

Proceedings of an International Conference in Mexico, February 27-28, 2020

Landscape, Monuments, Arts, and Rituals Out of Eurasia in Bio-Cultural Perspectives

Edited by **Naoko Matsumoto, Saburo Sugiyama**
and **Claudia Garcia-Des Lauriers**



OUT OF EURASIA

Grant-in-Aid for Scientific Research on Innovative Areas (2019-2023)

Integrative Human Historical Science of “Out of Eurasia”

Exploring the Mechanisms of the Development of Civilization

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Landscape, Monuments, Arts, and Rituals

Out of Eurasia in Bio-Cultural Perspectives

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The Mesoamerican Conception of the Sacred Mountain, its Projections and Architectural Manifestations¹

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This text presents initially a synthesis of the known cultural traditions known in Mesoamerica, explaining its chronological limits, maximum extension, geography and economic foundations, in order to elucidate what Mesoamerica as a concept is. The cultures that comprised it included the Olmec, Zapotec, the Teotihuacanos, the Maya, Toltec, Aztec etc. The text continues to refer to the common characteristics in cosmovision of the diverse indigenous groups throughout their history and the sources relied upon by researchers to understand the Mesoamerican worldview.

One of the principal ideas of Mesoamerican peoples was the conception of the cosmos as a great machine, whose center was the pivot or axis mundi, that descended to the cold Region of the Dead and upwards to the igneous sky. This is due to the fact that Mesoamerican cosmologic thought was ruled by the principal of opposite and complimentary forces, similar to the Asian idea of yin/yang. Precisely, the center of the axis mundi was formed by a rope of two chords, one fire and one water, that formed the motor of the cosmos. The axis mundi reproduces itself in the four extremes of the terrestrial surface, forming four columns that separate earth from sky.

In actuality, it is possible to know how old these concepts were, since they are reproduced in the symbols of the ancient Olmec. Through them, the symbols appear in later cultures, principally the Maya and the Teotihuacanos and would be found among the Aztec clear until the eve of the European invasion.

Some of the most important realms for the expression of these ideas are the visual arts and architecture. The Maya, for examples, beautifully reproduced ideas related to the axis mundi in their temples and palaces, like a cosmologic obsession they gave form to sacred figures in sculpture and painting. They did so, for example representing in stone and in painting the axis mundi, the sacred mountain that is the axis, the mountain's cave, the sacred tree on its summit etc. It was a custom shared by the other peoples of Mesoamerica. In this manner, Mesoamerican people imagined themselves as living parts of the world mechanism, collaborators of the gods who maintained the dynamism of the cosmos. These ancient cultural expressions were reproduced until the cultural destruction provoked by the European invasion and Christian evangelization.

Este texto presenta inicialmente, en forma sintética, qué se entiende por la tradición cultural mesoamericana, explicando sus límites cronológicos, su extensión máxima, su geografía y sus bases económicas, para dar a entender qué fue Mesoamérica, cultura que comprendió pueblos como los olmecas, los zapotecos, los teotihuacanos, los mayas, los toltecas, los aztecas, etc. El texto continúa refiriéndose a las características comunes de la cosmovisión de los diferentes grupos indígenas a lo largo de su historia, y de las fuentes con las que los investigadores cuentan hoy para conocer el pensamiento mesoamericano.

Una de las ideas principales de los mesoamericanos fue concebir el cosmos como una gran maquinaria, cuyo centro era el Eje o axis mundi, que descendía hasta la fría Región de la Muerte y llegaba hasta el Cielo, considerado ígneo. Esto se debe a que el pensamiento cosmológico mesoamericano se regía por un principio de opuestos complementarios, semejante a la idea asiática del yin/yang. Precisamente, el centro del axis mundi está formado por una cuerda de dos corrientes, una de fuego y otra de agua, que forman el motor del cosmos. El axis mundi se reproduce en los cuatro extremos de la superficie terrestre, formando cuatro columnas que son las que separan la Tierra del Cielo.

Actualmente se puede saber qué tan antiguas eran estas concepciones, ya que están reproducidas en la simbología de los antiguos olmecas. A partir de ellos, los símbolos aparecerán en culturas muy posteriores, principalmente entre los mayas y los teotihuacanos, y llegarán hasta los aztecas, ya en vísperas de la invasión europea.

Unos de los ámbitos más importantes para la expresión de estas ideas son las artes visuales y la arquitectura. Los mayas, por ejemplo, reprodujeron bellamente ideas relacionadas con el axis mundi en sus templos y palacios, como una obsesión cosmológica de plasmar las figuras en la escultura y la pintura. Así lo hicieron, por ejemplo, representando en la piedra y en la pintura el axis mundo, el Monte Sagrado que está en el axis, la cueva del Monte, el árbol sagrado que está en la cúspide del Monte, etc. Fue una costumbre compartida por los demás pueblos de Mesoamérica. En esta forma, los hombres mesoamericanos se imaginaban como partes vivas del mecanismo del mundo, colaboradores de los dioses en la función de mantener la dinámica del cosmos. Estas manifestaciones culturales, tan antiguas, se hicieron hasta la destrucción cultural provocada por la invasión europea y la evangelización cristiana.

Today we call Mesoamerica a culture whose maximum extension occupied a territory of approximately 1,300,000 km² of which, around one million belong to the southern half of the territory of modern Mexico and the rest of the eastern part of Central America. Such a territorial extension is comprised of very contrasting climates, from semiarid deserts in the north to exuberant tropical jungles in the south, to the marine coasts of the Gulf of Mexico, Pacific Ocean and Caribbean sea, and highland valleys of more than 2000 masl. The territory's relief is highly mountainous, and its summer pluvial regimes go from abundant to scarce.

Current calculations suggest this territory was occupied since 34,000 years ago by hunter-gatherer-fisher societies, but the term Mesoamerica designates the cultural traditions of the sedentary agriculturalists that initiated this way of life 4500 years ago and proceeded their autonomous development until the beginning of the XVI century of our era (Map and Chart)—the period when the Spanish conquest initiated a difficult colonial life. The indigenous societies of agriculturalists were very diverse, ethnically as well as linguistically. Some were descendants of the ancient hunter-gatherer-fishers of this territory, while others arrived here later.

Agricultural life was based on a system known as *milpa*, in which the cultivation of corn, beans, squash and chile were combined with other products, already common and particular to the various climatic zones. These societies transformed themselves from organizations of simple households and small egalitarian villages to primary hierarchical societies, and from these complex societies were borne the great cities and militaristic states.

Despite their great ethnic, linguistic, regional historical, and climatic differences, Mesoamericans forged, thanks to their constant interactions of all types, a culturally homogeneous base, formed by common social practices

and a central cosmovision, over which they constructed different practices and cultural expressions. Along with many other peoples, the Olmec, Zapotec, Teotihuacanos, Maya, Huastec, Totonacs, Mixtec, Tarascans, and the Nahuas stand out historically. Of the Nahua peoples in Central Mexico, the Toltec of the Early Postclassic Period (900-1200 CE) and the Mexica (known also as the Aztec) in the late Postclassic (1200-1521 CE) stand out (Figure 15.1).

One of the common foundations of the Mesoamerican cosmovision was the conception of unperceivable entities whose actions explain the creation and transformation of the world inhabited by their creations; these beings are the Gods. People, in their desire to propitiate or avoid the actions of those deities, attempted to influence in their actions using the human faculty that they considered the most powerful—language. To give value to this resource, they had to imagine gods with similar human faculties, among them intelligence, emotions, the power of perception, volition, social existence, the understanding of human language, etc. They had characteristics that one can describe as *anthropic*.

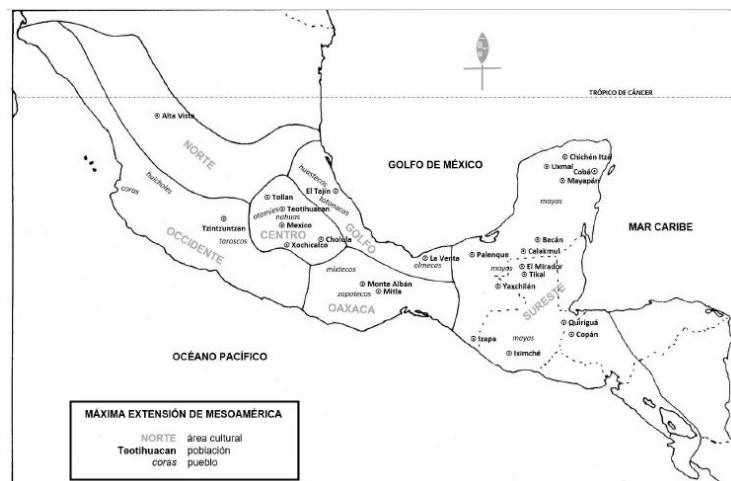
A good part of the gods were conceived with human forms (*anthropomorphic*), although they were also imagined in animal forms (*zoomorphic*), vegetal forms (*phytomorphic*), mountain or rock form (*lithomorphic*), or those that combined parts of distinct beings (*teratomorphic*). Often these were represented with a distinct appearance indicating their diverse characteristics, powers, and functions. I should add that the gods also had the capacity to change form and could make themselves visible to people as human bodies, animals, plants, rocks, or mountains.

Today we know some of the cosmologic ideas of the ancient Mesoamericans through their primary iconographic complexes that have survived into our days. One of the most ancient conceptions identified among the Olmec

in the Middle Preclassic (1200-400 BCE) is the sacred mountain. Given that the belief in the sacred mountain is widely distributed throughout the world with similar characteristics, it suggests that it is a very ancient conception found among hunter-gatherer communities and enduring in many different traditions across the planet. In Mesoamerican, from very ancient times and until the European invasion, the conception of the sacred mountain relates to the idea of the cosmic motor. It is the great prometry that is located at the center of the world (Figure 15.2). Its surface marks the limits between the sky and underworld. It stands tall over the earthly surface inhabited by the living beings. Over it, the astral region can be found and beyond that the realm of the celestial gods. In its interior and base is the realm of the dead.

The Sacred Mountain is seated on a layer of the primordial waters from which the clouds, the springs, the rivers, and the subterranean currents and the sea all fill. Below this layer are the dead and the gods of the dead. There, in the underworld, souls or seed-hearts of the deceased creatures are cleansed until they lose all worldly experience. When they are totally purified, the various seeds move upwards to the hollow interior of the mountain. This hollow is a great warehouse where the seed-hearts await the opportunity to emerge again and form part of the creatures of their respective species. In its exterior aspect, the sacred mountain has on the lower part of its slope an opening through which the forces of germination and the invisible hearts of the seeds come out into the world. Through this mouth enter the offerings given by people in

Figure 15.1.
Map of Mesoamerica.



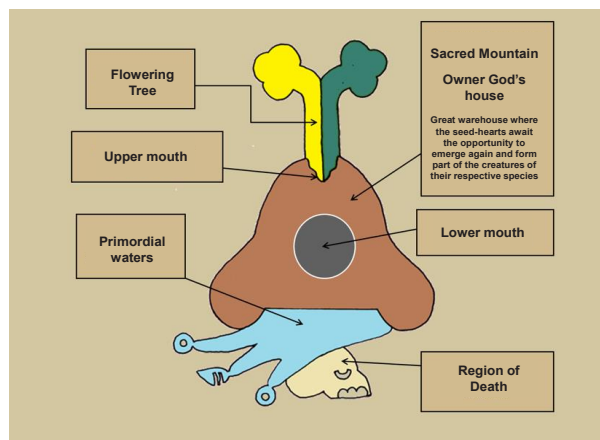
Periods	Dates	Important characteristics
Preclassic	Early 2500–1200 BCE	Sedentary life, agriculture. Egalitarian tribal communities. Households and small villages. Ceramics appear in Puerto Marqués, Tehuacán and Tlapacoya. Agriculture based principally on seasonal rainfall. Trade between villages. Funerary burials below house floors.
	Middle 1200–400 BCE	Considerable changes in agricultural technology. Growth of social hierarchy. Labor specialization. Trade controlled by regional centers. Artistic refinement. Flourishing of Olmec culture. Population centers with monumental architecture. Astronomical orientation of La Venta.
	Late 400 BCE– 200CE	Growth in the size and complexity of settlements. Raids and bellicose conflicts over political and economic rivalries. Monumental architecture at Teotihuacán and El Mirador. Obsidian is one of the principal trade goods. Notable religious sculpture at Izapa. Writing is developed. The concept of zero invented.
Classic	Early 200 – 650 CE	Notable social divisions. Growth of labor specialization. Urban/Rural differentiation. Organized long-distance trade. Important cities emerge: Monte Albán, Teotihuacán and a number of Maya cities. Commercial dominance of Teotihuacán. Great cultural, urban, and artistic developments. At the end, fall of Teotihuacán.
	Late 650–900 CE	With the fall of Teotihuacán, Monte Albán and the Maya flourish. Cultural and artistic splendor. Growth in writing, mathematics and astronomy. Growth of centers previously in Teotihuacán's orbit: Cholula, Xochicalco and Teotenango in the center, and in Veracruz, El Tajín.
Postclassic	Early 900 –1200 CE	The period of military expansion begins. Tollan flourishes, capital of the Toltec. After reaching its maximum extension, Mesoamerica retracts its northern frontier possibly due to droughts. Significant movements of northern agriculturists accompanied by hunters. Copper metallurgy appears in the West.
	Late 1200–1521 CE	Period of political instability. Distinct hegemonic powers emerge: The Mexica lead the militaristic Triple Alliance which expands and submits its neighbors to paying tribute, in the West the Tarascan, in Oaxaca, the Mixtec, in Yucatan Chichén Itzá. Considerable growth of human sacrifice. Spanish invasion.

reciprocity of the gifts received. On the cusp of the Sacred Mountain is another opening. From it, sprouts the cosmic or flowering tree. The tree has a double, hollow trunk which is the dual road through which celestial bodies circulate from the underworld to the sky and through which they return to their declination. The road is a double helical path that leads from the sky to the deepest realms of the underworld and from the underworld to the sky.

Its branches twist one over another without ever joining (Figure 15.3). The ascendant path is that of the cold water, part of the underworld which is a cold place, and represents the blue-green hue. The descending path proceeds from a luminous, hot sky, and is fiery and yellow in color. For this reason, the sacred mountain is the dynamic center of the cosmos, meeting line of the opposite and complementary forces—cold/hot, life/death.

Figure 15.2.

Schematic of the Sacred Mountain.



In Olmec iconography, the sacred mountain is represented geometrically or like an anthropomorphic, zoomorphic, lithomorphic or teratomorphic being. Some of its features endured into the Late Postclassic and into contemporary times among indigenous communities. The

elements represented are the lower mouth of the cave, the opening at its cusp, the tree, and the surroundings of the sacred mountain frequently appeared to be flanked by four figures that correspond to the columns or trees that hold up the sky on the four corners of the surface of the earth. This last composition is known as a *quincunx*, and represents the center of the earth's surface and the four columns or trees (Figure 15.4).

Figure 15.3.

The representations of Malinalli.



The principal Olmec representations of the sacred mountain are found carved into ritual celts or as small stone figures (Figure 15.5), although its elements also appear in the great stone monuments known as “altars.” In its geometric form, the sacred mountain is simply an elongated figure that alludes to its role as the *axis mundi*. Given that the image is two-dimensional, it is represented in a horizontal position. It is flanked, to create a quincunx, by four other figures that correspond to the columns or cosmic trees. Frequently the sacred mountain has been represented as a human, jaguar or teratomorph head. In

those instances, the lower mouth of the mountain is the jaws of the head while the upper opening is a cleft at the apex in the form of a V very peculiar to Olmec symbolism. From said cleft, emerges a maize plant in the form of a cross—the Olmec version of the cosmic tree. Centuries later the figure of the tree is also represented among the Maya as a maize plant. This is how it appears at the city of Palenque, where one example appears on the sarcophagus lid of king Pakal (Figure 15.6).

Figure 15.4.

Quincunx.

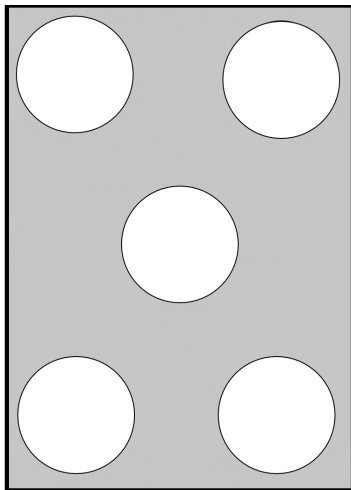
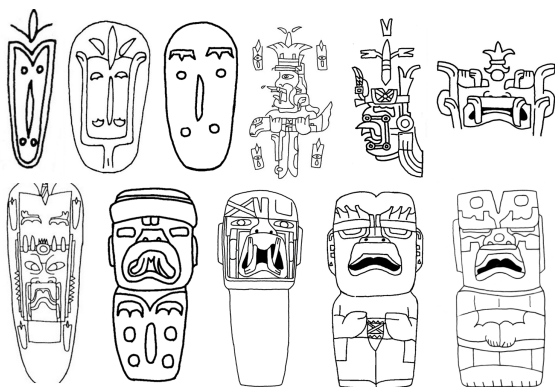


Figure 15.5.

Olmec figures on ritual celts with sacred mountain motifs. Karl A. Taube (2004) identifies the figure of the quincunx on these celts.



It is assumed that the predominance of the jaguar features of the sacred mountain is a very ancient inheritance of hunting peoples, ancestors of Mesoamerican farmers. In Mesoamerica as well as other parts of the world, it is believed that the sacred mountain is governed by a god called the Lord of the Animals. In Mesoamerica, he is also called the Dueño or owner and one of his multiple functions is to protect the fauna (García de León, 1969).

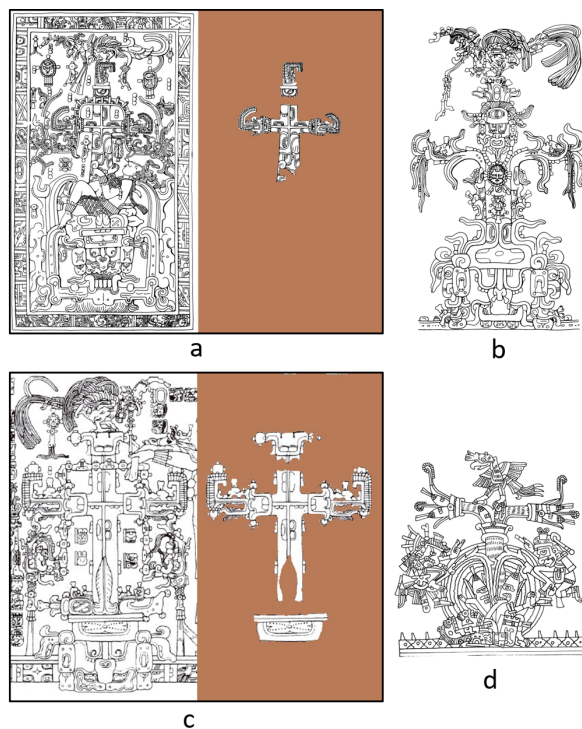
The ancient Nahua identified him with Tlaloc, god of rain. Tlaloc's name, strangely, has no pluvial associations, instead he is qualified as the lord of the earth (Sullivan, 1974, p. 217). The same is true among the Maya of Belize who call Mam the god of rain and *mam* means "earth" (Graulich, 1990, p. 277). This suggests that that the ancient origin of the Mesoamerican pluvial deities may have had various functions, among the most important were to be the guardians of the great warehouse in the sacred mountain and protectors of the animals. Their pluvial character is thus derived from them dispensing the water from the warehouse. As to their persistence as protectors of fauna, it is worth noting a myth found among the XX century Nahua of Veracruz. In Zongolica, they tell that the dogs assembled a meeting to avoid the abuse given them by people. They agreed to take the complaint to their protector deity; more importantly they called him Tlaloc (Uejkautl nauaueitlajtoli, 1982, pp. 20-21).

The teratomorphic representation of the sacred mountain was passed on by the Olmec to other Mesoamerican cultures. Special attention is paid to the lower opening of the sacred mountain where the vegetal richness emerges (López Austin y López Luján, 2009, pp. 255-264). In Late Preclassic (200-400 BCE) Izapa, the maw of the earth monster is shown in a simple geometric style (Figure 15.7a). During the Classic (200-900 CE) among the Maya, the face of the monster acquires a motley architectural complexity at the entrances of those

temples (Figure 15.7b). In contrast, during the same time period, there is the more simplified “mouth of the sky” of the Zapotec (Figures 15.7c-e); while in painting it is shown in abbreviated form and geometric lines around the cornices of buildings (Figure 15.7f). The same simplicity appears at Teotihuacan (Figure 15.7g) and in an archaizing Mexica mural on the eve of the Spanish conquest (Figure 15.7h). In the same time period, a frank figure of the maw at Malinalco in central Mexico at the entrance of the chapel of the Temple of the Eagles and Jaguars (Figure 15.7i).

Figure 15.6.

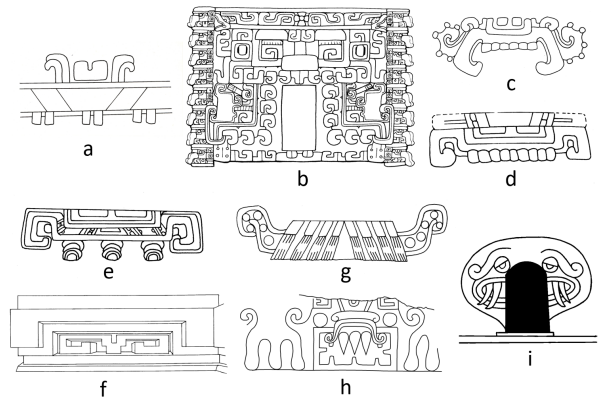
Three Classic Maya examples and one from Postclassic Central Mexico representing the sacred tree as a cruciform maize plant.



Note. a. Sarcophagus of Pakal ; b. Tablet of the Foliated Cross, Palenque; c. Tablet of the Cross, Palenque; d. Codex Borgia, Plate 53

Figure 15.7.

Representations of the lower maw of the sacred mountain cave.



Note. a. Izapa; b. Façade of Maya temple, Structure 1 from Tabasqueño; c-e. Details of Zapotec murals; f. Zapotec stacked cornices; g. Detail of Teotihuacan mural; h. Detail of archaizing mural from the Templo Mayor, Mexico-Tenochtitlan; i. Entrance to the Temple of the Eagles and Jaguars, Malinalco.

The human representations of the sacred mountain or those with humanoid features have also been inherited by later Mesoamerican cultures. One example from the Classic Maya is an image from Altún Ha (Figure 15.8) in which on the lower part of the *axis mundi* appears the face of the Lord of the Underworld. Over him the figure of the sacred mountain stands with a human face, and above the cosmic tree with its helical trunk and a bird perched in the tree. Also from the Classic, the Tepantitla murals from Teotihuacan (Figure 15.9) show the sacred mountain as a face and arms, and by the Late Postclassic in the *Codex Cospi*, from central Mexico, two humanized paintings appear—one of the sacred mountain and the other of the cosmic tree (Figure 15.10).

Figure 15.8.

Maya sculpture of Altún Ha, Belize.

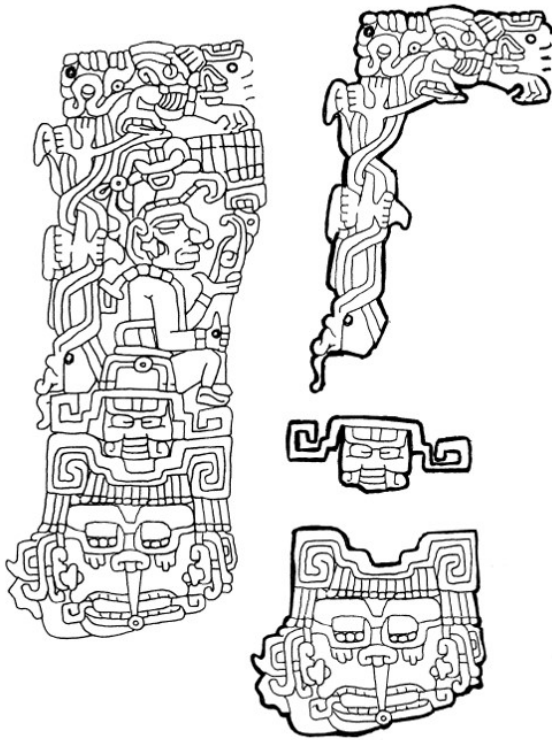
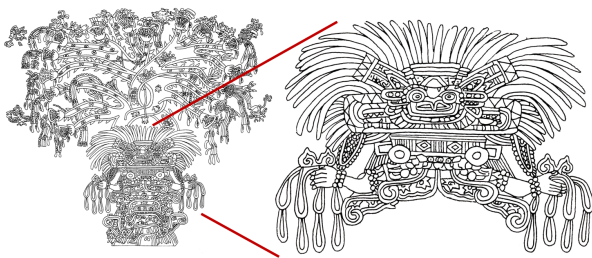


Figure 15.9.

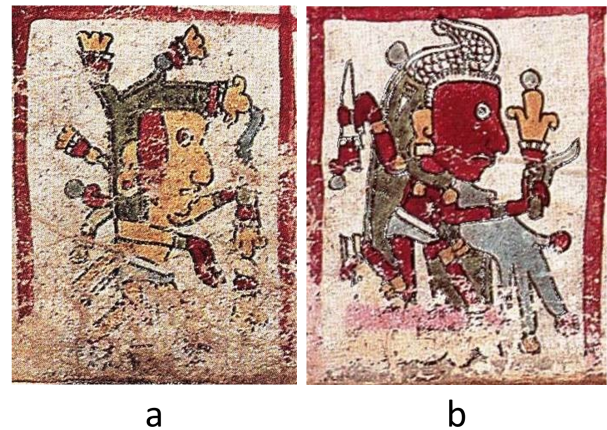
Detail of Tepantitla mural, Teotihuacan.



The *zoomorphic*, *teratomorphic*, and *anthropomorphic* representations of the sacred mountain are intended to personify a cosmologic entity. In other words, these images recognize the sacred mountain as an anthropic character to whom one can ask for children, rain, germination of plants, reproduction of animals, regularity in the luminous bodies of the heavens; to whom one can propitiate for plagues or disease to emerge from its warehouse, and to whom one gives offerings and sacrifices that enter through the mouth of its cave. In summary, the sacred mountain is a god. This god is identified with its Dueño. As Johanna Broda affirmed, both are aspects of the same divinity (Figure 15.11) (Broda, 1971, pp. 301-302). The most overwhelming proof is the conception of the god Tepeyólotl of the Mexica (Figure 15.12), which as at the same time the mountain and an anthropomorphic god dressed in a jaguar's pelt.

Figure 15.10.

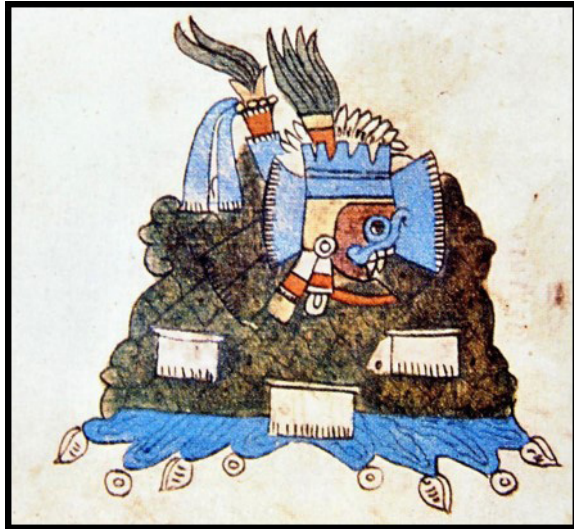
Two anthropomorphic representations from the Codex Cospi.



Note. a. Flowering Tree, Plate 1; b. Sacred mountain, Plate 2.

Figure 15.11.

Tlaloc and Sacred Mountain. Codex Vaticano Latino 3738, fol. 48v.



Like all deities, the sacred mountain has the power to project its own being, to reproduce itself in other beings that will give it other faculties. The first projection of the mountain is towards the four extremes of the terrestrial plain, since the trees and columns that sustain the sky are merely reproductions of the *axis mundi* (Figure 15.13). They are also the communication lines through which the gods move, places in which the contrary forces of hot and cold struggle, the doors of communication between the divine and the world of the living etc. In addition, with the projection, the functions of the sacred mountain are delegated to the four trees. Through the red tree of the east emerge the astral beings ascending into the sky while their return to the underworld is via the black tree of the west. The white tree of the north is the realm of the dead while life manifests itself through the yellow tree of the south. Time emerges from all four—one day through the red tree, the next through the white, then the black, and the fourth day emerges from the yellow and from there a return to the red.

Figure 15.12.

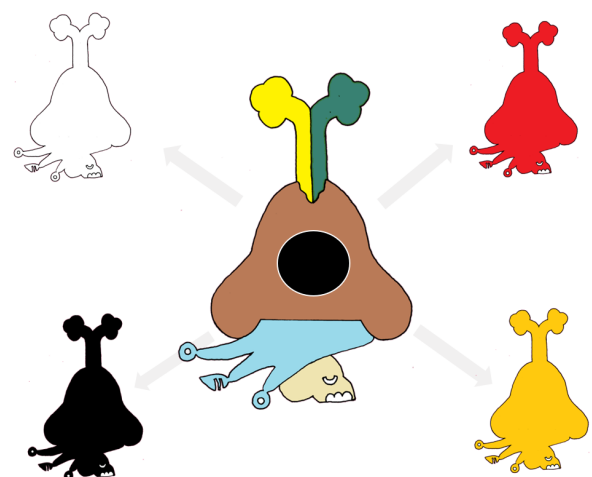
Images of the god Tepeyólotl.



Note. a. *Codex Borbonicus*, Plate 3; b. *Codex Telleriano-Remensis*, fol. 9v; c. *Codex Borbonicus*, Plate 5; d. *Codex Cospi*, Plate 5.

Figure 15.13.

Schematic projection of the cosmic tree of the four corners forming the columns that sustain the sky.



In the world of the living, the sacred mountain is projected on all of the prominent mountains. These, in turn, are projected on the lesser mountains in such a manner that every population recognized their sacred mountain in those that were close to them. They considered it the center of their world and the home of their specific Dueño. Local sacred mountains were then projected onto the pyramids and the specific Dueño is the image of the local protector deity. It is a game of fractals.

Mesoamerican people imagined human beings as collaborators with the gods. Their efforts, offerings, and sacrifices contributing to the divine labor that permits the continuity of the world. They believed that without their participation, the existence of other beings would not be possible. Two maximum expressions of this idea are architecture and urbanism, arts that served to create ideal models of the world of the gods on earth. Their temples were not just imitations of the houses of the gods, but the homes themselves, charged with sacredness by the force of divine projections, and the alignment of their streets and buildings that corresponded to the points of rising and setting of the celestial beings on the horizon of determined dates, consecrated by the calendar. In this manner, the common actions and the ritual acts had a place on a microcosmic stage that was derived and coessential with the macro-cosmos. Each human being, with their work, was a piece of this great machine.

¹English translation by Claudia García-Des Lauriers.

REFERENCES CITED

- Broda, J. (1971). Las fiestas aztecas de los dioses de la lluvia: Una reconstrucción según las fuentes del siglo XVI, *Revista Española de Antropología Americana*, 6. pp. 245-327.
- García de León, A. (1969). El universo de lo sobrenatural entre los nahuas de Pajapan, *Veracruz, Estudios de Cultura Náhuatl*, 8, pp. 279-311.
- Graulich, M. (1990). *Mitos y rituales del México antiguo*. Istmo, Madrid.
- López Austin, A. y L. López Luján. (2009). *Monte Sagrado – Templo Mayor*. Instituto Nacional de Antropología e Historia / Universidad Nacional Autónoma de México – Instituto de Investigaciones Antropológicas, México.
- Sullivan, T.D. (1974). Tlaloc: A new etymological interpretation of the god's name and what it reveals of his essence and nature. En *Atti del XL Congresso Internazionale degli Americanisti*, Roma-Genova, 3-10 Settembre 1972, Genova. v. II, pp. 213-219.
- Taube, K.A. (2004). *Olmec Art at Dumbarton Oaks*, Dumbarton Oaks Research Library and Collection, Washington, D.C.
- Uejkautl nauaueuejtlajtoli. (1982). *Cuentos nahuas. Tradición oral indígena*. CONAFE, México.

Chart. [Content]

Periods || Dates || Important characteristics

Preclassic || Early || 2500 –1200 BCE || Sedentary life, agriculture. Egalitarian tribal communities. Households and small villages. Ceramics appear in Puerto Marqués, Tehuacán and Tlapacoya. Agriculture based principally on seasonal rainfall. Trade between villages. Funerary burials below house floors.

Middle || 1200–400 BCE || Considerable changes in agricultural technology. Growth of social hierarchy. Labor specialization. Trade controlled by regional centers. Artistic refinement. Flourishing of Olmec culture. Population centers with monumental architecture. Astronomical orientation of La Venta.

Late || 400 BCE–200CE || Growth in the size and complexity of settlements. Raids and bellicose conflicts over political and economic rivalries. Monumental architecture at Teotihuacan and El Mirador. Obsidian is one of the principal trade goods. Notable religious sculpture at Izapa. Writing is developed. The concept of zero invented.

Classic || Early || 200 – 650 CE || Notable social divisions. Growth of labor specialization. Urban/Rural differentiation. Organized long-distance trade. Important cities emerge: Monte Albán, Teotihuacan and a number of Maya cities. Commercial dominance of Teotihuacan. Great cultural, urban, and artistic developments. At the end, fall of Teotihuacan.

Late || 650–900 CE || With the fall of Teotihuacan, Monte Albán and the Maya flourish. Cultural and artistic splendor. Growth in writing, mathematics and astronomy. Growth of centers previously in Teotihuacan's orbit: Cholula, Xochicalco and Teotenango in the center, and in Veracruz, El Tajín.

Postclassic || Early || 900 –1200 CE || The period of military expansion begins. Tollan flourishes, capital of the Toltec. After reaching its maximum extension, Mesoamerica retracts its northern frontier possibly due to droughts. Significant movements of northern agriculturists accompanied by hunters. Copper metallurgy appears in the West.

Late || 1200–1521 CE || Period of political instability. Distinct hegemonic powers emerge: The Mexica lead the militaristic Triple Alliance which expands and submits its neighbors to paying tribute, in the West the Tarascans, in Oaxaca, the Mixtec, in Yucatan Chichén Itzá. Considerable growth of human sacrifice. Spanish invasion.



Front cover: Ceremonial gathering on the Spring equinox 2000 taken from the Moon Pyramid illustrating the Avenue of the Dead and the Sun Pyramid.

Front background: Eagle sculpture from the Quetzalpapalotl Palace in Teotihuacan.

Back cover: Mural painting of the sacred water mountain at Tepantitla, Teotihuacan.

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