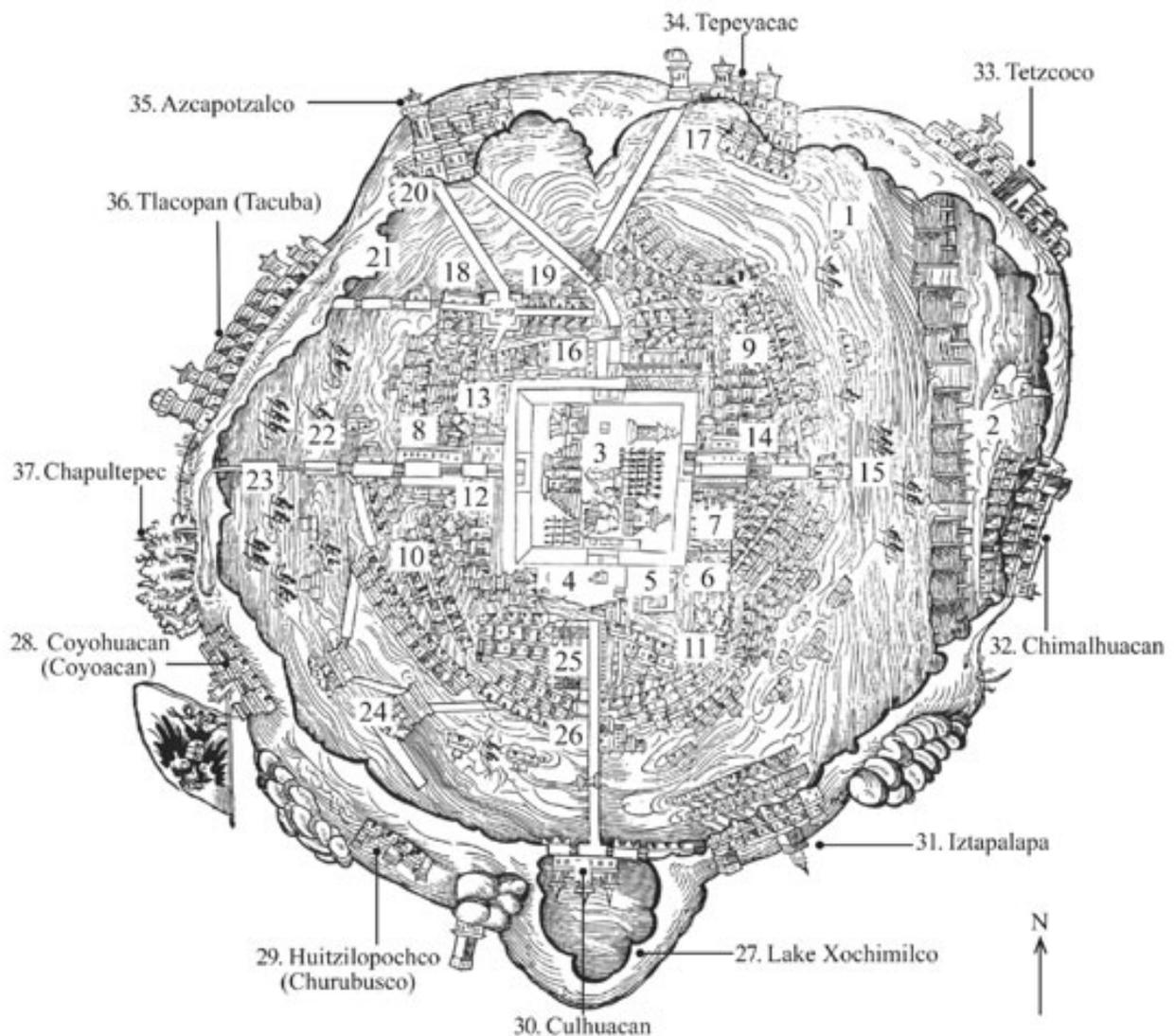
**Figure 75. Chinampas (photo Fernando González y González).**



**Figure 76a. Portrait of Tenochtitlan by Miguel Covarrubias (photo Fernando González y González).**

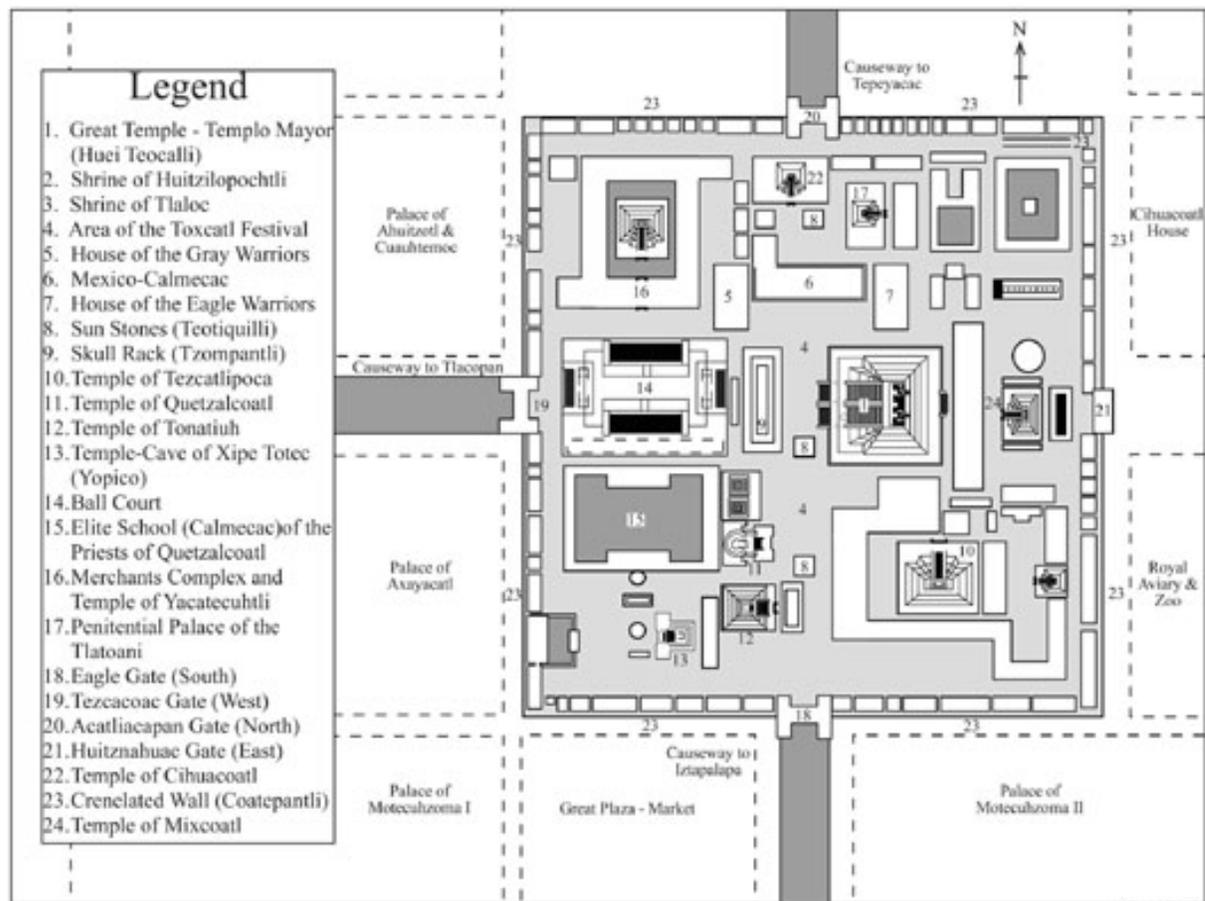


**Figure 76b. Map of Tenochtitlan (drawing Lluvia Arras).**



1. Lake Tetzoco	14. Causeway from Ceremonial Precinct to Tetamazolco Dock	24. Motecuhzoma's Country Side Houses
2. Netzahualcoyotl's Dike	15. Tetamazolco Dock	25. Iztapalapa Causeway
3. Ceremonial Precinct with Great Temple	16. Tepeyacac Causeway	26. Xoloc's Fortress
4. Plaza and Market	17. Tepeyacac Causeway	27. Lake Xochimilco
5. Motecuhzoma's Palace	18. Tlatelolco's Great Temple	28. Coyohuacan (Coyoacan)
6. Botanical Garden	19. Tlatelolco's Market	29. Huitzilopochco (Churubusco)
7. Zoo	20. Causeway and Aqueduct from Azcapotzalco to Tlatelolco	30. Culhuacan
8. Cuepopan District	21. Causeway and Aqueduct from Tlacopan to Tlatelolco	31. Iztapalapa
9. Atzacolco District	22. Tlacopan Causeway (Tacuba)	32. Chimalhuacan
10. Moyotlan District	23. Aqueduct from Chapultepec to Mexico lined up with Causeway to Tlacopan	33. Tezcoco
11. Teopan District		34. Tepeyacac
12. Axayacatl's Palace		35. Azcapotzalco
13. Cuauhtemoc's Palace		36. Tlacopan (Tacuba)
		37. Chapultepec

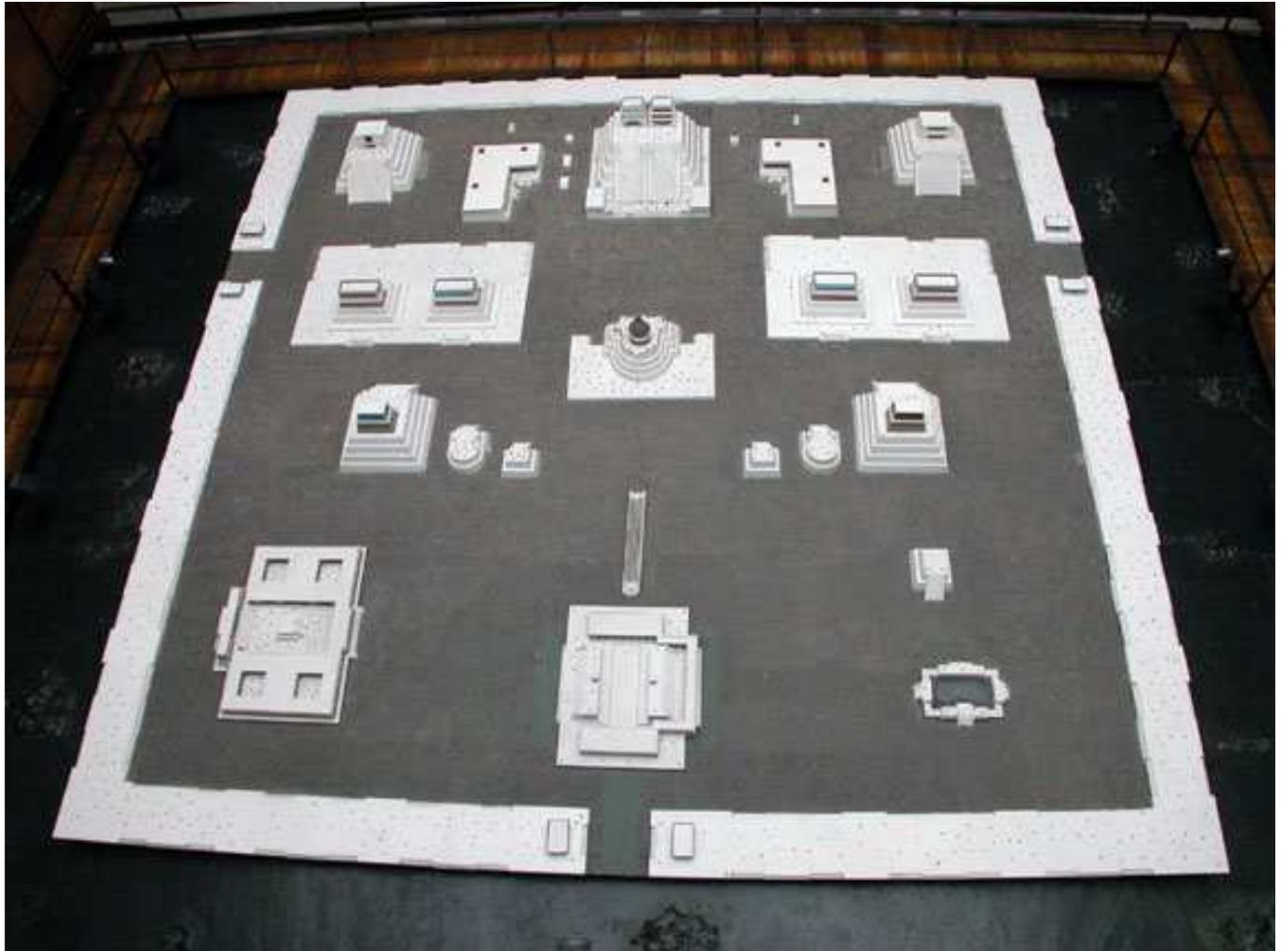
**Figure 77. Map of Tenochtitlan by Hernán Cortéz (drawing Lluvia Arras).**



**Figure 78a. Plan of the Sacred Precinct of Tenochtitlan (drawing Lluvia Arras).**



**Figure 78b. Model of Tenochtitlan by Ignacio Marquina (photo Fernando González y González).**



**Figure 78c. Model of Tenochtitlan at the Templo Mayor Museum (photo Fernando González y González).**



**Figure 79a. Model of the Great Temple (photo Fernando González y González).**



**Figure 79b. Superimpositions of the Great Temple (photo Fernando González y González).**



**Figure 79c. Superimpositions of the Great Temple (photo Fernando González y González).**



**Figure 80a. The Great Temple (photo Fernando González y González).**

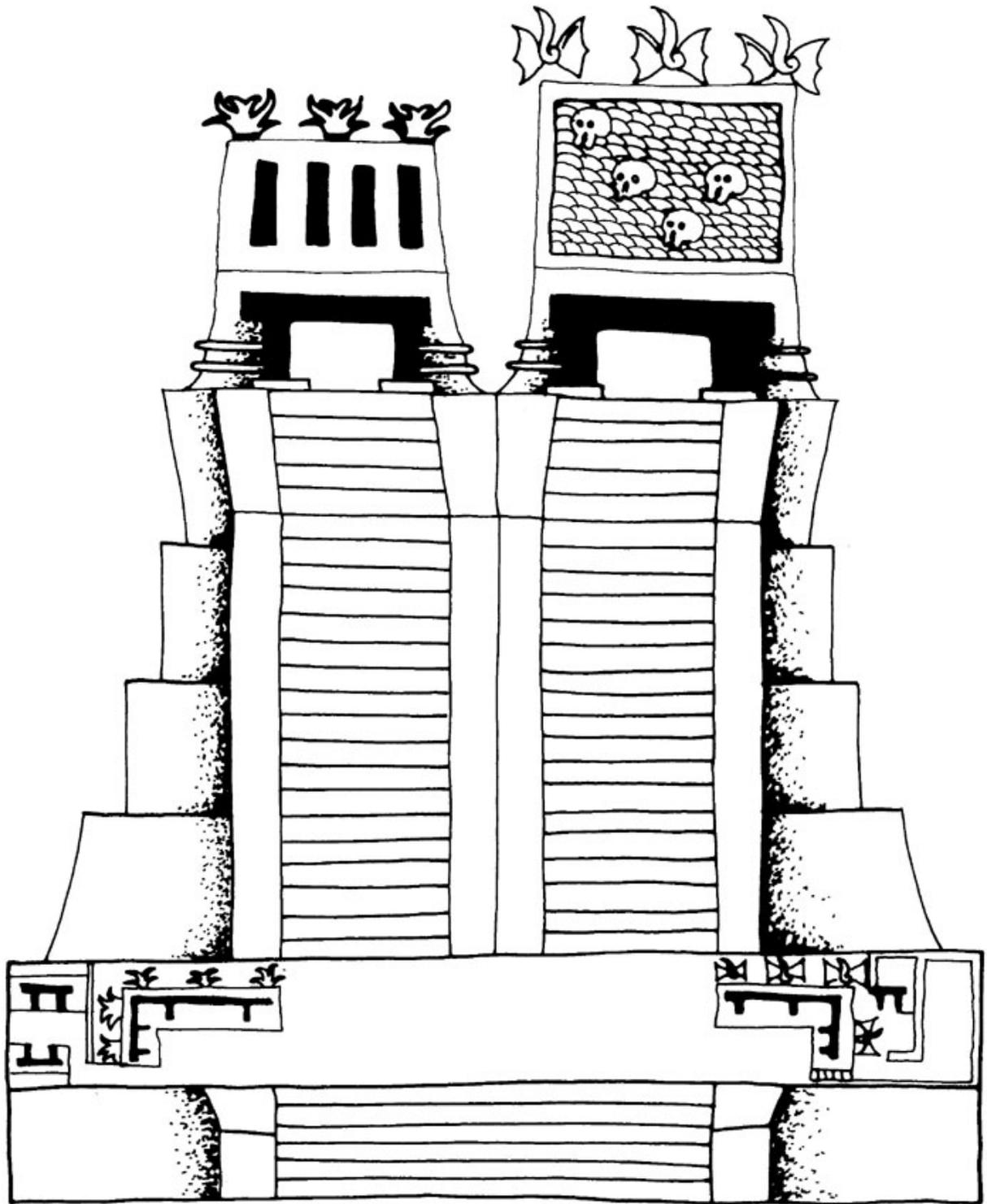


Figure 80b. The Great Temple from Codex Ixtlilxochitl (drawing Fonda Portales).

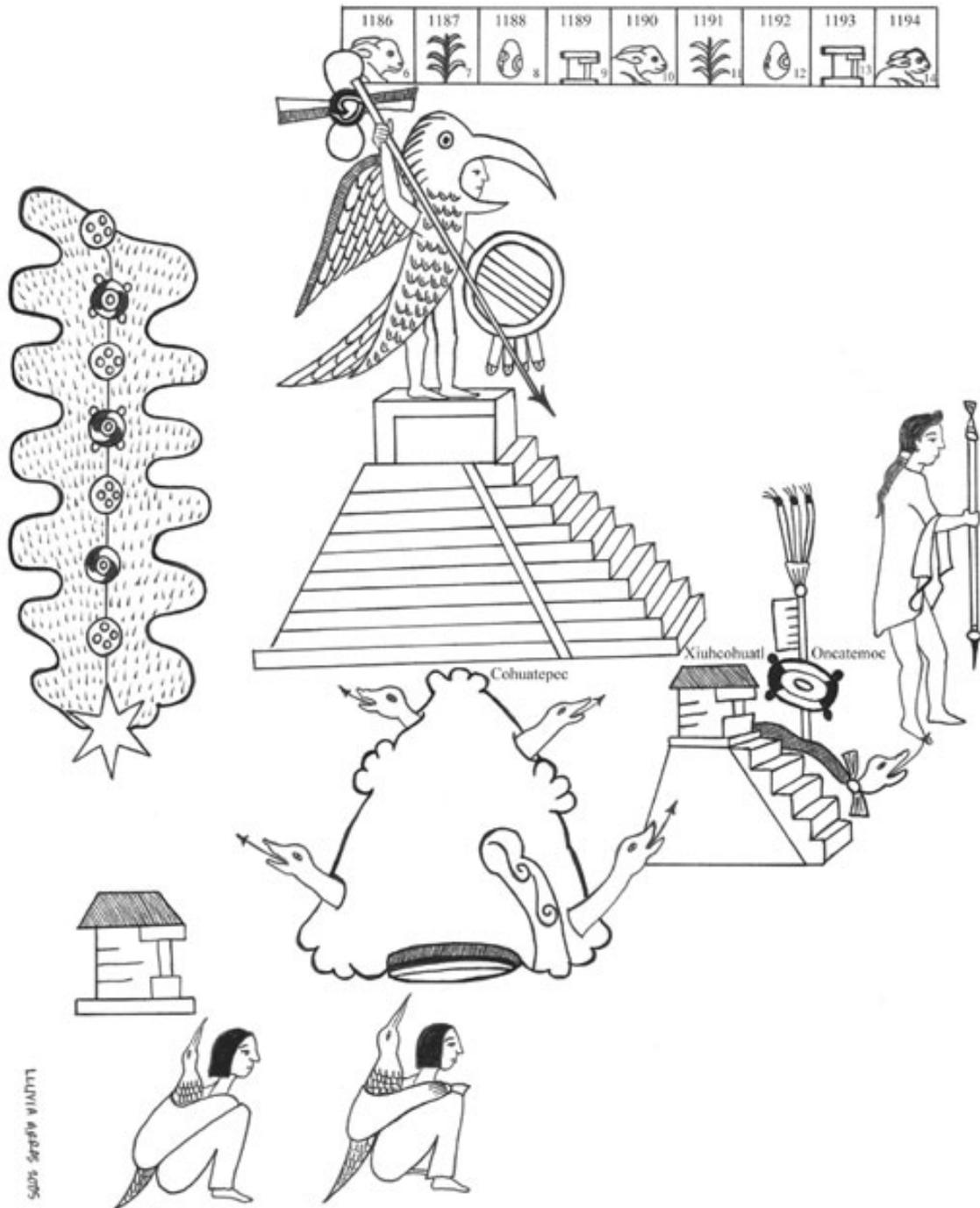


Figure 81. Birth of Huitzilopochtli at coatepec from Codex Azcatitlan (drawing Lluvia Arras).

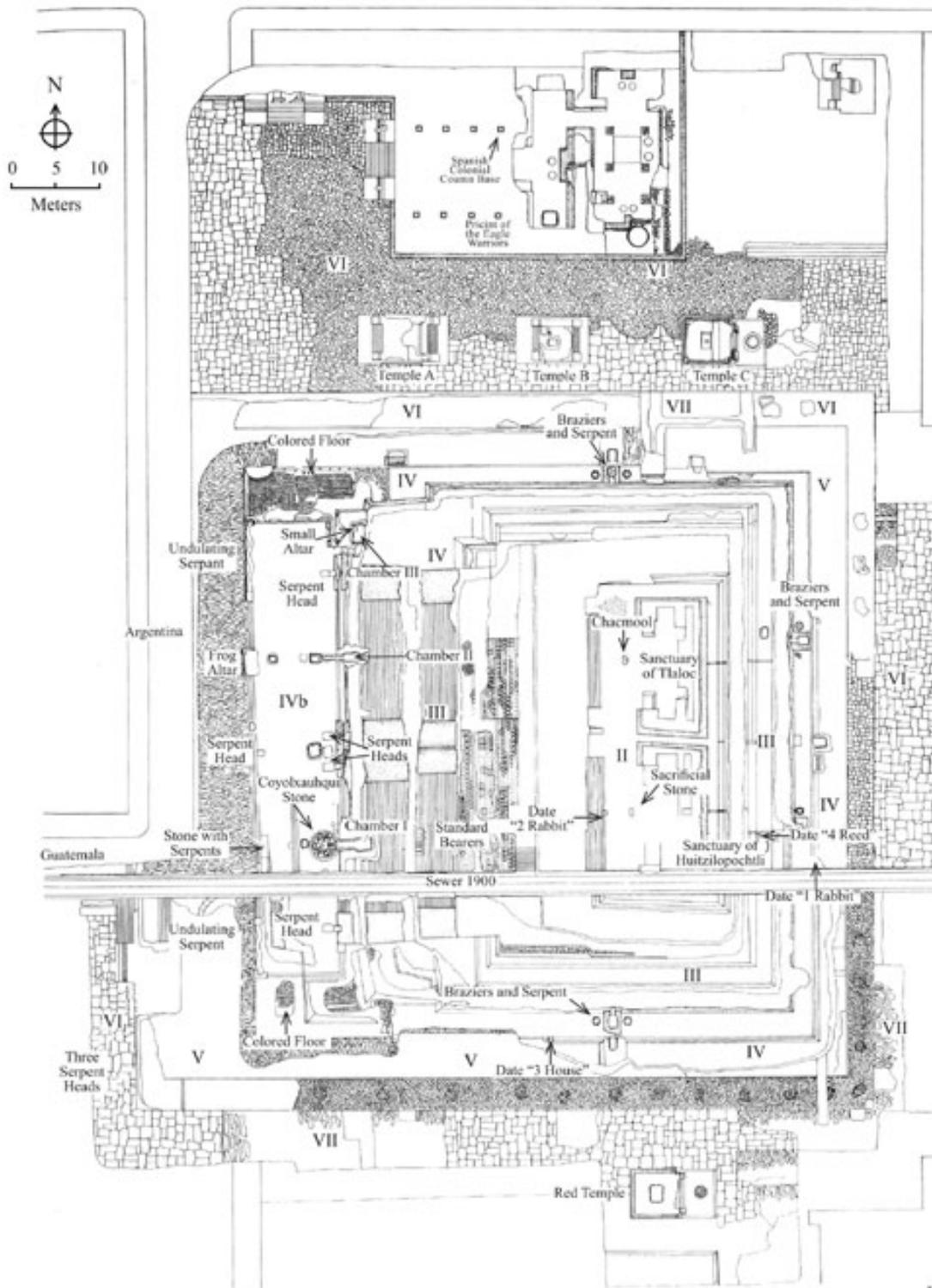


Fig. 9.7

**Figure 82. Plan of the Seven Superimpositions of the Great Temple of Tenochtitlan (photo Fernando González y González).**



**Figure 83. Phase II of the Great Temple with the Shrines of Tlaloc and Huitzilopochtli (photo Fernando González y González).**



**Figure 84. Stone of Sacrifices in the Huitzilopochtli Shrine (photo Fernando González y González).**



**Figure 85. Chacmool in the Tlaloc Shrine (photo Fernando González y González).**



**Figure 86. Phase III of the Great Temple with statues of the Centzon Huiznahua (photo Fernando González y González).**



**Figure 87. Phase IV and the location of the Coyolxauhqui Stone (photo Fernando González y González).**



**Figure 88. Serpent Head in Phase IV (photo Fernando González y González).**



**Figure 89. Offering Cache found in Phase IV (photo Fernando González y González).**



**Figure 90. Phase V (photo Fernando González y González).**



**Figure 91. Eagle Warriors House and Temple A in Phase VI (photo Fernando González y González).**



**Figure 92. Temple B (Tzompantli Altar) in Phase VI (photo Fernando González y González).**



**Figure 93. Temple C (Red Temple) in Phase VI (photo Fernando González y González).**



**Figure 94. Eagle Warriors House in Phase VI (photo Fernando González y González).**



**Figure 95. Interior of the House of the Eagle Warriors (photo Fernando González y González).**



**Figure 96. Bench Relief in the House of the Eagle Warriors (photo Fernando González y González).**



Figure 97. Bench Relief in the House of the Eagle Warriors (photo Fernando González y González).

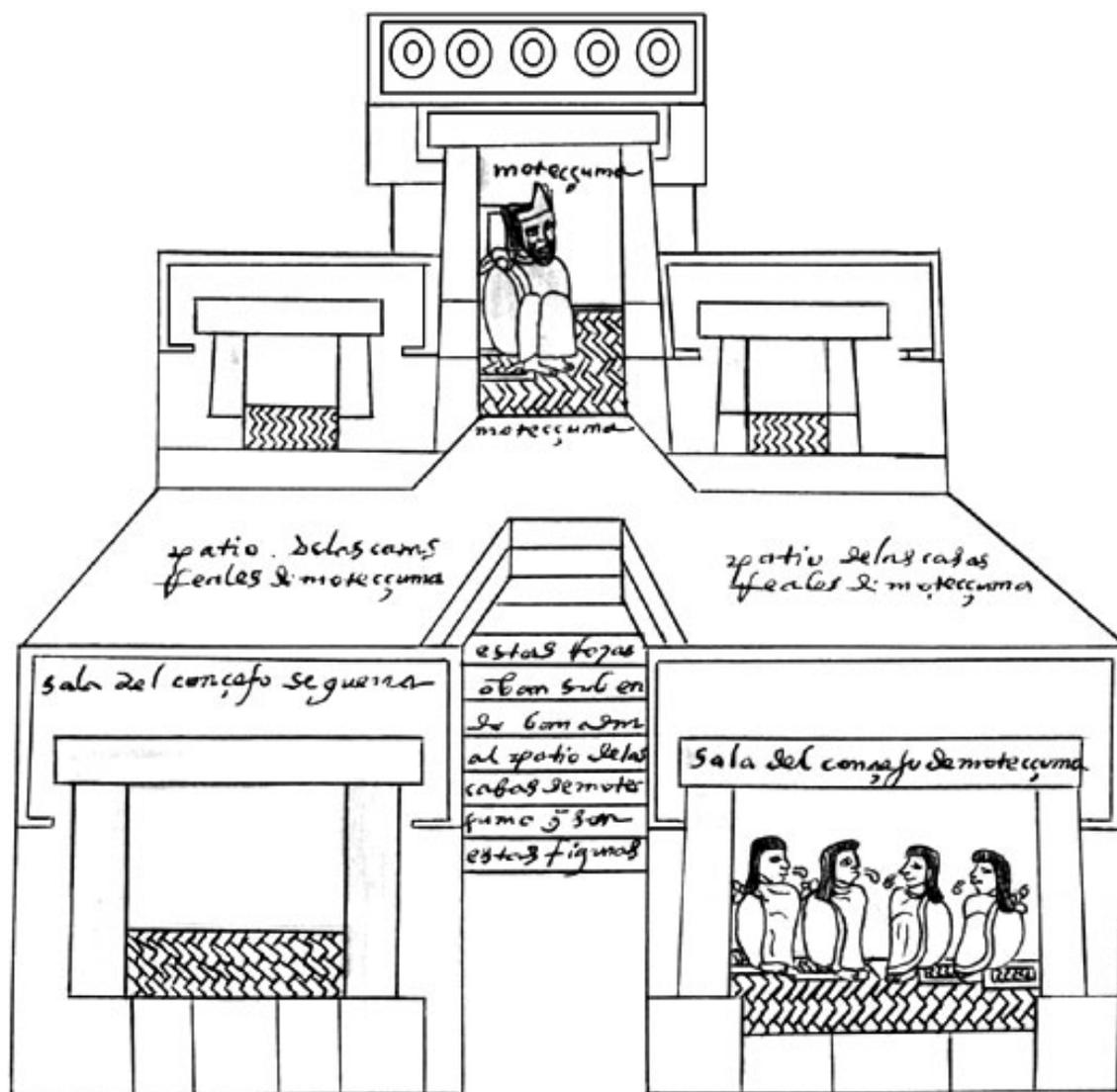


Figure 98. Palace of Motecuhzoma II according to the Codex Mendoza (drawing Maria Ramos).



Figure 99. Metlatl and Comalli (photo Fernando González y González).



Figure 100. Temazcalli (drawing Fonda Portales).



**Figure 101. Chinampas (photo Fernando González y González).**

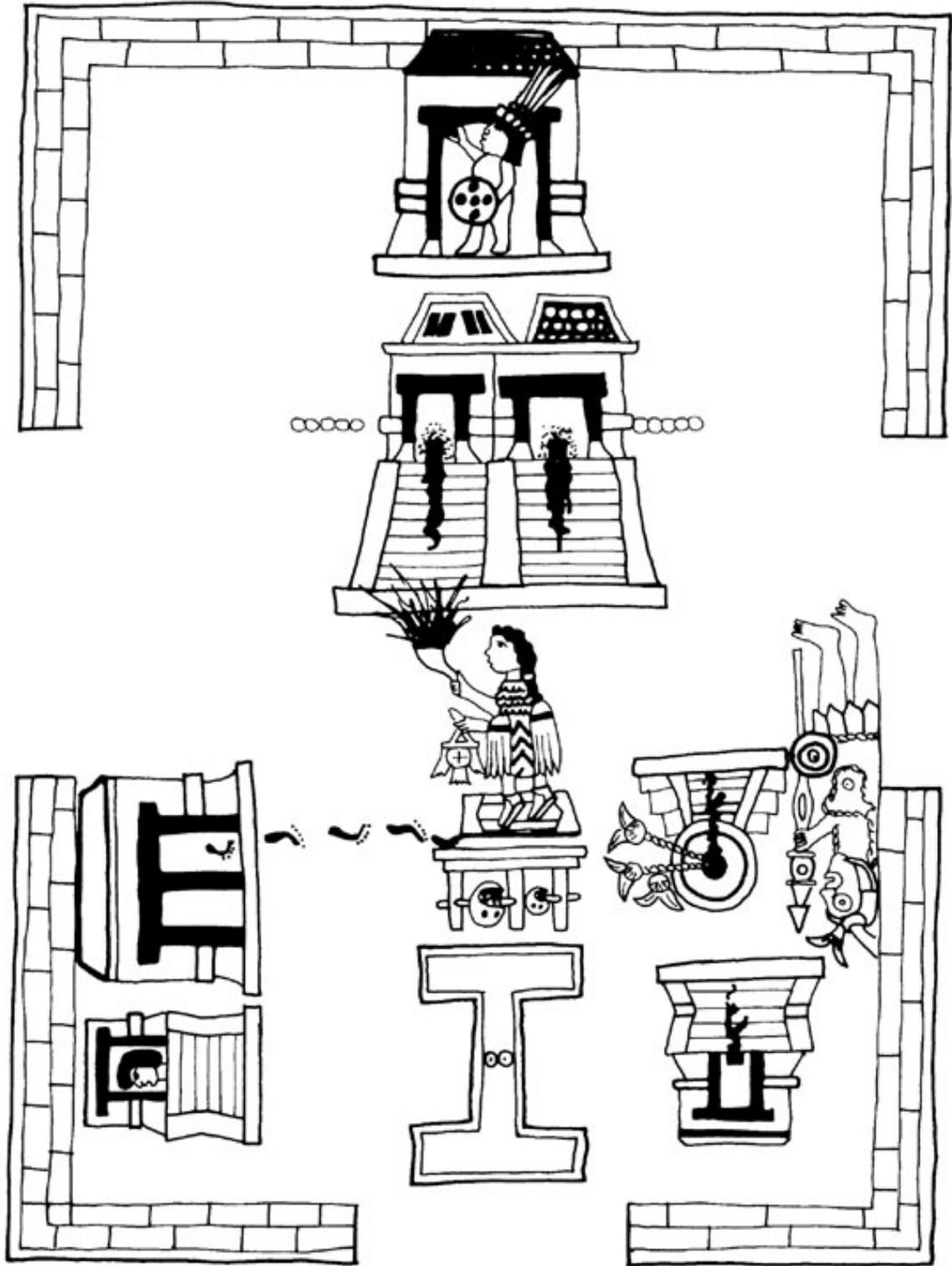


Figure 102. Plan of the Sacred Precinct of Tenochtitlan from Primeros (drawing Fonda Portales).



**Figure 103. Temple of Pino Suárez Metro Station (photo Fernando González y González).**



**Figure 132a. Mount Tlaloc (photo Fernando González y González).**



**Figure 160. Temple of Ehecatl-Quetzalcoatl in Calixtlahuaca (photo Fernando González y González).**

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