

Altepetl: Cholula's Great Pyramid as 'Water-Mountain'

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The water-mountain, or *altepetl*, was a metaphor in Postclassic central Mexico for a culturally complex place, usually the capital of a city-state featuring a central pyramid structure. This paper will consider the highland ceremonial centre of Cholula as a prototypical *altepetl*, with particular attention to its Great Pyramid. I will situate the symbolic significance of Cholula's 'water-mountain' within the hydrological context of the Puebla-Tlaxcala Valley, and also discuss the developmental history of the site relative to other major sites in the region to consider why Cholula emerged as the first-order ceremonial centre in the valley. One conclusion of this analysis may be that Cholula served as the model for later claims of symbolic centrality for sites throughout highland Mesoamerica.

For the Nahuatl of Postclassic Mexico, the *altepetl*, or 'water mountain,' was synonymous with both 'community' and 'king,' encompassing both social and physical characteristics. Mexican ethnohistorian Cayetano Reyes García (2000) recently published a book entitled *El Altepetl, Origen y Desarrollo*—'the origin and organisation of the Altepetl.' The term *altepetl* is derived from the Nahuatl words for water, *atl*, and mountain, *tepetl*. It was also a nested concept, as Reyes points out in reference to barrio, municipal, and regional structures of the *altepetl*. One of his goals in presenting the concept was to put forward an emic alternative to the Old World models that are generally used to classify traditional New World societies.

Reyes based his study on ethnohistoric accounts of pre-Columbian and Colonial Cholula. Cholula is located in the Puebla-Tlaxcala valley of the central Mexican highlands, just across the snow-capped chain of volcanoes from the Basin of Mexico (Figure 1). Cholula is among the longest occupied urban centres of Mesoamerica, and has been an important ceremonial centre for most of its 3000-year history (McCafferty 1996a; McCafferty and Peuramaki-Brown 2007).

Consequently, it holds outstanding resources for both archaeological and ethnohistorical interpretations of the pre-Columbian world.

The purpose of this paper is to build on Reyes García's excellent ethnohistorical study with archaeological and art historical evidence, in order to more fully explore the concept of the 'water-mountain.' In doing so, I will argue that Cholula's Great Pyramid may have been the primordial model of the 'water-mountain,' pre-dating other possible candidates. Furthermore, I will suggest that the *altepetl* concept as practised in Cholula may provide some hints as to why the city sustained such longevity, especially in comparison to other Mesoamerican polities that experienced periodic rise and decline.

The earliest evidence for construction at the site of the Great Pyramid dates to the Middle Formative period, ca. 500 BCE, where Eduardo Noguera encountered pottery in stratigraphic excavations beneath the pyramid itself (1954:199-200), and from materials found in the earliest levels of the *Edificio Rojo* located within the northeast corner of the Pyramid (1956). The earliest known construction stage of the Pyramid probably dates to the Late Formative period, what Noguera and Ignacio Marquina (1970) identified as 'Teotihuacan I.'

Two geomantic principles relate to the construction of the Great Pyramid, and provide hints as to the symbolic meanings associated with the structure. The orientation of Cholula's Pyramid is 24° to the north of west, the same angle as the setting sun at the summer solstice (Tichy 1981). This orientation suggests a relationship with solar worship, an idea supported by Diego Durán's (1971 [1576-79]) account of mountain worship at Cholula that was related to "the lord of all created things," the sun god Tonacatecuhtli.

The Great Pyramid of Cholula was built over a spring which still flows out of the east side of the mound, but is also accessed via a well in a shrine on the side of the Pyramid (Figure 2).

Adventurous visitors can lower buckets to sample the divine waters of the spring. Images of the Great Pyramid in the *Historia Tolteca-Chichimeca* (1976 [1547-60]) depict the pyramid, known as *Tlachihualtepetl*, or 'artificial mountain,' with a spring flowing from a cave opening at its base (Figure 3). Thus the second principle upon which the Great Pyramid was established was the idea that springs signified a portal to the Underworld, and hence a means of communicating with divine levels of the cosmos. By building a pyramid on top of a spring, this freedom of passage was extended into the celestial realm. As David Carrasco (1982:135) observed: "The [Great P]yramid was believed to be the opening to celestial forces as well as the covering over the primordial waters of the underworld."

In this sense, the Great Pyramid also corresponds to what Susan Gillespie (1989:87) would identify as a 'serpent hill,' or *coatepetl* as:

an Aztec Tower of Babel with its base on earth and its summit connecting the earth to the sky. It linked people on the surface of the earth with the gods in the Upperworld beyond them . . . Coatepec represents a point of continuity between the terrestrial and celestial spheres. Finally, the fact that it was a "serpent" hill shows its mediating qualities, for serpents were viewed as connectors of the vertical layers of the cosmos throughout Mesoamerica.

The linkage between Cholula's Great Pyramid and the Tower of Babel was common in ethnohistorical sources, and in fact continues in contemporary oral history. Motolinía (1951 [1540]) recorded that the Pyramid was built 'like the Tower of Babel' in order to ascend into heaven, but this plan was foiled when God sent a great storm and hurled a stone in the shape of a frog to stop construction. A similar story is still told in San Andrés Cholula, though now it is San Miguel who slices off the upper portion of the pyramid with his mighty sword, resulting in all the little pyramid mounds in adjacent fields.

A large carved stone, arguably in the shape of a frog, rests in the Patio of the Altars on the south side of the Pyramid. I suspect that this was originally an altar on top of the mound,

corresponding to a shrine described by Gabriel de Rojas (1927 [1581]) that was dedicated to a rain deity, Chiconauquiahuitl. While the Aztec god Tlaloc was often associated with mountains, the calendrical equivalent of Chiconauquiahuitl, 9 Rain, is associated with the goddess of earthly waters, Chalchiutlicue. Ceramic figurines of the goggle-eyed Tlaloc are the predominant deity found in Cholula, so the male rain god was clearly an important figure in commoner ritual (McCafferty 2007).

The Great Pyramid is one of the highest points in the surrounding valley, and consequently acts as a lightning rod during the violent storms of the rainy season. When early Spaniards tried to erect a cross on top of the Pyramid, it was repeatedly destroyed by lightning (Motolinía 1951 [1540]). In 1531, the priest Motolinía conducted an exorcism of the summit, and excavated to find a cache of shell trumpets as well as children who had been sacrificed to the rain god. Since both drowning and lightning victims were associated with the storm god Tlaloc (McKeever-Furst 1995), it is possible that sacrificial victims may have been placed on top of the Pyramid for death by electrocution.

Frogs were closely associated with water in Mesoamerican tradition. They call out, croaking the arrival of the rains, as indicated by their presence at the base of temple balustrades of the rain god at the Mexica *Templo Mayor*. A frog is depicted atop the Tlachihualtepetl pyramid in the *Historia Tolteca-Chichimeca* (1976 [1547-60]). Sahagún (1950-82 [1547-85], Book 2:62) recorded a ceremony in which toad effigies were dressed up and dedicated to Chalchiutlicue, and this may be further evidence to identify the Great Pyramid with that goddess.

The goddess Chalchiutlicue is closely related to springs and rivers that flow down from mountains ((1971 [1576-79])). Women made offerings in springs and rivers to petition for pregnancy, and Durán advises that the rivers flowing down from the Popocatepetl volcano were a good place to search for precious things left by pilgrims.

These [rivers] ... issue from the goddess named Chalchiutlicue ... [M]ountains were only magic places, with earth, with rock on

the surface; they were only like ollas ... they were filled with the water which was there. If sometime it were necessary, the mountains would dissolve; the whole world would flood. And hence the people called their settlements *altepetl* (Sahagún 1950-82 [1547-85], Book 1:18-19).

In the early Colonial period, Diego Muñoz Camargo (1948) recorded the story of the Cholula massacre, in which Cortés' Tlaxcaltecan allies were afraid to enter the city because they believed that any attack on Cholula's pyramid would result in it bursting forth with earthly waters to wash away the enemy.

At the end of the Tlachiualtepetl period, ca. 1200 CE, the Great Pyramid was abandoned as the main temple of the holy city, and a new pyramid was dedicated to Quetzalcoatl. This was located to the northwest of the old centre, in what is now the ceremonial centre of San Pedro Cholula. This new pyramid was taller than the *Templo Mayor* of Tenochtitlan, at least according to *conquistador* Bernal Díaz del Castillo (1964 [1580]), and was 120 steps in height. It is also illustrated in the *Historia Tolteca-Chichimeca* (1976 [1547-60]) with elaborate towers (Figure 4). At the base of pyramid is a stream that appears to flow from a spring, though there is no known spring in the area. Therefore it is possible that a canal may have existed to give an artificial impression of a 'water-mountain.'

Within the pool in front of the pyramid is a strange creature, white with an elongated body, and a feathery 'ruffle' around the neck (Figure 5). This may be a monstrous *axolotl*, an amphibian that lives in the fresh-water lakes of central Mexico. More commonly (though mistakenly) known as a mudpuppy in English, the *axolotl* is a stunted salamander that, because of a hormonal deficiency, never matures to move out of the water. The name derives from 'atl,' for water and 'xolotl,' the monstrous twin of Quetzalcoatl. In recent times, *axolotls* have been raised in ponds as food and for medicinal purposes in the Puebla valley (Figure 6). In the *Atamalqualiztli* ceremony people ate frogs and *axolotl*-like creatures with their hands bound behind their backs (Sahagún 1950-82 [1547-85], Book 2: Appendix 1) in much the same way that children bob for apples at Halloween (also

Sahagún 1994). The eggs of the *axolotl* can lie dormant in the earth during the dry season, to hatch once the rains return; I've heard stories of the frilled heads of the newborn *axolotl* emerging from a mudbank at the beginning of the rainy season.

This image recalls another famous 'water-mountain': the so-called Pyramid of the Feathered Serpent at Teotihuacan. Many authors have suggested interpretations of the iconographic program of the pyramid, which features undulating serpents in a shell-studded watery environment (Lopez Austin, Lopez Lujan, and Sugiyama 1991; Taube 2000). Based on the marine imagery, and the ruffled heads that protrude from the facade (Figure 7), I suggest that this 'feathered serpent' may be based on the concept of the *axolotl*.

Another aspect of the Teotihuacan pyramids that may be related to the 'water mountain' concept is evidence that canals may have carried waters around the base of the buildings. It has even been suggested that the plaza within the Ciudadela may have been flooded during festivals to reveal the 'Axolotl' Pyramid as emerging from primordial waters. A similar concept is found at El Tajín, where an enclosed area known as the Plaza of the Xicalcolihqui can be flooded to give the visual impression of miniature pyramids and ballcourts emerging from the waters (Koontz 2002).

In summary, the Great Pyramid of Cholula combines characteristics of an *altepetl* as an artificial mountain, Tlachiualtepetl, built over a spring. In both the *Historia Tolteca-Chichimeca* and the map that accompanies the 1581 *Descripción de Cholula* the Pyramid is shown surrounded by cattails, as it emerges from its marshy surroundings. Since the cattail, or *tule*, is symbolic of Tollan, the Nahuatl term for a 'great city,' Cholula is both a 'water-mountain' as well as a tollan place. In fact, it was known as *Tollan Chollolan Tlachiualtepetl* in Colonial sources, 'Cholula, the Great City of the Artificial Mountain.'

Since the origin of the Great Pyramid dates to the Formative Period, it is likely one of the earliest, if not the earliest, manifestation of this principle. At the site of Amalucan, also in the Puebla valley, an elaborate canal system was constructed that included a major artery leading

up to the base of the main pyramid, and with a reservoir associated. While this has been interpreted in relation to its function for intensive agriculture, it is also plausible that the canal and reservoir were built to create an artificial 'water-mountain.' As noted, pyramids at Teotihuacan may have also emulated this pattern. There is a suggestion that the earthen mound at La Venta may have symbolised a 'water mountain' for the Olmec, though this deserves further investigation.

One of the distinctions of Cholula was that it continued as a major urban centre, with important religious and economic functions, for at least 2500 years before the Spanish conquest, and in fact continues to the present. Considering the turbulent histories of other Mesoamerican centres, what was it about Cholula that allowed it to weather religious, political and ethnic changes? Certainly the most impressive feature of the city is its Great Pyramid, the largest pre-industrial building in world history. Ethnohistorical sources tell of pilgrims coming to the city from distant parts of Mesoamerica and rulers coming to the associated temples to receive legitimation (de Rojas 1927 [1581]). Even today the annual pilgrimage ranks as one of the largest in the world, with as many as 350,000 people visiting the church atop the Great Pyramid (Olivera 1970).

The Great Pyramid of Cholula embodies a palimpsest of symbolic meanings, accrued over a period of 3000 years (McCafferty 2001). It is an artificial mountain on top of a portal to the primordial waters of the Underworld. Religious significance includes worship of water deities, including Chiconauquiahuitl, Tlaloc, and Chalchiutlicue. As such, the Great Pyramid is the consummate 'water-mountain,' and has been for much of its existence. I believe that Cholula is the prototypical *altepetl*, a model for community that was emulated throughout Mesoamerica. It was a fundamentally different centre than other Mesoamerican polities, and its reliance on religion and long-distance exchange made it resilient to the political rise and fall that characterised other Mesoamerican centres. The long archaeological sequence, coupled with the outstanding ethnohistorical resources, make it an outstanding source for interpreting the cultures of pre-Columbian Mexico.

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Figure 1. Map of central Mexico showing location of Cholula.



Figure 2. Shrine over spring on east side of the Great Pyramid.

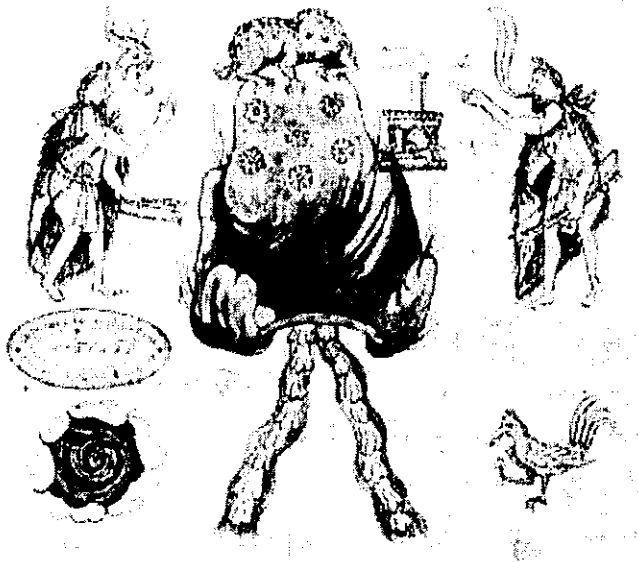


Figure 3. Tlachihualtepetl with spring flowing from its base (*Historia Tolteca-Chichimeca* 1976 [1547-60]).



Figure 5. Detail of axolotl (*Historia Tolteca-Chichimeca* 1976 [1547-60]).

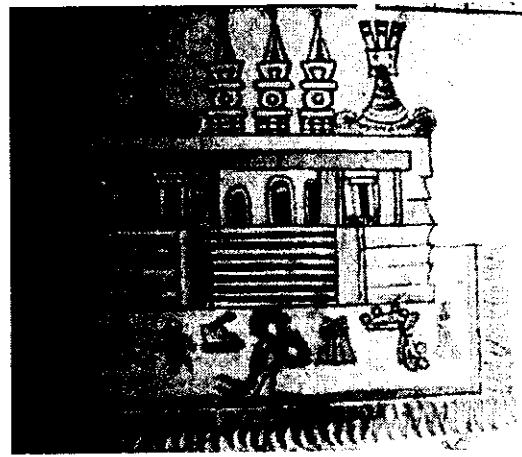


Figure 4. Pyramid of Quetzalcoatl in Cholula centre (*Historia Tolteca-Chichimeca* 1976 [1547-60]).



Figure 6. Photo of axolotl.



Figure 7. Possible axolotl head on "Pyramid of the Feathered Serpent" at Teotihuacan.