

# **THE PERSONIFICATIONS OF CELESTIAL WATER: THE MANY GUISES OF THE STORM GOD IN THE PANTHEON AND COSMOLOGY OF TEOTIHUACAN**

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## **Abstract**

The Teotihuacan Storm god – evidently a proto-type of the rain deity *Tlaalok* of the later Aztec – figures prominently in the iconography of this great metropolis. This prominence bespeaks of the importance of this divinity in the ancient pantheon and ritual practices of Teotihuacan. Yet, although the Storm god has been studied by Teotihuacanists for some time, a coherent treatment that identifies and segregates all of its varied manifestations is still wanting. For the ancient Maya the matching rain divinity, known as *Chaahk* (literally ‘thunder’), is also known for its many manifestations, wherein each served as embodiments, or personifications, of distinctive atmospheric phenomena. Thanks to the associated glyphic captions that name each of these manifestations of *Chaahk* we are now in a position to create a more sound classification of these diverse embodiments and to begin to tie these to particular types of rains and storms. One of the primary sets of personifications of the Maya *Chaahk* is tied to the cardinal points, wherein each manifestation is associated to the matching coloration of the prime directions of the heavens. Using Classic Maya as well as Postclassic Aztec and Mixtec data as sources of analogy it becomes clear that we are able to identify some of the more salient manifestations of the Teotihuacan Storm god, to clarify the associated features and to provide a template or underlying structure to the ancient pantheon and cosmology of Teotihuacan.

## **Resumen**

El dios de las tormentas de Teotihuacan — evidentemente, un prototipo de *Tlaalok*, la deidad de la lluvia de los aztecas posteriores — fue destacada prominentemente en la iconografía de esta gran metrópolis. Esta preponderancia denota la envergadura de esta divinidad dentro del antiguo panteón y las prácticas rituales de Teotihuacan. Sin embargo, aunque los teotihuacanistas han estudiado al dios de las tormentas hace algún tiempo, aún no se ha efectuado un tratamiento coherente que identifique y separe a todas sus múltiples manifestaciones. La deidad correspondiente en el caso de los antiguos mayas, conocida como *Chaahk* (cuyo significado literal es ‘trueno’), también es conocida por sus múltiples manifestaciones, en donde cada una de estas funcionaba a manera de encarnaciones o personificaciones de fenómenos atmosféricos particulares. Gracias a los pasajes jeroglíficos asociados que nombran a cada una de estas manifestaciones de *Chaahk*, nos encontramos en una posición que permite crear una clasificación más sólida de estas diferentes personificaciones y comenzar a vincularlas con tipos particulares de lluvias y tormentas. Uno de los conjuntos primarios de personificaciones del *Chaahk* maya está relacionado con los puntos cardinales, en donde cada manifestación está asociada con la coloración correspondiente a las principales direcciones celestiales. El empleo de datos proveniente de los mayas del Clásico, y de los aztecas y los mixtecos del Posclásico como fuentes de comparación, se hace evidente nuestra capacidad para identificar a algunas de las manifestaciones más destacadas del dios de las tormentas de Teotihuacan, para aclarar los rasgos asociados y para proporcionar un patrón o estructura subyacente al antiguo panteón y cosmología de Teotihuacan.

## INTRODUCTION

Water is of paramount importance to human survival. As a basic source of nourishment and sustenance, of hygiene and even as the basic element in the production of ceramic and lapidary arts as well as masonry, it is little wonder that water has assumed such a privileged place in all cultures. The significance of water cannot be exaggerated in any way, and as a consequence water has assumed an exalted role in the mythology and religious world-view, or cosmology, of so many societies. However, in grappling with the daunting task of conceptualising water, recourse has invariably been made to the process of personification, wherein bodies of water, lakes, rivers and springs, were each envisioned as a particular divine entity, assuming a distinct guise and exhibiting a set of typical characteristics. Nevertheless, this process of personification extends also to other types of water, such as that associated to phreatic caves, or the array of atmospheric water phenomena, including rain, sleet, hail, and snow. Mesoamerica is no exception in this and in the panthea of its varied cultures personification appears to have been nurtured by theologically-motivated ontological concerns and as an emphatic process defining focal points of ritual devotion. Although it is difficult to generalise, in Mesoamerican panthea there is a strong division between deities tied to bodies of standing water, bodies of running water, and deities that personify atmospheric phenomena. Characteristically, the latter are also typically viewed as the guardians of caves, since caves are thought to be the birth place of rain-bearing clouds.

Here we will focus on personifications of water, particularly celestial water and associated atmospheric phenomena. As we will see there are some notable structural continuities between the rain and thunder deities of several Mesoamerican cultures, including the Maya and the Aztec. In turn, this allows us to posit some hypotheses and establish inferences as to the Storm god of Teotihuacan, a deity of paramount importance considering the many depictions of this entity in the murals and plastic arts of this great metropolis. Anchored in epigraphic research of recent years, this paper will also investigate how cultures in Mesoamerica have used colours as parts of their cosmological and theological frameworks, and we will propose that a similar pattern undoubtedly existed at Teotihuacan during the Classic period, made manifest by the Storm god and its varied incarnations. Beside the use of cross-cultural comparisons our approach is based on a systematic review in the iconographic corpus, to analyze and scrutinize the many different depictions of the Storm god, followed by comprehensive inventorying, classification, and typological exercises that serve to segregate and identify the different manifestations of this deity. Whereas several scholars have expressed doubts as to where to draw the line, we identify a standard or even proto-typical Storm god in the iconography as one that exhibits three main characteristics, namely: **1**) goggles framing the eyes (a.k.a. *anteojos* or eye-rings), **2**) curving upper lip (a.k.a. *bigotera* or moustache), and **3**) prominent fangs below the lips (a.k.a. *colmillos*).

Any entity that does not exhibit these three features is not considered to be a representation of the Storm god (Figure 1). The reason for drawing this distinction is that several figures represented in the iconography bear traits of the Storm god, especially the goggles, such as martial effigies and even actual inhumations, as well as depictions of butterflies, undoubtedly representing the souls of departed warriors (see Miller 1973: 78, Fig. 110; 80-81, Fig. 116; 81, Fig. 119; Pasztory 1974: 15). Through our review we have amassed examples of the Storm god where the three characteristics are visible, in the iconography and material culture of Teotihuacan as documented in the published literature. The corpus which we have amassed, including the more abbreviated emblematic forms and nose-pendant figures, comprise 143 examples in all, including 114 monochromatic examples, rendered in sculptures, glyphic renderings, ceramic effigies, and murals, and a smaller sample of 29 polychromatic examples found in the murals and stuccoed ceramics. The polychromatic sample has allowed us to identify that there are several Storm gods whose bodies are characterized by a particular colouration. In all we have identified six different colorations that appear to serve as diagnostic attributes, and as



**Figure 1.** An example of a Teotihuacan Storm god, exhibiting the three basic characteristics, namely the goggles, the curving upper lip and the prominent fangs. Example from Tepantitla, Portico 2 (photograph by Christophe Helmke).

such we surmise that these serve as discrete identifiers to these particular manifestations of the Storm god. We will return to these fascinating examples of Teotihuacan below, but first let us briefly review the research history surrounding the Storm god and draw comparisons to the Postclassic Aztec and Classic Maya, by focusing on the place occupied by rain deities in the cosmology and pantheon of these Mesoamerican cultures.

### “TLALOC A”, “TLALOC B” AND STORM GOD

The goggles, fangs and upper lip, shared between the Postclassic Aztec *Tlaalok*, and the earlier figures depicted in the murals, as well as on the vessels and figurines found in the early excavations at Teotihuacan, led scholars such as Manuel Gamio, Eduard Seler and Hermann Beyer to conclude that an early form of the Aztec deity *Tlaalok* was worshipped at Teotihuacan (Gamio 1922: lxxii-lxxiii, Lám. xiiia-b; Beyer 1922: 273-278; Pasztory 1974: 3, see also Carballo 2007). In the literature different terms have been applied to name the deity related to rain and thunder at Teotihuacan, which traditionally and predominantly has been described by its facial characteristics (Caso 1966; Pasztory 1974; von Winning 1987; Berlo 1992; de la Fuente 1995; 1996). Although the shared traits and facial features imply a continuity spanning from Teotihuacan to the Late Postclassic *Tlaalok* of the Aztec, we prefer to use the more neutral designation of “Storm god” to designate the goggled deity at Teotihuacan (following Millon 1988: 100; Pasztory 1988: 45-73; 1997: 95-107, 136; Berlo 1992: 129-168; Langley 1992: 248-259). Part of the reason is that the language of Teotihuacan remains unknown and a subject of vivid debate (see Nielsen and Helmke 2011: 345-349), and to transpose a Nawatl term onto a deity of the Classic period of Teotihuacan is an entirely anachronistic, and quite possibly wholly erroneous, exercise. Esther Pasztory felt it was practical to use the name of the corresponding Aztec deity when such a correspondence could be established, but cautioned that “the reference must be qualified as being to the Teotihuacan version of the deity” (Pasztory 1972: 152; see also Carballo 2007: 55). Pasztory

herself has used designations such as “Tlaloc” (Pasztory 1971: 127-138) and the “Teotihuacan Tlaloc” (Pasztory 1974), but in the past two decades she has preferred the designation “Storm God” (Pasztory 1988: 45-77; 1997: 95-107)<sup>1</sup>. Nowadays, some scholars prefer to revive the Nawatl designation (Taube 2011), and some are arguing that the name conveys the essential descriptors and connotations that are appropriate to this entity (Headrick 2010). The etymology of the Nawatl theonym *Tlaalok* remains debated, but is usually thought to include *tlaal* ‘earth’, some going on to suggest that the name can be translated as ‘he who ripens the earth’ (Luján and Santos 2012: 31-32, see also Sullivan 1972: 213-217; Karttunen 1983: 276). No matter the designation used, it is crucial to make a clear distinction between the deity of Teotihuacan and that of the Aztec, not the least since the two are separated by more than a millennium.

Nevertheless, most early scholars used the designation of “Tlaloc” for Teotihuacan’s goggled divinity, including Alfonso Caso and Pedro Armillas who found that one such “Tlaloc” entity was closely connected to “watery contexts” (Pasztory 1974: 6). Similarly, for Esther Paszatory, who strove to nuance our understanding of these so-called “Tlaloc” entities, argued for the existence of two types of rain-deities in Teotihuacan iconography, whom she designated as “Tlaloc A” and “Tlaloc B” (Pasztory 1974). Based on this dichotomy a very simple two-sided picture of Teotihuacan’s Storm god had been formed. Using the Postclassic *Codex Borgia* (p. 27)<sup>2</sup> as a canonical reference, she identified different types of *Tlaaloke* in Teotihuacan iconography, and concluded her analysis by suggesting the terms “crocodile-Tlaloc” and “jaguar-Tlaloc” (Pasztory 1974: 18). In this scheme, the allegedly crocodilian “Tlaloc A”, was associated to earth and water, whereas the feline “Tlaloc B”, was tied to weaponry and war, as well as fertility (Pasztory 1974: 19)<sup>3</sup>. Startlingly, Paszatory even went on to ask whether “other so-called Tlaloc [*Tlaalok*] images at Teotihuacan can be further variants of a Tlaloc image?” To this query she provided a clear and categorical answer: “no” (Pasztory 1974: 10-11). Thirteen years later, the significant two-volume work on the iconography of Teotihuacan, compiled by Hasso von Winning, was finally published (von Winning 1987). In these works, von Winning makes it clear that he followed in the footsteps of Paszatory, arguing that two types of *Tlaaloke* were found at Teotihuacan, one associated to water, “Tlaloc A”, and another associated primarily to war and offerings, “Tlaloc B”, and secondarily to water and fertility (1987: Tomo I: 77, Tabla 6). Both Paszatory and von Winning identified the “Tlaloc A” and “Tlaloc B” according to different facial characteristics by categorizing, for example, the specific form of the upper lip (Pasztory 1974: 6-7, 16; von Winning 1987: Tomo I: 68; 94), the number of fangs, and the presence of a water-lily in mouth (von Winning 1987: Tomo I: 77, Tabla 6). Remarkably, no study to date appears to have taken into consideration the colour-differences of these various Storm gods as a criterion for segregating different entities or manifestations. Underscoring this is the fact, that the works of Paszatory and von Winning

<sup>1</sup> Karl Taube mentions that “en el Altiplano Central de México, los vientos que provocan las lluvias de primavera y verano provienen del oriente” (2009: 29; for an illustrative example, see Iwaniszewski 1986: 254, Fig. 3), and is hereby highlighting a natural phenomenon, where stormy winds precedes the heavy and rain-laden clouds during the rainy season. To term the rain-related deity in Teotihuacan as the Storm god, may then be seen as an equation with the Rain god, but the tradition of using the term Storm god within the cultural spheres of Teotihuacan, may further serve to mark the distinction between the rain-deity in this particular culture, compared to rain-related deities in other Mesoamerican cultures, as the Aztec one, discussed in this paper.

<sup>2</sup> Consult Vela 2009b for an illustrative overview over some Pre-Hispanic and Early Colonial codices, including *Codex Borgia*.

<sup>3</sup> This analysis conducted by Paszatory was adopted a few years later when Cecilia Klein tried to answer who the Postclassic Aztec *Tlaalok* was, illustrating the seldom case when interpretations based on Classic Teotihuacan material try to explain subjects within the later Aztec one (Klein 1980: 156-157, see also Heyden 1975 for an example of the opposite approach).

were published in solid black and white. However, Pasztory does make a mention to the yellow colouration of the Storm god represented in the registers that frame the murals of Tepantitla, and referred to this feature as “internal cross references”, going on to suggest that the yellow colouration refers to “the yellow vegetation deity” (Pasztory 1974: 11, note 2). Although this one sympathetic comment yields insights into the conceptualizations of Western scholars, it opens no windows onto the ancient pantheon of Teotihuacan, nor its internal structure and inhabitants. As we will see, colour is of paramount importance, not only at Teotihuacan, but for Mesoamerican cultures generally, and provides an open field in which to explore the varied nature of the Storm god and its many manifestations.

## QUADRIPARTITE RAIN AND THUNDER DEITIES IN MESOAMERICA

Since records from the Maya area illustrate one of the best documented cosmological schemes in all of Mesoamerica, it seems natural to begin our broader Mesoamerican approach within the Maya data. Sir J. Eric S. Thompson, the famed Mayanist, informs us that the modern Yukatek Maya believe that there are four leading *Cháak* entities, called the *Nukuch Cháako'ob*, and that there are many other minor *Cháak* deities. The four leading *Cháak* deities are associated with and correspond to each of the world directions, and are known by different names, such as *Hopo ka'an Cháak* ‘Cháak who ignites the sky’, and *Ajbolon ka'an Cháak* ‘He the nine sky *Cháak*’ (Thompson 1970a: 255). Based on their work at Chan Kom, in Yucatan, Robert Redfield and Alfonso Villa-Rojas confirm the existence of the different facets of *Cháak* when they state: “In formal prayers alternative names for the chacs of the four directions [are used, and] when a black cloud first arises in the east, it is said the black chac is coming” (Redfield and Villa-Rojas 1962: 115-116). To this we can add the observation made by Sir Thompson, commenting on the religious beliefs of the Maya of southern Belize: “Again there is a chief Chac among four principal ones, who are associated with the four corners of the world and the four world colors. In addition to this there are innumerable minor Chacs” (Thompson 1930: 61).

These ethnographic and ethnohistoric accounts unquestionably demonstrate the existence of a quadripartite universe among the Yukatek Maya, a pattern that can be extended to the Late Postclassic, in the evidence afforded by the *Dresden Codex*. This Postclassic Maya divinatory almanac, includes an extensive section listing attributes of the rain and thunder deity *Chaahk*, his many guises, and associated attributes (see Helmke 2007; Pallán Gayol 2009: 18; Stone and Zender 2011: 40-41). Of interest are the segments of pages 42 through 45, as well as pages 29 and 30, which all portray four different aspects of *Chaahk*, each labelled by the following captions (Figure 2):

Demonstrative	Theonym		Cardinal direction	Translation
<i>Alay?</i>	<i>Chak</i>	<i>Xib Chaahk</i>	<i>lak'in</i>	‘This is the Red man <i>Chaahk</i> , east’
<i>Alay?</i>	<i>K'an</i>	<i>Xib Chaahk</i>	<i>nohol</i>	‘This is the Yellow man <i>Chaahk</i> , south’
<i>Alay?</i>	<i>Ihk'</i>	<i>Xib Chaahk</i>	<i>chik'in</i>	‘This is the Black man <i>Chaahk</i> , west’
<i>Alay?</i>	<i>Sak</i>	<i>Xib Chaahk</i>	<i>nal</i>	‘This is White man <i>Chaahk</i> , north’

The relation between colouration and cardinal direction is thus evenly made, and here we can see that the colouration serves as the main distinguishing attribute for this particular set of quadripartite *Chaahk* (see also Helmke 2007, 2012: 85-89). Fascinatingly, we see references in the glyphic texts of the Classic Maya, to the same *Chak Xib Chaahk* (see for example Schele and Miller 1986: 148-150, Pl. 40; 227, Pl. 90; 275-277, Fig. VII.3; 310-312, Pl. 122; García Barrios 2006: 201-206) making it clear



**Figure 2.** Detail of pages 29-30, *Codex Dresden*. These pages show the four-fold manifestations of the Late Postclassic Maya rain and thunder deity *Chaahk*, each tied to a particular colouration and world direction. From left to right these are the white *Chaahk* in his canoe, the black *Chaahk* in a *cenote*, the yellow *Chaahk* beating on a drum, and the red *Chaahk* hunting deer (scan of the original © Sächsische Landesbibliothek, Dresden).

that the same underlying system existed in the pantheon of the Classic Maya, wherein one aspect of the rain and thunder deity existed in quadripartite form. It is also important to remark that this quadripartite distribution was not restricted to *Chaahk*, but also applied for example to other divinities, including God K (*K'awiil*) and an aspect of God N (*Chan Itzam Tuun*), that during the Classic period equally occurs with its distinctive cardinal colourations (Helmke 2012: 89; see also Boot 2003: 7-10; Martin in press). As a result it may well be that the majority, if not all, Maya deities were considered to exist in quadripartite form, even if these were not explicitly referred to as such.

That this framework is a Mesoamerican one, and not restricted to the Maya can be demonstrated by the Aztec *tepetlakalli* de Tizapan, most recently analysed by scholars Leonardo Lòpez Luján and Marco Antonio Santos (2012) (Figure 3a). This gripping artefact is for all intents and purposes a cosmogram and represents on the underside of its lid an array of four *Tlaalok* deities, each supporting and framing the centre of the universe (see also Matos Moctezuma and Solís Olguín 2002: 145, Cat. 56). Again the *Tlaalok* figures are each rendered in the colouration that corresponds to the cardinal directions. In the *Codex Borgia*, we find another comparable array, but this time with four *Tlaalok* in each of the corners of page 27, and a central one, as if hovering in the foreground, dominating the scene, and forming a cosmological quincunx (Figure 4; see also Boone 2007: 145-151). A panel, now in the Museo Amparo, provides corroboration of the quadripartite nature of the Mixtec form of *Tlaalok*, here as four deities hovering above the scene, each replete with small and upturned water jars, as if showering forth propitious rain (Figure 3b) (Urcid 2009: 34). Even more to the point is the set of five *Kosiyo* urns that adorned the facade of Tomb 3 at Xoxocotlan, again speaking of a quincunx configuration among the



**Figure 3.** a) The cosmogram representing four different Tlaloc, with their corresponding colours, on the lid of the tepetlacalli de Tizapan (drawing by Fernando Carrizosa); b) The quadripartite configuration of the Late Classic Zapotec deity of thunder and rain, Kosiyo, hovering above the scene with small jars, tipped over the seated humans (Urcid 2009: 34); c) Early Classic period Zapotec Kosiyo effigy adhering to four ceramic vessels, demonstrating the quadripartite nature of this deity (Flannery and Marcus 2003: Fig. 9.13).



**Figure 4.** The cosmogram depicted in *Codex Borgia* (p. 27). Here five coloured manifestations of the rain-deity are portrayed. Note also the way weather phenomena and maize cobs are rendered in each of the four world quadrants. As an example on this connection, the blue-coloured *Tlalok* is surrounded by heavy rain-laden clouds, above seemingly erect and fresh maize cobs, whereas the yellow-coloured *Tlalok* smoulders under the piercing rays of the sun and the maize fields are blighted by grasshoppers.

Classic Zapotec (Urcid 2009: 33; see also Flannery and Marcus 2003: 346, Fig. 9.13) (Figure 3a-b). These intriguing correspondences, which span at least a millennium, and in some parts subsist to this day, between the Maya, the Zapotec, the Aztec, and the Mixtec leave little doubt that the quadripartite or quincunx nature of deities – and of rain gods in particular – was a fundamental point of equivalence between the panthea of these societies, despite significant linguistic, cultural and temporal differences.

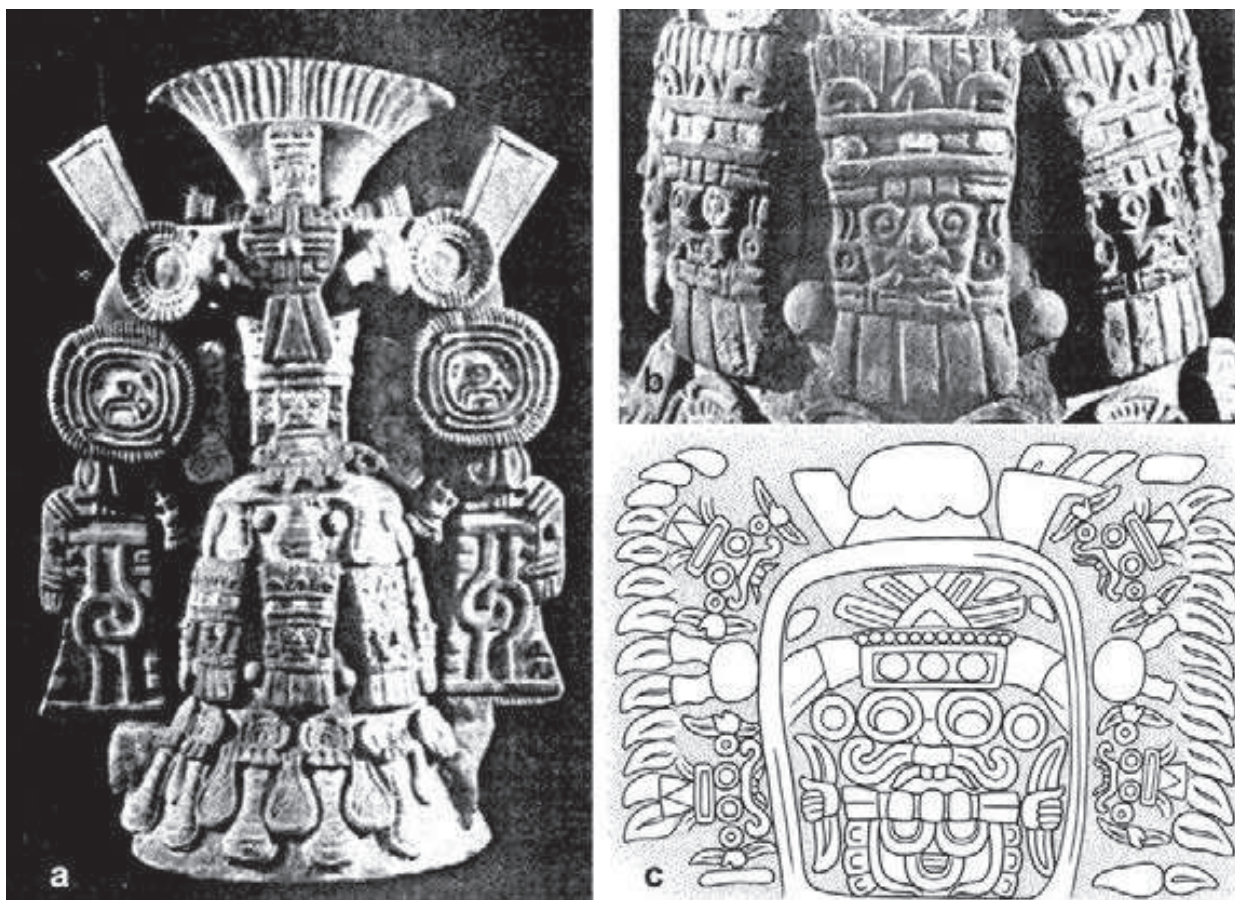




**Figure 5.** Sets of Storm god effigy vessels in groups of three, illustrating another numerical pattern that is significant to this grouping of deities (Berrin and Pasztory 1993: 242, Cat. 119).

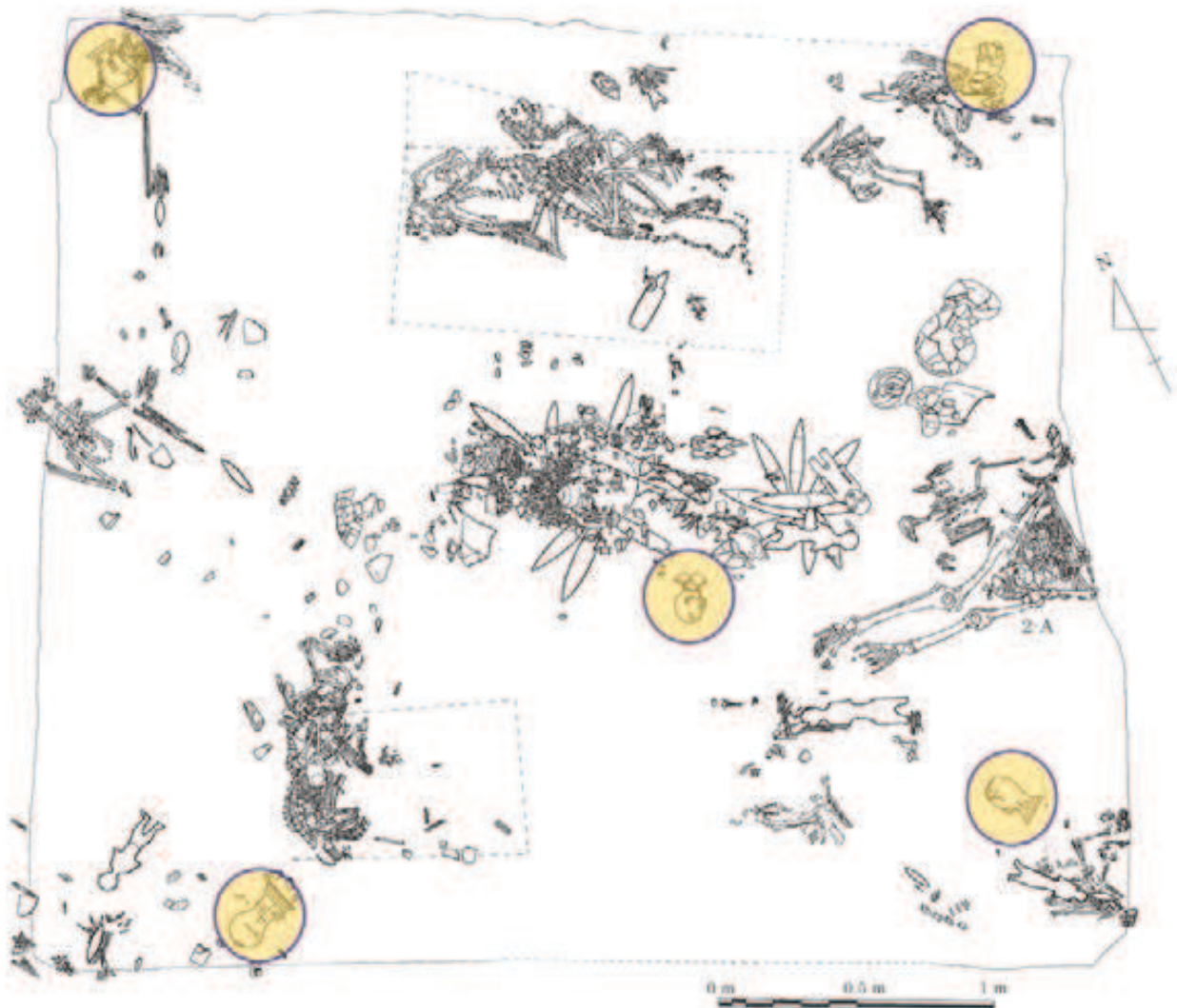
In turn, this begs the question as to whether a comparable scheme existed at Teotihuacan. At first glance, the intriguing Storm god jars that occur in sets of three, would seem to suggest that a different numerical pattern governed the pantheon of Teotihuacan (Figure 5) (Berrin and Pasztory 1993: 242, Cat. 119; Castillo and Miranda 2009: 321, Cat. 136). However, on a fascinating incense burner from Teotihuacan, we can see a five-fold representation of the Storm god below another Storm god representation (Figure 6a-b). They all bear a torch in the mouth, and a trapeze-and-ray sign in their headdresses. Mirrors adorned with the Reptile Eye sign are seen on both sides of this censer. Farther afield in the Escuintla region of Guatemala, a ceramic tripod, in pure Teotihuacan style represents a large centrally-placed Storm god, with trapeze-and-ray headdress and an inverted triple mountain sign in his mouth; but what is truly remarkable are the four smaller Storm gods that frame this central figure, each brandishing small lightning bolts (Figure 6c) (Hellmuth 1978: 83, Fig. 16; Taube 2009: 155, Fig. 2a). These ceramic specimens confirm that a five-fold conception of the Teotihuacan Storm god were indeed present in this city and beyond, among its dominions.

Moreover, as has been aptly identified by Annabeth Headrick, a burial in the Moon Pyramid allows us to reconstruct a key part of the cosmology of Teotihuacan. Headrick (2010) in commenting on Burial 2 (Figure 7), has remarked that five small jars, bearing the effigy of the Storm god were found in this deposit, and that four of these were placed at the corners, whereas the fifth was placed in the very centre (see Sugiyama and López Luján 2007: 127-130). Finally, Hermann Beyer, also comments on the existence of fragmentary ceramic specimen wherein five such Storm god jars were modelled and fired together, with one larger central jar, and four smaller ones around it (Beyer 1922: 274, Lám. xiiia-b). As such, it is clear that the quadripartite and quincunx configuration of rain and thunder-deities extends also to the Classic period Storm god of Teotihuacan.



**Figure 6.** Five-fold Storm god manifestations in Teotihuacan culture; a) An incense burner depicting five-fold manifestations of the Storm god, with another supreme and overarching Storm god presiding over the lesser Storm gods; b) detail (Berlo 1984: Plate 37); c) Detail of moulded tripod vessel from the Escuintla area of the Guatemalan piedmont, depicting a large central Storm god, flanked in the corners by four smaller Storm god “helpers”, arranged in a cosmological quincunx (drawing by Nicolas Latsanopoulos).

Although the “Structure of the Altars” at the foot of the Pyramid of the Moon has been the subject of much discussion, it seems necessary to consider it again here (Figure 8a). This structure has been dated by Jorge Acosta (1966: 48) to c. AD 300-650, and as many scholars have noted, the quadrangular structure is accessed from the west and in its interior are the remains of the lowest reaches of *talud-tablero* piers. Whereas the original interior configuration of the structure remains unknown on account of its state of preservation, it would seem plausible that the *talud-tablero* stumps are in fact the remains of “altars” for lack of a better term, to use the designation by authors before us (e.g. Acosta 1966: 48; Schöndube 1975: 241; Cabrera Castro 2000: 206-207). What makes these so-called altars remarkable is their disposition, which is significant in terms of cardinal directions, four altars aligned centrally to each of the cardinal directions (the western one distributed on either side of the doorway), four additional ones to the inter-cardinal directions and finally, a ninth one at the centre. This nine-part configuration is extremely important, and implies that in addition to the quadrangular cardinal configuration with the centre figuring as a quincunx, the lateral inter-cardinal directions also figured prominently in the cosmological structure in place at Teotihuacan in the Classic period. Relatively



**Figure 7.** Burial 2, Moon Pyramid, Teotihuacan. The plan shows the disposition of the five Storm god effigy vessels that were found within this ceremonial deposit, conforming to a quincunx cosmogram (drawing by Saburo Sugiyama © Moon Pyramid Project).

little is known about the role of inter-cardinal directions in Mesoamerica, but the murals discovered in Tomb 12 at Río Azul, in Guatemala, provide further insights (Figure 8b). Here, the accompanying glyphic caption suggests that the tomb can be dated to c. AD 450 (see Acuña 2007: 35-36), indicating that it is squarely contemporary with the “Structure of the Altars” at Teotihuacan. As a result it is clear that inter-cardinal points were of some importance in Mesoamerican cosmology, although these have gone largely unrecognized to date. What is significant for us here is that such a cosmological template may have shaped conceptions of the pantheon that were in place during the Classic period. Consequently, the number nine appears as equally significant as four or five, each as different aspects of a larger cosmological template. Considering the importance of the number nine, one wonders if this helps to explain the triadic groupings of Storm gods, as mentioned above, since three triadic groups naturally forms nine (see Figure 5). These findings have fascinating implications, not the least when we consider the examples of Teotihuacan Storm gods rendered polychromatically on murals and stuccoed



**Figure 8.** a) The “Structure of the Altars” at the base of the Pyramid of the Moon, Teotihuacan (photograph by Christophe Helmke); b) The interior of Tomb 2, Río Azul, Guatemala. Note the glyphic captions on the walls that record the cardinal directions and those in the corners referring to inter-cardinal directions (photograph by George Mobly © National Geographic Society).

ceramics. The 29 such examples that we have identified were rendered in blue, black, green, red, white and yellow, the common cardinal colours, not only in Mesoamerica, but in the Americas as a whole (see Table 1; DeBoer 2005: 71, Table 4). However, before we go on to explore the ramifications that these colourations have for our understanding of the cosmology and pantheon of Classic Teotihuacan, it is necessary to review the role that colours played in the cosmograms of Amerindian cultures, both within and without Mesoamerica.

### THE COLOURS OF THE CARDINAL DIRECTIONS

It is a well-known fact that Amerindian cultures, both within Mesoamerica and beyond, conceived of a cosmology that divided the universe into four equal quadrants, aligned to the cardinal directions<sup>4</sup> (see DeBoer 2005). Each of these quadrants was associated with a distinct colour and at times the centre was also attributed a colour. Throughout the Americas the cosmological colours involved, to varying degrees, were in decreasing order, black, red, yellow, white, green, and blue. The scheme in place for the Maya was first related to us by Franciscan Friar Diego de Landa Calderón (1524-1579) in ca. 1566 (Tozzer 1941: 135-138) who indicates that east was the predominant colour and was tied to red (*chak*), west to black (*ek'*), south to yellow (*k'an*), north to white (*sak*) and the centre to the colour blue-green (*yax*). Remarkably the same exact colour scheme with the same cosmological associations is not only recorded in the *Dresden Codex*, dated to shortly before the European invasion, but also as far back as the Classic period, a whole millennium earlier (see Thompson 1970b; Boot 2003; Houston *et al.* 2009). With the European colonization and Christian conversion, much of Maya religion and rituals have eroded away, and a century ago, among the Maya of southern Belize, it was no longer remembered which of the colours were tied to what compass point (Thompson 1930: 48) whereas among the Maya of Soccutz, in western Belize, there was a lingering, but apparently erroneous memory, stipulating that east should be linked with white and north with yellow (Thompson 1930: 108; see also 57, 59, 65). The Maya case makes it clear that it is not only the best documented cosmological scheme of the Americas, but also the most stable and secure one, until the meddling interference of foreign Western culture.<sup>5</sup>

These are important lessons to remember and should be borne in mind when examining other Mesoamerican cases. As far as can be ascertained the earliest clear indication of a quadripartite universe associated to coloured quadrants in central Mexico is the *tepetlakalli* de Tizapan (Figure 3a), which may well date to the end of the Late Postclassic period (c. 15<sup>th</sup> century) (e.g. Luján and Santos 2012: 26). This stone box shows a colour sequence involving red, black, yellow, and white, with blue at the middle. Although no clear anchor as to directionality is given it seems probable that red should be equated with east. Were this the case then it can be said that the Postclassic colour scheme of the Aztec compared to the Maya cosmos in all respects, included a selection of colours, with the exception that the colours for south and west would be exchanged. Furthermore the central blue would stand in lieu of green, which corresponds well considering that for several Mesoamerican languages the colour referents for 'green' and 'blue' tend to fall under the same term (see MacLaury 1997; Houston *et al.* 2009: 40, 65). Significantly, Guido Münch, in his ethnography of the Nawa and Soke-speaking groups of the Isthmus of Veracruz (1994: 154) makes it clear that precisely the same colour scheme

<sup>4</sup> For a brief discussion of fixed Cardinal directions vs. world quadrants which borders are defined by solstices, see Stuart (2011: 82-84) and DeBoer (2005: 73).

<sup>5</sup> See also Walker (1979: 509) and Hieb (1979: 578) for examples of European interference on Amerindian culture.

as that of the Classic Maya prevailed there, including green at its centre, with seasons also associated to each of the directions (Karl Taube pers. comm. 2012). An intermediate representation to that of the Postclassic Aztec is found in the *Codex Borgia* (p. 27), from western Puebla, which also depicts the colours associated to the cardinal points and the centre, but this provides a rather different picture (Figure 4). The differences could be the product of different cultural filiations, or the dating of the text, since it probably postdates the stone box, but if so, by no more than a century. In the Borgia we find the colour sequence red, blue, yellow, and black, with a rather idiosyncratic series of red stripes on white for the centre (certainly the central colouration is only a place-holder for blue/green). Precisely the same configuration is found in the *Codex Vaticanus 3773* (p. 69) making it likely that the latter is a copy of the former. This arrangement differs from the Tizapan example by having north as black, and south as blue, but preserving the important east-west solar axis with red and yellow, respectively. Looking further still, most modern scholars will agree that the colour scheme of the Aztec cosmos was different, if one were to rely on the works of Friar Diego Durán (1537-1588), completed before 1579 (see Durán 1971; López Austin 2002). Accordingly, such ethnohistorical sources relate that whereas east was indeed red, south was blue, west white and north black, and the centre was green. Comparing this to the Borgia, we can see a coherence, with only the previously yellow west fading to white. However, comparing this to the cosmological scheme of the Maya, it is clear that there is a vivid departure, with the only real key piece of continuity being the selections of colours, and the use of red for east. We can wonder, however, as to the appearance of blue for a cardinal direction in the central Mexican cosmological scheme, since it is absent among the Maya as well as on the *tepetlakalli* de Tizapan, where it is used as centre colour. To find a possible origin for the use of blue as one of the major cardinal points, one has to look farther north among other Amerindian groups. For instance blue is used among the Apache and Navajo for south and among the Cherokee and Pueblo for north (see Table 1). Remarkably, the Navajo cosmos duplicates many of the aspects of the cosmogram found in the Borgia, with the exception that east, is replaced by white. Among the Pueblo the cosmological colours are precisely the same as those used among the Maya, with the exception that black and blue are exchanged and that the whole scheme is rotated 90 degrees south, or one turn clockwise.<sup>6</sup> Seeing as the central Mexican cosmological colour scheme is so liable to change, as attested by the sources available, it makes us wonder what the corresponding cosmogram would have looked like during the Classic period, and at Teotihuacan in particular, assuming that one such existed. Based on patterns of predominance in Mesoamerica and the Americas as a whole (Table 1), we are able to formulate some rudimentary hypotheses concerning the cosmogram in Teotihuacan. For one, in most all cases, east can be equated with red, making this a likely reconstruction for the cosmogram of Teotihuacan. In contrast, west is predominantly associated with either black or yellow, making either of these possible candidates. The colour of the centre tends to be universally blue-green and this seems applicable here also, although since we have good examples of both green and blue at Teotihuacan it seems probable that green should be tied to the centre, leaving blue to one of the major cardinal points. In most all Amerindian cases, if blue is used as a major cardinal colour, it is used for either north or south, and in Mesoamerica it seems to be used nearly exclusively for south, making this the likely format for Teotihuacan also. Finally, depending on the colour for west, north can only be either white or black, by process of elimination. To this we should add that there are some really interesting and mutually-exclusive substitution patterns for black and blue at Teotihuacan making us wonder if yet another

<sup>6</sup> What makes the cosmograms of the cultures of the American Southwest so significant is their extensive use of the colour blue for a major cardinal point and the Navajo-Borgia connections are enticing making one wonder whether one can correlate the appearance of blue in the central Mexican cosmological colour scheme with the fact that migrations figure so prominently in the foundational myths of the Aztec.

possibility is that blue is not merely a subsequent stand-in for black, since comparable substitutions are known for other Amerindian cases (Table 1; see also DeBoer 2005: 67). If this proves to be the case, this would go a long way to clarifying why six colours are represented in the corpus, with green used for the centre, four used for cardinal directions, and blue as the sixth colour, substituting for black.

	East	South	West	North	Centre	Notes
Apache – Modern	Yellow	Blue	Black	White	—	1
Cherokee	Red	White	Black	Blue	Green	2
Lakota	Red	Yellow	Black	Red	Blue	3
Pueblo – Modern	White	Red	Yellow	Blue	—	4
Hopi – Modern	White	Red	Blue	Yellow	—	5
Navajo – Colonial	White	Blue	Yellow	Black	—	6
Tarascan	Red	Black	White	Yellow	Blue	7
Sioux	Red	Yellow	Black	White	—	8
Aztec – Colonial	Red	Blue	White	Black	Green	9, 10
Puebla – Postclassic	Red	Blue	Yellow	Black	Red and white stripes	11
Aztec – Postclassic	Red	Black	Yellow	White	Blue	12
Mixtec – Postclassic	Red	Black	Blue	Yellow	—	13
Zapotec	Red	Yellow	Black	White	—	14
Istmian – Modern	Red	Yellow	Black	White	Green	15
Maya – Postclassic	Red	Yellow	Black	White	Green	16, 17
Maya – Classic	Red	Yellow	Black	White	Green	18
Teotihuacan A (?)	Red	Blue	Black and yellow triangle	Black and white triangle	Green	
Teotihuacan B (?)	Red	Yellow	Black and blue triangle	Black and white triangle	Green	

**Table 1:** Cardinal colours among selected Mesoamerican and North American cultures. Note the two hypothetical cosmograms that we propose for Teotihuacan.

**Legend:** (1) Curtis 1907: 30-48 *passim*. (2) Mooney 1891: 342; DeBoer 2005: Table 4. (3) Brown 1997: 58, 87; see DeBoer 2005: Table 4. (4) see Lenneberg and Roberts 1956. (5) Stephen 1898: 261-262, 1936: 2: 1190-1191; Hieb 1979: 577-578; Dossier 1970: Table 8. (6) Reichard 1990: 15; see also Pinxton 1983: 11; Newcomb and Reichard 1975. (7) Pollard 1993: 141, see also 144, Table 7.1. (8) Hassrick 1989: 256. (9) Diego Durán 1574-1576 and 1579. (10) López Austin 2002: 32. (11) *Codex Borgia*. (12) *Tepetlakalli* de Tizapan (see López Luján and Antonio Santos 2012). (13) *Codex Fejérváry-Mayer*. (14) Marcus 1998: 13. (15) Münch 1994: 154. (16) *Codex Dresden*. (17) Diego de Landa Calderón (Tozzer 1941: 135-138). (18) Glyphic texts, assorted.

## RECONSTRUCTING THE PLACE OF THE STORM GOD IN THE PANTHEON OF TEOTIHUACAN

Having thus made our case for a broad Mesoamerican pattern on how to depict rain and thunder deities and illustrate them in relation to colours associated with the world directions in pre-Columbian times, it is now time to focus our research on the divinities themselves. However, before we attempt to segregate and classify the Storm god material from Teotihuacan, we need to review some important features of rain deities among the Aztec and Maya.

Representations of rain-deities and colours are found in the Postclassic Aztec *Codex Borbonicus* (pp. 30-31). On page 30 the colourful figures are shown in two superimposed rows. The figures of the lower row are standing atop a pyramidal platform, with a *teixiptla*, or 'deity impersonator', of the maize-goddess, adorned with multi-coloured garments (DiCesare 2009: 127). The maize-goddess has "a retinue of four attendants, who also carry maize cobs in their hands [and] they display headdress adornments of fanged, goggle-eyed blue masks" (DiCesare 2009: 128). The garments of these four figures are, appropriate enough, coloured blue, white, yellow, and red. Also dressed in the colouration of the four cardinal directions are four *Tlaalok* impersonators that surround a maize goddess on page 31 in the *Codex Borbonicus* (Figure 9). The coloured impersonators stand according to the cardinal directions, and Taube mentions that "in one hand, each Tlaloc figure holds a colored bag and paper-wrapped celt, and in the other hand each grasps a vertical batonlike object colored according to the corresponding directions" (Taube 1996: 319, see also Klein 1980: 192-194; DiCesare 2009: 123-129).

Both different maize cobs and colours of *Tlaalok* is also evident in the *Codex Borgia* (p. 27), where the different coloured *Tlaaloke* are associated with different types of weather (Figure 4). According to Elizabeth Hill Boone's (2007: 145) interpretation of this page in the *Codex Borgia*, a distinction between benevolent or propitious and malevolent or harmful weather phenomena can be observed, reflecting different types of rain. A yellow-*Tlaalok* is seen holding two axes, a serpent, and what seems to be a small jar, bearing in effigy his own facial characteristics. Above him are seen several tapering objects, rendering rays of the sun, and below him, split maize cobs are devoured by grasshopper-like creatures. In the vignette of the blue-coloured *Tlaalok*, different curled signs are pictured above *Tlaalok*, representing rain-laden clouds, and he wields a serpent. In contrast to the maize associated with the yellow-*Tlaalok*, these maize here grows erect and fresh, and is temptingly eatable. Judging from the contexts wherein which these different *Tlaalok* are depicted it is clear that these *Tlaalok* are each associated to vastly different atmospheric phenomena.

The Franciscan friar Andrés de Olmos (c. 1480-1568) was like other missionaries in New Spain, dedicated to the evangelization of Native Americans. To accomplish this aim, the Spanish missionaries collected information concerning the language, history, customs and beliefs of the people they wanted to convert (Baudot 2001: 410; Robertson 1994: 156; Lopes Don 2010). Forming part of such a project was the work of Olmos known as *Treatise on Mexican Antiquities*, concluded in 1539, which explores the society and literature of the people in Central Mexico. Unfortunately, the whereabouts of this work are today unknown, but some preparatory drafts remained of this work, one set of which is named *History of the Mexicans through Their Paintings*.<sup>7</sup> In this work, different weather phenomena, and the multiple aspects of *Tlaalok*-related deities, are found in some interesting passages, which state: "Of this god of water it is said that he has a dwelling of four rooms, and in the middle of which [is] a large patio where are four large tubs of water. The [water therein] is very good, and from this it rains when

<sup>7</sup> *The History of the Mexicans through their Paintings* forms part of an anonymous codex from the sixteenth century, called *Golden Book and Indian Thesaurus*, first published in 1882 by Joaquín García Icazbalceta (Baudot 2001: 410, see also Garibay 1965: 19).





**Figure 9.** *Codex Borbonicus* (p. 31). Four *Tlaloke* impersonators stand at the four directions, each dressed in an elaborate coloured garment, bearing incense pouches, and encircling the maize-goddess *Chikoomekoowaatl*, who is being offered at the centre of the scene.

the grains and seeds are nourished, and it comes at a good time. The other is bad when it rains, and with the water cobwebs are created on the grains and it sleets/hails; another is when it rains and [the seeds] do not fill out, and they dry up. And in order to make rain, this god of water created many small assistants who lived in the four rooms of the house, and they had containers in which they took water from those tubs and [had] rods in their other hand” (Garibay 1965: 26).<sup>8</sup> Interestingly in these passages,

<sup>8</sup> See Curtis (1907: 30) for a description of a similar cosmological ritual within modern Apache culture.

the quadripartite aspect and spatial configuration of the *Tlaalok*-deities, and the power that is attributed to them in the making of different kinds of rain, are all equally emphasized.

Not only the rain-deity was represented in sets of colours, but also the highly-valued maize cobs have different colours. From the chronicles of another missionary, the Dominican friar Diego Durán (1537-1588)<sup>9</sup> the connection between directional coloured maize cobs are evident, a trait that is also found outside of Mesoamerica (Taube 2010: 76). From the book devoted to the ancient calendar (see Durán 1971: 383-470), Durán informs us that in the 13<sup>th</sup> month of the year, on the 29<sup>th</sup> of October, a feast called *Tepee-ilwitl* ('mountain-day') was held in honour of the great mountains, especially mountains like *Popooka-tepeetl* ('smoking-mountain') and *Istaak-siwaatl* ('white-woman') (Karttunen 1983: 35, 104, 123, 203, 230). Describing these 'festivities of the hills' Durán mentions that: "grains of corn were cast toward the four cardinal points associated with the native year. To the east lay Reed, to the west lay House, to the north lay Flint knife, and to the south lay Rabbit. These were represented by four types of corn: black, white, yellow, and spotted" (1971: 454). During the festivities held in honour of the goddess of *Xoochi-ketzal* ('flowering-plumage'), where a farewell to the flowers were marked, an indication that frost was now on its trap, different coloured maize cob grains were scattered (see Karttunen 1983: 210, 329). On the 26<sup>th</sup> of October, after the feast of *Weey-pachtli* ('great-moss'; Durán 1971: 240-241; Karttunen 1983: 85, 183), had ended, Durán inform us that together with some young girls who were to be sacrificed: "the four priests also climbed upon the stone, carrying in their hands four gourds of maize. [One] contained white corn, another black corn, another bright-yellow corn, and yet another purple" (Durán 1971: 243). The priests turned towards different elements in the nature, and scattered the coloured maize. Black was scattered towards the mountains, white toward the maize fields, the yellow in the direction of the lake, and the purple in the direction called *amilpan* (Durán 1971: 243). The use of cardinal directions was not only reserved for the deity *Xoochiketzal*, but most significant to the case at hand, also in the rites dedicated to the god *Tlaalok*. As such, the association between deities and the cardinal directions is a pan-Mesoamerican trait found among the Maya of the Classic period and the Aztec of the Postclassic. The idea of a multiple set of *Tlaalok* entities in the Post-colonial period is further nurtured when Durán describes how the deity effigies were placed at the summit of Mount Tlaloc: "around were a number of small idols, but he [*Tlaalok*] stood in the center as their supreme lord. These little idols represented the other hills and cliffs which surrounded this great mountain. Each one of them was named according to the hill he stood for" (Durán 1971: 156; see also Townsend 1999). Here we can see that to the Aztec the many guises of the rain deity were not only restricted to a handful of cosmological conceptions, or to a wider array of personifications of weather phenomena, but also to specific mountains, serving essentially as patron deities of the mountainous landscape, permeating all. This being the case, one may conclude that to the Aztec there really was an almost endless sequence of incarnations of *Tlaalok* throughout the realms, both terrestrial and celestial.

Similarly, among the Classic Maya, *Chaahk* was not limited to a singular manifestation, but was also associated with many different aspects, and with different weather patterns and atmospheric phenomena in particular. In the past twenty years epigraphers have successfully been able to read an astounding plethora of names tied to *Chaahk*, wherein each appears to be a personification of a particular type of rain, or storm (e.g. Lacadena 2004; Garcia Barrios 2006; 2007; 2009; Helmke 2007; Pallán Gayol 2009). Illustrative examples include:

<sup>9</sup> The Dominican order commissioned Diego Durán to write about indigenous beliefs and ceremonies in Mexico, and he then compiled the works *The Book of the Gods and Rites* (1574-1576), *The Ancient Calendar* (1579), and *The History of the Indies of New Spain* (1581), all three newly translated and published (Durán 1971; Durán 1994).

<i>Yax Ha'al Chaahk</i>	'First Rains <i>Chaahk</i> '
<i>Yax Mayuy Chan Chaahk</i>	' <i>Chaahk</i> is the first (morning) fog in the sky'
<i>K'ahk' Chan Chaahk</i>	' <i>Chaahk</i> who is the fire in the sky'
<i>K'ahk' Yipiy Chan Chaahk</i>	' <i>Chaahk</i> who ignites the sky with fire'

These examples here link together weather phenomenon and *Chaahk*, which suggests that *Chaahk* had many *different* characters. *Chaahk* showed himself in many different guises or manifestations. As we have already seen, the quadripartite *Chaahk* associated to cardinal directions forms a coherent group, wherein each is essentially the same type of *Chaahk*, but distinguished by their colouration. As such, a set of four or five cardinal *Chaahk* is nothing more than the multiple facets or manifestations of one large incarnation. However, a whole series of such sets was probably conceived of as defining the totality of the otherwise inexplicably large and overwhelming entity that is *Chaahk*. Thus here, the ancient ritual specialists divided what was an inconceivably large entity into smaller groupings, each comprised of units, in order for the human mind to be able to grasp the constituent parts of this one divinity.

One aspect that is important to remark upon here is that there are repeated patternings in the nominal sequences of various Classic Maya divinities. To provide some key examples of such patternings:

<i>Nu'n</i>	<i>Ujo'l</i>	<i>Chaahk</i>	' <i>Nu'n</i> (?) is the head of <i>Chaahk</i> '
<i>Nu'n</i>	<i>Ujo'l</i>	<i>K'inich</i>	' <i>Nu'n</i> (?) is the head of the <i>K'inich</i> '
<i>K'ahk' Yipiy</i>	<i>Chan</i>	<i>Chaahk</i>	' <i>Chaahk</i> who ignites the sky with fire'
<i>K'ahk' Yipyaj</i>	<i>Chan</i>	<i>K'awiil</i>	' <i>K'awiil</i> who ignites the sky with fire'
<i>K'ahk' Tiliw</i>	<i>Chan</i>	<i>Chaahk</i>	' <i>Chaahk</i> who stokes fire in the sky'
<i>K'ahk' Tiliw</i>	<i>Chan</i>	<i>Yopaat</i>	' <i>Yopaat</i> who stokes fire in the sky'
<i>Sihyaj</i>	<i>Chan</i>	<i>K'awiil</i>	' <i>K'awiil</i> who is born in the sky'
<i>Sihyaj</i>	<i>Chan</i>	<i>K'inich</i>	' <i>K'inich</i> who is born in the sky'
<i>Baluun</i>		<i>Chaahk</i>	'9 <i>Chaahk</i> '
<i>Baluun</i>		<i>K'awiil</i>	'9 <i>K'awiil</i> '
<i>Waxaklajuun</i>	<i>Ubaah</i>	<i>K'awiil</i>	'18 are the images of <i>K'awiil</i> '
<i>Waxaklajuun</i>	<i>Ubaah</i>	<i>Kan</i>	'18 are the images of the <i>Kan</i> (snake)'

As such it is clear that there were many embodiments of different deities, but the question remains as to how many incarnations were recognized for each particular deity and whether there was a shared underlying structure? Helping to reconstruct the fundamental logic governing the Maya pantheon and recognizing these structural continuities are the final entries in the table above, wherein we see names of particular manifestations headed by the numbers 9 and 18. Thus, here we see *Waxaklajuun Ubaah K'awiil* 'Eighteen are the images/incarnations of *K'awiil*' and the same exact type of name is carried by the so-called War Serpent of Teotihuacan, known as *Waxaklajuun Ubaah Kan* 'Eighteen are the images/incarnations of the snake'. These two names are particularly evocative since these can be contrasted to those headed by *baluun* 'nine', which is numerically significant, since it is half of 18. Furthermore, as we have already seen, 9 probably also symbolized the four cardinal plus intercardinal directions and the cosmological centre. In the theonyms, since the numerical prefixes do not

exceed 18, it is tempting to propose that the Maya recognised as many as 18 different incarnations, not only for *K'awiil* (God K) and the War Serpent, but also *Chaahk* (God B). If this pattern holds true, it might be applicable to all major deities recognized by the ancient Maya thereby providing a coherent numerological structure to their pantheon. What is truly remarkable here is that this underlying structure appears to be shared by Maya deities and the contemporaneous War Serpent, an entity that is known to stem from Teotihuacan (Freidel *et al.* 1993: 281; Taube 2004: 88, 2006: 161). It thus follows that this pattern of 18 manifestations existed not only in the Maya area, but was also the guiding principle found at Teotihuacan.

### CLASSIFICATION AND TYPOLOGY OF THE TEOTIHUACAN STORM GOD

As already mentioned, we have documented 29 different polychromatic representations of the Storm god in the iconography of Teotihuacan. These examples depict the Storm god in the following colours: blue, yellow, green, white, red, and black. As we have already seen, since the colour green was undoubtedly tied to the centre of cosmograms, it seems likely that the green Storm god was equally tied to the centre, in much the same way that it seems plausible that the red Storm god was associated to the east. The other cardinal directions and their colours are more difficult to resolve, but seeing as there are significant one-to-one substitutions between black and blue it seems possible to suggest that the black and the blue Storm god were tied to the same world direction, as otherwise there is no means of explaining the substitutions.

Were colour a discrete identifier, the data should form “natural” groupings of Storm gods, each exhibiting different characteristics and diagnostic elements, grouped according to colouration. Although our sample is much smaller than could be desired, it became rapidly clear that colouration could not be used as a discrete identifier, since attributes and diagnostic elements were shared by Storm gods of different colourations. Instead, in most instances, colouration appears to serve as a secondary continuous identifier, which was used to segregate between four or five-fold manifestations of the same “type” of Storm god. In fact the idea that there existed five different Storm gods, each tied to the cardinal directions and axis mundi, is not as new as can be initially assumed. Careful examination of the extant literature reveals that Hermann Beyer, originally proposed this idea, as far back as 1922, in his contribution to Gamio’s famed *La Población del Valle de Teotihuacán* (Beyer 1922: 278; see also Pasztory 1971: 133). In this regard one of his comments is of particular note: “En los Museos de Teotihuacán y de México se conservan unos vasos de manufactura algo burda que están decorados en su lado anterior con caras de Tláloc. Algunas piezas tienen, además, los diminutos miembros de la deidad. También una curiosa combinación de cinco vasos cilíndricos ostenta en el anterior y más alto de ellos las facciones de Tláloc hechas en el mismo estilo” (Beyer 1922: 278). However, despite such a promising start it is clear that the hypothesis proposed by Beyer was never really taken up again in a decisive fashion by Teotihuacan researchers. Thus, even though colour allows us to distinguish between separate and cardinally associated incarnations, the cosmological grouping of Storm gods forms a set, which shares the same sets of attributes and diagnostic elements.

A few examples are in order to clarify these concepts, and we must consider the monochromatic examples of Storm gods to illustrate a few key points. The monochromatic examples are evidently devoid of colouration that could be aptly tied to the cardinal directions. Consequently, colouration and its potential as a discriminatory feature is thus repressed and one has to rely on a different set of attributes in order to be able to recognize and distinguish one manifestation from another. Here we should also recall that to the ancient inhabitants of Teotihuacan, who were fully enculturated into the religion, rituals and cosmology of that ancient city, it would have been easy to distinguish one



**Figure 10.** Matching the polychromatic Teotihuacan Storm god with its monochromatic brethren; a) Black Storm god with lit torches, Barrio San Sebastian (photograph by Christophe Helmke); b) Glyphic example of head-variant of Storm god with unlit torch as qualifier, La Ventilla (this and other glyph drawings by Christophe Helmke); c) Harvesting Storm god brandishing vegetal frond, Zacuala (photograph by Haupt und Binder); d) Glyphic rendition with the vegetal frond as the diagnostic element, La Ventilla; e) Storm god with quincunx emblem on his shield, Amanalco (photograph by Leticia Staines © IIE, UNAM); f) Storm god glyph, with the quincunx logogram at his mouth as principal qualifier, La Ventilla.

manifestation of a deity from another, based on key iconographic elements. But for us, who are not enculturated, the question remains, which iconographic elements are the ones that serve as diagnostic features for one or another Storm god? The resolution of this question is what has guided all aspects of our research, starting with the construction and selection of criteria of our database. Here we will only be able to present some of the preliminary results of the classification and efforts to typologise the data, leaving the more final results to another future treatment, after all the data have been subjected to more rigorous analyses and statistical testing. We used the terms “primary attributes” and “secondary attributes” to further analyze the different manifestations. A “primary attribute” being the motif that characterizes a particular manifestation of the Storm god, such as *eye rings*, *upper lip*, and *fangs*<sup>10</sup>. A “secondary attribute” is a motif that reveals a bit more about the specific manifestation of the Storm god, for example *a lightning serpent*, *a water-lily*, *a small effigy jar* or *a maize frond*.

To illustrate what we mean by diagnostic features, let us consider the black Storm god represented on the San Sebastián mural (Figure 10a). Here colouration is evidently present, and aside from the standard features, including goggles, the curved upper lip and fangs, this Storm god has a set of oversized flaming torches in its mouth. For all intents and purposes the torches must be the diagnostic element that allows us to identify this particular Storm god. Intriguingly, we have several glyphic references to Storm gods in the texts of La Ventilla, and one glyphic collocation pairs off the head-variant of the Storm god with an unlit torch (Glyph 31) (Figure 10b; see also Cabrera Castro 1996; Taube 2000: 13-15; King and Gómez Chávez 2004; Nielsen and Helmke 2011). Since the La Ventilla glyphs are rendered monochromatically, and the only identifying feature provided is the torch, it is clear that the latter functions as *the* diagnostic feature of this particular Storm god. At present the “torch Storm god” has only been found as a black Storm god, suggesting that it was tied to igneous fire rituals (perhaps nocturnal rites?)<sup>11</sup> as well as to one particular colouration and one matching cardinal direction in exclusivity. Similarly, the frond or maize stalks that are carried by the Techinantla and Zacuala Storm gods (Figure 10c) also serve as their diagnostic indicator since it is again represented glyphically at La Ventilla (Glyph 1) as sole identifier (Figure 10d). Although the pigmentation of the Zacuala examples have long since weathered, it is clear from Laurette Séjourné’s watercolours that these “frond Storm gods”, were predominantly green in colouration at the time of discovery. Thus again, we have the pairing of a particular colouration with a discrete diagnostic element, and here the associated iconography ties these green Storm gods to harvests and an abundance of crops. A third cogent example from La Ventilla (Glyph 37) depicts the head of a Storm god, who has a quincunx glyph at his mouth (Figure 10f)<sup>12</sup>. We know from other examples that this particular Storm god is named glyphically by a quincunx glyph infixed into the mouth of a stylized and proto-typical Storm god, its goggle eyes replaced by a series of disks. Two depictions of Storm gods from Amanalco are significant here since they depict white Storm gods, wielding broad stylized lightning bolts and bearing shields that are emblazoned by precisely this emblematic glyph (Figure 10e). As such it seems possible to suggest that the “quincunx Storm god” named at La Ventilla was a white Storm god, in much the same way as the wonderful example from Tetitla (Figure 11), that depicts a white Storm god preparing to cast a sinuous lightning bolt with his *atlatl*, his left arm concealed behind a round shield. Here is

<sup>10</sup> In cataloguing fangs in the database a distinction was made between curved or straight fangs, although these variables can now be demonstrated to be stylistic variants that do not carry any semantic weight.

<sup>11</sup> Interestingly in this matter, Durán inform us that during the feast of the fourth month, known as the *Weeytosostli* ‘great Perforation’, rituals involving men walking through the cities with enlightened torches, a ritual beginning at sunset the day before the feast, which allegedly fell on the 30<sup>th</sup> of April (Durán 1971: 423).

<sup>12</sup> The quincunx sign functions as the logogram **K’AN** in the Classic Maya writing, where it functions to record the adjective ‘yellow’ (see Stone and Zender 2011: 126-127; Anderson *et al.* 2013).

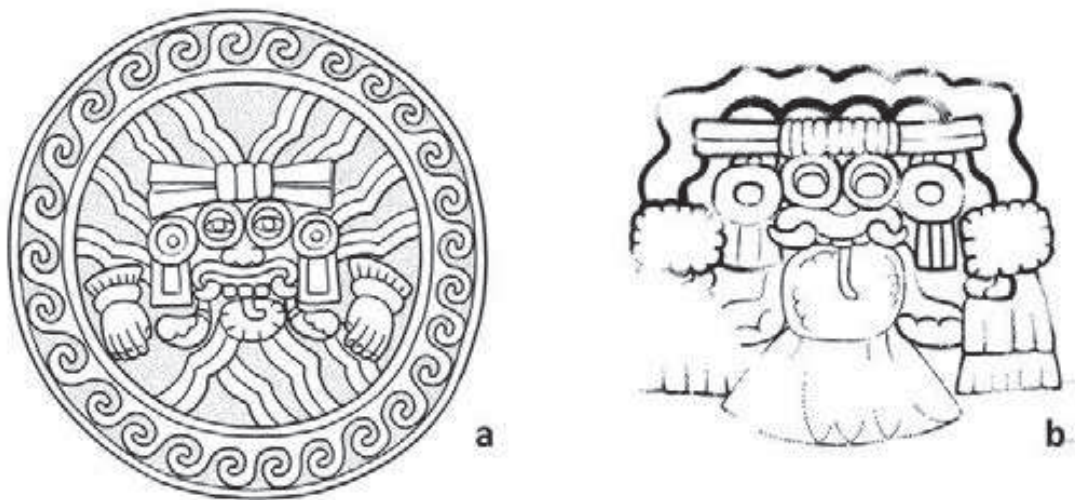


**Figure 11.** White Storm god casting a sinuous lightning serpent with an atlatl, Tetitla (photograph by Christophe Helmke).

the combination of features that allows us to identify this bellicose, perhaps even martial aspect of the Storm god (see Taube 2011: 102; Langley 1992: 249-253), and although he is not glyphically named as such at Tetitla all the features represented help us to identify this as a depiction of the “quincunx Storm god”.

Another example of tying together the polychromatic and monochromatic evidence together is the Storm god representation on the bottom of the famous Las Colinas bowl (Figure 12a). The monochromatic depiction of this manifestation with its water-lily in mouth, knot-headaddress, and water-signs surrounding it, show a remarkably resemblance to the yellow-coloured Storm gods in both the Tepantitla compound (see Figure 1). Sharing the same secondary attributes, and portrayal, these examples suggest that the Las Colinas Bowl Storm god, may represent a yellow Storm god, on par with the manifestation depicted at Tepantitla.

These fantastic examples aside, we can see already that other sets of features are not restricted to particular manifestations of Storm gods, especially for example the lightning serpent and small effigy jar that is relatively commonplace across the board. As a result these features can only be considered to be secondary non-discriminatory and accretive attributes; and in the case of the lightning serpent it was found to be so widespread and overlapping a feature that one could consider adding it to the three canonical elements that define Teotihuacan Storm gods. Yet again, the presence of the quincunx glyph, when not represented in martial contexts, appears to be more widespread, since it occurs in the dress of variously-coloured Storm gods. Our classification efforts are further hampered by the fact that at times Storm gods are represented in full-figure, whereas in other instances only the torso or head is visible. Thus, based on the type of scene at hand, only a certain of characteristic features are available. Similarly, the water-lily motif, that is frequently found adorning the buccal area of certain Storm gods, is seen with black, red, white, blue, and yellow Storm gods. These instances make it clear



**Figure 12.** The water-lily Storm god: a) Basal motif of the Las Colinas bowl, excavated by the Swedish ethnographer, Sigvald Linné (1899-1986) during his 1934-35 excavations, in the State of Tlaxcala (drawing by Nicolas Latsanopoulos); b) Another example of a water-lily Storm god, represented heraldically in Room 19, Tetitla (drawing by Christophe Helmke).



**Figure 13.** The Storm god from Techinantitla. This example is in essence the most elaborate and complex depiction of a particular manifestation of Storm god at Teotihuacan (drawing by Nicolas Latsanopoulos).



that if the water-lily is a type indicator of the Storm gods that are associated with this aquatic plant, existed also as a perfect quad of cardinaly-oriented manifestations, whereas black and blue substitute each other as shown above.

In light of the pioneering efforts of Pasztory and von Winning, it does seem as though one can create two larger groupings based upon facial characteristics alone, however, in expanding our analyses and identifying attributes that allow us to segregate Storm gods into a series of groups, that exhibit different colours and attributes a much more complex picture of the pantheon emerges, than an overly simplistic dichotomy. The manifestations found in our database are simply put, too complex, varied and colourful, to be lumped under the same umbrella, especially if we heed the knowledge imparted by the Aztec and Maya panthea. Nevertheless, our groupings remain provisional, since as we have seen colouration cross-cut groupings. For example, the red Storm god from Techinantitla (Figure 13) is rendered with a lightning serpent, small effigy jar vessel *and* a water-lily in the mouth, not to mention the distinctive headdress and a series of other motifs in its surroundings.

The latter yellow-coloured Storm gods figure prominently in the Tepantitla murals, and tend to be associated with the water-lily, and pouring vessels. We were also able to propose that another green-coloured Storm god was associated with young maize. In contrast, the blue Storm gods seem to be strongly associated with sowing, undertaken with the arrival of the first rains, at the beginning of the rainy season at the start of the summer. These examples bespeak of a model wherein each meteorological phenomenon, such as lightning and distinctive rain, has its own personification, and at times four-fold manifestations, each tied to a colour, as just mentioned with the water-lily. Evidently, the diverse manifestations of the Storm god encompass a wide array of divine occupations. Unsurprisingly, we found that the guises of the Storm god cover agricultural activities, places in nature, an offering-related aspect, and different weather conditions, mostly involving lightning, thunder and rain.

## FINAL REMARKS

Based on the findings alluded to above we have been able to see that quadripartite rain and thunder deities are a commonplace occurrence in Mesoamerica. We also saw that deities are often times seen as quads, wherein each is a manifestation of a larger type, with the specific coloured incarnations tied to different cardinal directions. This scheme provides groupings of four and sometimes five deities tied to what can be termed a particular “type”, each sharing essentially the same name and characteristic attributes, but using colouration as an additional discriminator to distinguish between them. Seeing as the inter-cardinal directions played some sort of secondary role among cultures of the Classic period, and the Maya and Teotihuacan are no exception in this, we find theonyms tied to nine different manifestations, and even what seem to be full sets of eighteen. However, despite these idealized models and frameworks we can see that the total number of individual incarnations by far vastly exceeds eighteen, as is the case among the Maya, and undoubtedly at Teotihuacan as well. Regardless of anything it is clear that the dichotomous categorization of the Teotihuacan Storm god into a so-called “Tlaloc A” and “Tlaloc B” is not only erroneous, but wide off the mark.

Our understanding of the Teotihuacan pantheon has grown as a result of the comparative analyses presented in this paper. Whereas we are still a long way away from being able to reconstruct the whole Teotihuacan pantheon we hope to have demonstrated the utility of a broad comparative perspective across Mesoamerican and Amerindian cultures generally. Despite great differences between the cultures compared, each showed a degree of affinity that enabled us to reconstruct from a broader vantage the underlying structure and symbolism of the Teotihuacan pantheon that was once populated by a whole

gamut of divinities that only now slowly emerge from slumbering oblivion. We can only hope that future investigations will uncover additional iconographic examples that would allow us to test our colourful propositions.

Teotihuacan pantheon, much as that of other contemporaneous Mesoamerican cultures did not distinguish space from divinities, and these formed one continuous and uninterrupted whole. Thus a cardinal (and inter-cardinal) direction and the manifestation of a supernatural entity where one and the same, indivisible wholes. Yet, this multiplicity gave a sense to permanence and worldliness, since the sum of the proverbial parts, all the different deity manifestations were conceived in tandem to provide a fuller conception of the large deity residing in the middle. Thus all the facets of the Storm god, each provide a small part of the larger nearly inconceivable entity, which is precisely why ancient Mesoamerican theologians appear to have attempted to reduce the greater deity to smaller embodiments that were more readily conceivable and liable for interaction with human interlocutors. Considering that the quadripartite aspect is not confined exclusively to rain and thunder deities among other Mesoamerican cultures, the same may also have been the case at Teotihuacan and we are excited to see if this proposition can be borne out in the future. However, what this research has attempted to demonstrate beyond a doubt is that the Teotihuacan conception of divinity and the cosmos were wholly and inextricably intertwined, so that it is impossible to speak of the one, without the other.

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