SYMBOLISM OF SOLSTICES IN MESOAMERICAN COSMOVISION

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RESUMEN

La autora reitera su hipótesis, corroborada por otros autores, acerca de la importancia de los puntos solsticiales como marcas de un espacio rectangular regido por el sol. Importancia que se muestra en los registros de los solsticios en los monumentos arqueológicos en su celebración en las fiestas religiosas del calendario anual; en el simbolismo, en los glifos kin y ollin, en los diagramas cósmicos, y en los rituales agrícolas, sobre todo en los relacionados con el maíz.

ABSTRACT

The author reaffirms her hypothesis, corroborated by other scholars, about the importance of the solstice points as markers of a cosmic rectangular space ruled by the Sun. Importance which is shown in the solstice registers in the archaeological sites, in the symbolism of the kin and ollin glyphs as well as in the cosmic diagrams, in the festivals celebrated during the solstices and in the agricultural rituals, specially the ones held in the maize fields.

Key Words: archaeoastronomy

Since long ago, we have insisted in the importance of the solstitial points in Mesoamerican cosmovision (González: 1963, 1975, 1995, 1999) which constitute – not only in Mesoamerica but in all the ancient world, one of the first and more meaningful marks to establish the limits of the universe. These points set limits to the horizontal space which surround humans, and in their imagination, place guardians who had as one of their tasks, stopping the sun at the solstitial points in the north and south of the horizon, so that would not lose itself in the infinite and in darkness.

In this paper, besides repeating the most important issues mentioned in my previous works, I add new data provided by scholars who have independently reached the same conclusions, regarding the importance of the solstitial points.

I insist on the importance of the solstitial points, because they are the ones which mark the limits of the earth, even though the earth can also be conceived as a living being.

1. SOLSTICE SYMBOLS

The medicinal wheels of the North American Plains and the solar petroglyphs of Mesoamerica may be the antecedent, or a complement, of Mayan kin glyphs or the Nahua ollin glyphs. The kin (Figure 1) symbol was represented by a square with a central point and axis or lines going to its corners or by vertical and horizontal lines, which show the cardinal and intercardinal directions respectively (González, 1975: 53, 54, 58; Milbrath, 1999: 79; Sprajc, 1996: 102).

The ollin sign (Figure 2) (González: 1963, 1975, 1995, 1999) has been generally represented by a dot, a little circle, or an eye in the center, from which four blades are directed more or less towards the intercardinal directions. Durán (1967, II: 268) clearly mentions that “The seventeen sign, who was called ollin, which word means “thing that moves or wiggles”, sign which was applied to the sun […] Ollin is the sign or the character of the Sun, and it is, as we saw in the form of blade, for the four points which makes, which means movement”. Very likely a form of ollin was represented in the center of the Sun Stone (Tichy: 1976) marking also the four solstice directions.

In his meticulous study about the sign ollin, Köhler (1982) proposes that it represents an image...
of the earth limited by the annual course of the Sun, as well as a model of the universe.

Constanza Vega (1991:521) in her article “The Course of the Sun and Aztec Ceramics” registers a group of signs that she relates to the days which mark the solstices; all of them are shown together in the polychrome vessel (Figure 3).

A flower with four petals has also been interpreted as an image of the Sun and its solstices (Freidel et al; Vega). It is prevalent in Teotihuacan’s iconography, including the cave underneath the Sun’s pyramid, which has the form of a flower with its four petals that: “seem to point to the four solstitial points” Heyden (1983: 65, 66).

The ball game with its form of an I or a double T may also symbolize the annual course of the Sun, especially in the way it is represented in almost all the Mesoamerican codices: the horizontal bars of the I would mark the places where the Sun stops for a few days, when it reaches the most southern and the most northern point in its path on the horizon.

2. COSMIC DIAGRAMS

The images in the Tonalamatl of the Pochtecas (Fejervary-Mayer,) and the Madrid Codex, contain the four sections of the Universe, including its corresponding trees, birds and gods, but also the intercardinal points which overlap with the solstitial points.

In the Tonalamatl of the Pochtecas’s diagram, the East, North, West and South sectors are clearly limited within a trapezoidal space. Between them, there are four long flower petals which mark the intercardinal directions, on the top of each, there is a bird which has on the center of its body a circle, inside of which there are one of four signs of the tonalpohualli, “carriers” of the year, and markers of the world directions: acatl—reed (NW), tecpatl—flint (NW), calli—house (SW) and tochtli—rabbit (SW). Inside and outside each petal there are many meaningful signs (Figure 4).

The diagram of Mayan Madrid Codex (Figure 5) also shows the cardinal and the intercardinal directions painted on the Mayan style with less figures and more glyphs. Milbrath (1999:71) points out the differences between the two diagrams and proposes further comparative studies between the two of them.

3. ANNUAL CALENDAR

In 1975 I placed the summer and winter solstices in the month’s tecuilhuitontli and atemoztli of the 365 days Mexica calendar according to the dates given by Cristóbal Del Castillo (1950:78). In the month tecuilhuitontli the days were longer, and even if the Sun seemed to rule, the aquatic deities had to be propitiated so that they would send their benefi-
cultural rains (González, 1975: 74)\(^2\). I placed the winter solstice (ibid :75) in atempoztli, following what Torquemada (1943, II:288) says: “the reason to order to celebrate [this feast] is because the Sun has reached the highest of it’s way and [as everybody knows] after twenty one days it makes it’s path and undoes what it has walked”. And Duran (1967, I: 287) adds: “a commemoration of the descent of [the god] Huitzilopochtli was celebrated”.

The month before atempoztli was panquetzaliztli, when Huitzilopochtli’s big feast was celebrated. In relation to this month, the Historia de los Mexicanos por sus pinturas (Del Castillo, 1950:234) says that it was celebrated when the Sun was in its declination, so I (González, 1975:75) infer that “to the eyes of the Mexicas the Sun was getting weak, therefore it was necessary that the nourishing blood and hearts were given to him with the help of the war god: Huitzilopochtli”. Aguilera (1982) places the winter solstice in atempoztli and Huitzilopochtli’s celebration in panquetzaliztli. According to her calculations the inauguration of the Great Temple of Tenochtitlan took place in a winter solstice and Broda (1980) places this event on December 22nd of 1487.

4. ARCHAEOLOGICAL ORIENTATIONS

Most of the archaeological ruins of buildings in Mesoamerica are astronomically oriented and many of them were oriented in relation to the Sun’s culmination, equinoxes and solstices. Aveni and Har-\(^2\) According to Sahagún, tecuilhuitontli took place from June 12th to July 1st, and atempoztli from November 13th to December 28th.

5. SOLSTICES AND ETHNOGRAPHY

Several authors who have carried out ethno-graphic research in different sites of Mesoamerica, mention the reference of the four corners of the world, or the four solstitial points, which define the rectangular space of the earth. These mentions refer to the cosmological view as well as to the rituals per-
formed following this worldview, especially the ones related to growing maize.

The first to write about the importance of the solstices among the Mayans from Yucatan was Villa Rojas (1968), but the scholar who has done more research on this field is Ulrich Köhler. Köhler, declares that the discussion about this point was initiated by Girard who tried to clarify the erroneous concept of cardinal points used by the chronicles and followed by the modern scholars. He insisted that rather than cardinal points, the idea the Mesoamericans had, and have, is of “rumbos”, spaces or sides,-idea that was expressed long ago by León Portilla - and that the holders of the sky were not in the cardinal points, but on the corners of the universe.

Barbara Tedlock (1992: 177, 178) in her study among the Quiché of Guatemala denies the existence of the conception of fixed cardinal points.

Köhler himself (1995: 90, 91) after his field investigations among the Tzotziles of San Pablo from Chiapas, concluded that at least in that place:

1. There is no name for the cardinal points;
2. The pillars of heaven are placed as a rectangle;
3. These pillars are located in the corners of heaven, or in the world building;
4. North and South are called “side of Heaven”;
5. Two pillars are located in each of the Eastern and Western horizons;
6. The ascent of the solar god described in the myth was done through a post in the house approximately placed in the Southeast direction;
7. The lines drawn by an observer towards the pillars placed to the East and West form an approximate grade of 40°-50°;
8. The four pillars of heaven limit the Sun’s path. And, he adds, that the first five points show that the pillars of heaven cannot be placed in the cardinal points, instead, the other three points clearly show that they are located in the solstitial points.

Köhler (ibid: 92-97) mentions similar data from other Mayan Tzetzal communities and from several other groups of Mesoamerica³.

³This book was first published in German in 1977.
4For lack of space we cannot include the names of all the scholars who have mentioned the squareness of the earth.

REFERENCES
Barrera-Bassols, Narciso. 2003, “Symbolism, Knowledge and Management of Soil and Land Resources in Indigenous Communities: Ethnopedology at Global, Regional and Local Scales, 2 vols”, Belgium, PhD in Earth Sciences, Faculty of Sciences, Ghent University.


Del Castillo, Cristóbal. 1950, “Historia de los Mexicanos por sus Pinturas”, traducción de Francisco del Paso y Troncoso, Florencia, [u.p ], (Biblioteca Náhuatl V. Tradiciones, Migraciones).


