

MYTHS AND PREHISPANIC ASTRONOMY: A LOOK FROM THE COLONIAL PERSPECTIVE

María Elena Ruiz Gallut¹

RESUMEN

La información que proviene de los documentos escritos durante la Colonia por los frailes españoles intentó ofrecer un panorama del pensamiento de las sociedades indígenas mesoamericanas. En dichas ideas se plasmaron los conceptos religiosos que ordenaron a la cultura, y que señalan el esfuerzo del hombre por ubicar su papel en el mundo y otorgar sentido a los fenómenos astronómicos y naturales que se integran en su religiosidad, particularmente en la creación de los mitos. La generación de los dioses, sus tareas y áreas de acción son exploradas aquí a través de los textos de Fray Andrés del Olmo.

ABSTRACT

The information from the documents written during colonial times by Spanish friars attempted to provide an overview of the thought of Mesoamerican indigenous societies. These ideas are permanently imprinted religious concepts that ordered the culture, and that signal the efforts of men to find its role in the world and give sense to the astronomical and natural phenomena that are integrated into their religion, particularly in the creation of myths. The generation of the gods, their tasks and areas of action are explored here through the texts of Fray Andres del Olmo.

Key Words: archaeoastronomy

“La diversidad cultural obliga al investigador a considerarse un otro en un mar de otredades”.

López Austin (2012)

1. INTRODUCTION

Today we know for certain that we are part of what we name “universe”, even though our knowledge of it is still limited to a large extent. However, we, as species, based on an ancestral and genuine intuition, and from our deepest thoughts, have developed a sense of cosmic belonging and identity. This is one of the several reasons why we have always turned our eyes towards the sky, trying to understand the peculiarity of its distant life, which governs our world. This is also why we have ascribed a heavenly and divine origin to our creators, who take part in that which we cannot control, as the existence of time or the natural phenomena. Furthermore, it is due to this reason that throughout history we have endowed with shape, meaning, faces, capabilities and specific functions to the gods, designing their personalities as a response to the particular needs of each society. In this creative process of intellectual explanation of the world, myths function as tools used by every culture, a much studied matter in the field

of history of religions. In order to study how myths operate and affect society, two separate studies were performed in this brief analysis.²

2. THE IDEA OF THE UNIVERSE AS PART OF A SYSTEM OF THOUGHT

As support for this text, I consider the relevant proposals from López Austin (2012)³ regarding the comprehensive and enduring thinking figured into the Mesoamerican worldview, which develops and strengthens by acting as a constant of social activity and through its interaction with the natural environment. From this perspective, according to

²The myth has been widely studied by authors including the ideas of Mircea Eliade (1981) and Claude Levi-Strauss (1987). For Mesoamerica, we must remember, for example, the important work by Alfredo López Austin (1996) on this cultural aspect. However it should be noted here that we will review thoroughly the principles of myth in recent decades. Just note that the approach in this text is only methodological, with the intention of targeting different areas for approaches that can be also different.

³López Austin (2012). In this text, López Austin’s extensive work on the worldview summed up noticeably thin and complicated networks that involve and integrate the way of looking at the world of Mesoamerican man and, in that look, let you hand move and it space and other functioning as a society in the long term historical shares profound philosophical elements. Their contributions, barely sketched here, support us to enter into many territories that comprise precisely all that revolves around the life and their conception, between their knowledge of the sky and their cultural expressions.

¹Instituto de Investigaciones Estéticas, UNAM (gallut@unam.mx).

López Austin, we can approach the past cultures on the basis of the information provided by documentary sources, which require constant verification as research tools to the study of previous concepts.⁴ López Austin considered the Mesoamerican tradition as a consistent totality structured in a geometrical, symmetrical, isometric and isonomical universe which allows us to identify the cosmos and its parts from a holistic perspective.⁵

This idea of the universe integrates a dual conception – divine and human - of time, space and substances. The gods created and inhabit the ecumene while the men reside in what López Austin called the *anecumene*.⁶ Complementary opposites participate in similar way in the creation myths, where the deities take on some specificities of men, such as the corporeality of his nature, resulting in gods with a humanized appearance and living beings (such as plants, animals and humans) who participate in the supernatural spirit. In the same way, the cosmos and its cycles are articulated with the natural, social and everyday order. We have to bear in mind that, according to López Austin, the unity of the cosmos is preserved and maintained over time as a mental reference through what is denominated by this author as the “hard core” (núcleo duro), although with regional differences in its definition.⁷

3. ANCIENT KNOWLEDGE OF THE SKY

It is not the intention here to analyze the different proposals developed around this topic. However, we will use an example to illustrate that the philosophical thinking in Mesoamerica was largely based on the contemplation of the Stars bandits application reflected in the creation of a cosmogony, as several of the lines on the conception of the universe indicate.

There was a sophisticated knowledge of the sky movements in Mesoamerican astronomy. This is demonstrated in several studies on the alignments of temples and other architectural buildings, related to relevant events which occurred in the night sky or referred at specific times of the annual movement of the sun. Hierophanies or manifestations of the sacred on earth also belong to this group of presences.

The use and development of a calendar system is the strongest and most obvious evidence of the existence of a systematic recording of the sky. In addition to this proof, we could consider the analysis of other sources, as the one studied here, to get another view of the genesis and function of the myth

according to another intellectual construction. In this regard, we can recognize that our approach to this matter is not confined to a single perspective:

“...methodological plurality a unifying vision able to locate in the same scientific context of reference is indispensable both the fundamentals of analysis and the fruits obtained from each of the perspectives of study.”⁸

4. MYTH AND THE CELESTIAL SPHERES

According to the arguments presented above, we will see, in broad terms, how a myth is ordered, particularly into the following three components that interest us here:

- a) The mention of heavenly realms and the stars identification.
- b) the establishment of a pantheon of gods who know and control the time and cycles.
- c) The role of man in his relation to the astral environment. Men compose stories and give them meaning according to a cosmogonic model. Likewise, men abide the divine plan, particularly as this respond to the forces that we currently call supernatural.

These first myth components were provided by experience, as a consequence of probably ordered and measured practical observations; although its results are applied differently, they correspond essentially to the knowledge of celestial events and their protagonists.

The second one, is the establishment of a pantheon of gods, who know and control the time and its cycles. Divinities are generated after the fulfilment of a set of requirements and expectations raised to them to take up and participate in different ways and levels into the religious order.

Men as our third element weave stories and give them meaning according to a cosmogonic model. Likewise, men abide by the divine plan, particularly as this responds to the forces that we currently call supernatural.

The star movements are known and have been interpreted in this way as natural laws determining religious thought.

Now, in Prehispanic era, religion was precisely one of the fundamental institutions governing the social life and acting as a backbone for the articulation or other aspects. It possessed several characteristics that were common to different cultures and

⁴López Austin 2012, *Op. cit.*, pp. 2.

⁵López Austin 2012, *Op. cit.*, pp. 3.

⁶López Austin 2102, *Op. cit.*, pp. 3

⁷López Austin 2102, *Op. cit.*

⁸López Austin 1996, *Op. cit.*, pp. 26.

that took part of what López Austin denominated as “the core”. Based on an obsession with balance, where reason acts as the common force of the opposites, religion expresses itself through foundational myths of creation, whose complexity is manifested in the gods behavior, their multiple faces, names and titles. These attributes are assigned mainly in the upper strata of the cosmos, conceived as the places where the deities dwell and wield their power. They move also in the lower and in the middle levels, where the surface of the earth, essential zone of the cosmic structure, is located and upon which human life had sprung and developed after. Thus, stars, gods and men are closely linked to the conception of a universal mechanism.

In this manner a couple, founder of the divine caste, appear as the first subject in most of the pre-Hispanic myths. From its fecund action, that, except for the upper heavens, occur in most cases at an uncertain scenario, proliferate characters in charge of a multitude of tasks. Such obligations, of course, are directly related to the need for an explanation of the natural cycles and for the conservation of their order. Therefore, it will be first necessary to explain the construction order out of chaos, and then let the gods take responsibility and efforts to reestablish it.

The idea of time also permeates philosophical reflections such as: What is it? Who created it? How can men perceive it and understand its rhythm.

Answering these questions is a complex task, specially when we try to understand past civilizations.

5. THE WRITTEN WORDS: GODS AND REGIONS OF THE SKY

The text selected for this short essay corresponds to the pen of a friar and was written in the second half of the XVI century. It is entitled *Teogonía e historia de los mexicanos por sus pinturas*⁹, collected by the Franciscan friar Andrés del Olmo and published by Joaquín García Izcabalceta at the end of the XIX century. According to Ángel Ma. Garibay, the work consist of fragmented historical documents belonging to Náhuatl tradition that the friar had before him, and was written with the intention to preserve the living memory of the Prehispanic indigenous heritage: “to preserve the memory of the old ways of the indians [...] the same as the memory of the gentiles is preserved”. The friar would have read “those strange manuscripts [...] and interpret them with the help [of the indians], to know their stories, their

legends” provided by the elders as response to his questions.

To illustrate this interpretation of the manuscript written by Del Olmo, we selected some paragraphs of the first part about the myth, entitled “*De la creación y principio del mundo y de los primeros dioses*”. We quote excerpts in the following paragraphs where they are presented in a different order than the original one.

5.1. *Heavenly realms and identification of stars:*

3. “That they had a god, whom they called Tonacateuctli, which had as wife Tonacacihuat ... which were raised and were always in the thirteen sky, of which beginning nobody knew, but his abode and creation was in the thirteen sky”.

Del Olmo introduces in this part the creation couple, man (God) and female (Goddess), and provides relevant information about them such as their unexplained origin and their location in “heaven thirteen”.

55. “And because upon the raised sky, Tezcatlipuca and Quetzalcoatl, walked on it along the way that dies in heaven, in which they met and where they are found and, after here in it and with his seat in it”
57. “And in the second year after the flood - which was *acatl* - Tezcatlipuca left her name and took up Mixcóatl, that means ‘snake of cloud’ ”
58. “And, those that by this name had him as a God, painted him as snake.”

Here we consider the Milky Way as a region, that Del Olmo names as “way [...] in heaven” as reference to “the Path of Santiago”.

5.2. *The establishment of a pantheon of gods who know and control the time and cycles:*

66. “In the thirteen year after this second count of thirteen, which is the 26th year after the flood as it was deigned by the gods to be sunny and they had made war to feed their people... , Quetzalcoatl wanted his son to be sun... and also wanted that Tlalocatecutli, god of water, would make the son of his son and Chalchiuhtlicue, who is his wife, to be the moon”.

Before their transformation, they fasted for days, prayed and practiced self-sacrifice by bloodletting through body and ear piercing.

⁹Teogonía e Historia de los mexicanos. Tres opúsculos del siglo XVI, 1973.

69. “And [in this way]... , Quetzalcoatl took his son and threw him into a great fire, and from it came... transformed into sun to light the earth”.
70. “And after the fire died, Tlalocatecutli came and threw his son into the ashes, and he became the moon, which is the reason it is ashen and dark”.
71. “And at the end of these thirteen years the sun began to shine, because until then it had been at night, and the moon began to swim behind it and can never reach it, and both walk through the air without reaching heaven”.

The preceding paragraphs reflect a concern for the counting of the time. Let us remember that most of the cosmogonic myths from the Prehispanic cultures tell of a great flood that destroyed one of the generations of men and wiped out one of the eras. The Sun and the Moon were created after this catastrophe took place.

44. “then after thirteen times fifty-two years had passed, Quetzalcoatl was sun and Tezcatlipuca was no longer, because he struck him with a big stick and knocked him down in the water, where he became tiger and he went out to kill the giants. And this appears in the sky, because it is said that Ursa Major lowers itself into the water, because it is Tezcatlipuca and preserves his memory”.

As can be seen, Del Olmo establishes again a correspondence in his text, by linking the Ursa Major constellation with God.

5.3. *The role of man in relation to his astral environment.*

12. “These gods held these names and many others, because according to the activity that they performed, or that was attributed to them, they were assigned such name”.

Del Olmo states in this paragraph the mentioned designation by man of roles for each of the divinities that participates in the narration.¹⁰

¹⁰However, note that in the synthesis of the text that makes Garibay we can find a similar to this analytical work, as it shows the information in the form of tables, respect the numbering of the segments given by the Del Olmo own.

6. SOME FINAL REFLECTIONS

As we can see through this analysis:

- a) The conception of a stratified universe distributed in 9 lower levels, a central region, where the Earth’s surface is located, and 13 higher levels.
- b) The exclusive and unlimited power given to the creators, who occupy the uppermost levels. So far, their only task is to generate the pantheon of major gods.
- c) Their children, who have multiple faces and charges, are responsible for ordering the world. How? A first star (the Sun) is created and part of their task is to create and measure time. It is unclear how they do it.
- d) Different gods take in turn the responsibility to act as the Sun (by decision of other divinities).
- e) A time keeping system to govern man’s life is invented.
- f) Four chronological suns (major eras) are created and subsequently destroyed.
- g) As we see today, the two most important bodies of the celestial vault were created in the new era, the fifth.

We have to add that, as we know, many precepts contained in this myth are echoed in other compilations of missionaries from the Colonial period. Sahagún himself also details in a very similar way some of the points related to the cosmogonic creations.¹¹

It is clear that there is a difference between the astronomy as it is practiced today, compared to the way it was exercised by past generations. We can currently say that scientific data do not spread socially because it is not necessary. Do physicists and astronomers wonder, for example, what is the use for a young computation student to know how far a quasar is located? I think that the answer is no. Let’s say that the advancement of knowledge and specialization has widely exceeded the social interest to know with more depth all the aspects of science. However, what happened in the ancient cultures in that regard?

The question specially concerns one of the aspects that interest us more, that is, the function

¹¹Sahagún devoted space to this aspect in structuring capitulated in his *Historía de las Cosas de la Nueva España* (1981).

and the value we give to scientific data per se in the search for answers about the knowledge and understanding of the sky that our ancestors had. There has been a great deal of discussion in recent years about the theoretical and methodological foundations of archaeoastronomical studies. Considerations summarize irrefutable facts such as the current capacity of astronomy and physics to reconstruct the configuration of the sky at any time and latitude, thanks to which we can observe the same celestial figures as seen in antiquity. This ability has in many cases resulted in a separation of the scientific data from cultural interpretations. To overcome this gap, instead of the study of the celestial phenomena by themselves, some authors have proposed the explanation of the celestial phenomena as a product of cultural models of each society. In this way, the studies that have been part for some time of what is known as “Cultural Astronomy” seek to underline, in greater depth, the importance of the symbolic interpretation of astronomical data in collective thinking.¹²

7. CONCLUSIONS

The creation myth we reviewed reflects this. It acknowledges an era of gods perfectly synchronized with that of the mortals, as proof of the destiny that matches every 52 years the calendar cycles of both times.

The legacy of a precise observation of the sky, that runs through religious conceptions and crystallize in calendrical creations, finds unquestionable answer in hard data. But we have to set up another kind of conceptual frame in order to discern on the ideological components, those that lead to intellectual constructions, mirror of the philosophical depths of peoples thinking.

We have examined briefly the perspective of a European man, whose reflections were the product of the renaissance spirit, who attempted to reestablish

man as the center of the universe by looking at the humanist foundations of the world of ideas. The observation of the sky and the stars, the obsessive interest in the understanding and explanation of time, and the purpose to place the role of man into the cosmos game, permeate the minds of individuals through all ages. For the Prehispanic studies the man also reveals himself through the creation of his philosophical work.

The analysis presented here proposes, in general terms, to reappraise the reliable data provided by the texts of the missionaries, as a way to trace the future lines of research about the religious thinking of myths from indigenous societies of the past. This thought is translated as the basis of a symbolic world, in which the observation of natural and astronomical phenomena refer to the sacred and allow men to relate to their environment.

REFERENCES

- Elíade, Mircea. 1981, “Lo sagrado y lo profano”, Barcelona, Guadarrama, Punto Omega
- Lévi-Strauss, Claude. 1989, “Mito y significado”, Madrid, Editorial Alianza
- López Austin, Alfredo. 1973, “Teogonía e Historia de los mexicanos”. Tres opúsculos del siglo XVI, ed. Angel Ma. Garibay, México, Editorial Porrúa, (Sepan Cuanos, núm. 37)
- _____. 2006, “Los mitos del tlacuache”, México, Universidad Nacional Autónoma de México, Instituto de Investigaciones Antropológicas
- _____. 2012, “Cosmovisión y pensamiento indígena”, México, Universidad Nacional Autónoma de México, Instituto de Investigaciones Sociales
- Ruiz Gallut, María Elena. 2004, “Las formas de la noche. Diálogos en Atetelco”, en: Muros que hablan. Ensayos sobre la pintura mural prehispánica en México, México, El Colegio Nacional, 267
- Sahagún, Fray Bernardino de. 1981, “Historia general de las cosas de la Nueva España”, ed. Angel Ma. Garibay, México, Editorial Porrúa

¹²For myths, comparisons allow to find “further information” that rely on the social use that each one considers in their versions, and the value of all secular perceptions in our quest for meaning (López Austin, *Op. cit.*, pp. 359). Indeed, this is one of the tools from which new questions are asked and, above all, from which the possibility of enriching the answers rises.