



# The PARI Journal

A quarterly publication of the Ancient Cultures Institute  
Volume XVIII, No. 4, Spring 2018

In This Issue:

**Mural Paintings of the Tulum Castillo: Discovery, Conservation, and Study of New Pictorial Elements**

by

**Mónica A. López Portillo Guzmán and Octavio Quetzalcóatl Esparza Olgún**

PAGES 1-21

Marc Zender  
Editor

[marc@ancientcultures.org](mailto:marc@ancientcultures.org)

Joel Skidmore  
Associate Editor  
[joel@ancientcultures.org](mailto:joel@ancientcultures.org)

The PARI Journal  
202 Edgewood Avenue  
San Francisco, CA 94117  
415-664-8889  
[journal@ancientcultures.org](mailto:journal@ancientcultures.org)

Electronic version  
available at:  
[www.precolumbia.org/  
pari/journal/1804](http://www.precolumbia.org/pari/journal/1804)

ISSN 1531-5398

## Mural Paintings of the Tulum Castillo: Discovery, Conservation, and Study of New Pictorial Elements

**MÓNICA A. LÓPEZ PORTILLO GUZMÁN**

*CINAH Quintana Roo, Zona Norte*

**OCTAVIO QUETZALCÓATL ESPARZA OLGÚN**

*Universidad Nacional Autónoma de México*

The mural paintings of Tulum have been the subject of studies by various specialists for almost a century, resulting in an extensive record of figural characters and other iconographic elements portrayed in a considerable number of structures, bespeaking a thriving pictorial tradition in this seaside polity. However, it was only toward the end of 2009 that new pieces of the puzzle comprised by the murals of the Castillo substructure, so-called Structure 1 Sub, were discovered in conservation work coordinated by the restorer Mónica López Portillo Guzmán.

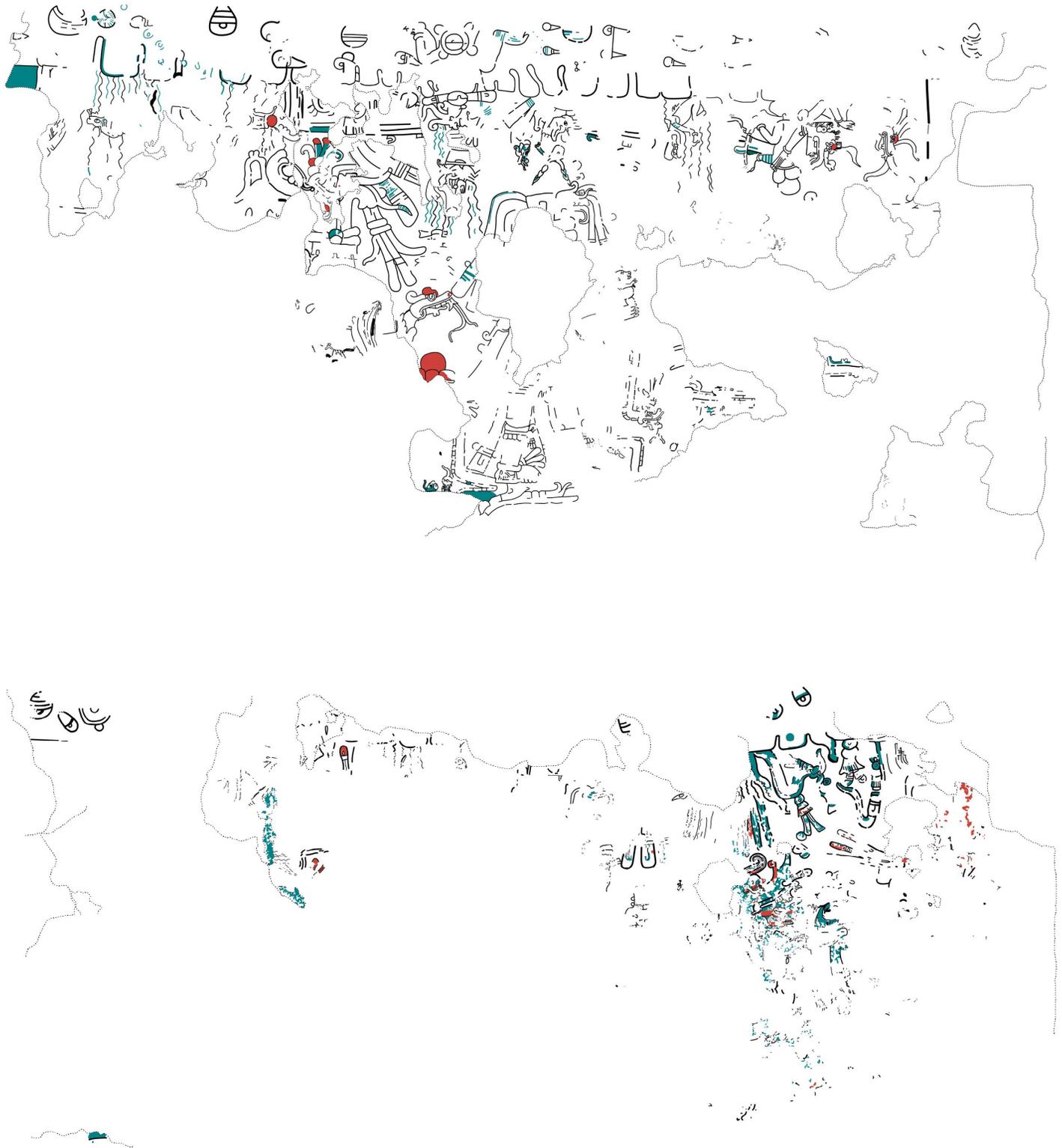
This work had its antecedents in 2005, when conservation was carried out in the upper temple of the Castillo. At that time, intervention in the murals was not possible due to significant water leakage into the substructure, which resulted in a stratum of microorganisms that covered almost the entirety of the pictorial design in a blackish layer. Indeed, a number of specialists in the past had made note of various substances that, with the passage of time, had covered the famous murals. As Miguel Ángel Fernández commented in 1938, "I proceeded to clean the walls where the most interesting frescos of the substructure and its corridor are found, and due to the constant leakage I encountered them in a terrible condition because a

thick layer of lime carbonate had formed" (Fernández 1945:101, translated from the Spanish).

The problem of the leakage was solved in 2007 thanks to intervention by the archaeologist Alejandro Martínez Muriel, who found that the problem was water leaking from the portico of the upper temple, as well as the deterioration of some of the joints between the stone blocks (López Portillo Guzmán 2011). This permitted conservation work to be carried out two years later, following strict criteria applied by the restorers, who employed reversible materials similar to the original constituents, as well as minimal direct intervention, prioritizing the control of deterioration and preservation.<sup>1</sup>

As the process of cleaning and consolidation advanced, interesting pictorial

<sup>1</sup> In the midst of torrential rains and a strong gale that lashed the rear of the Castillo in 2009, the team of restorers made up of Mariana Contreras del Cueto, Carlos Arturo Lozoya Martínez, and assistant Luis Eduardo Cen García began the work of conservation, coordinated by Mónica López Portillo Guzmán. The project continued until 2011 with resources from INAH's Coordinación Nacional de Conservación del Patrimonio Cultural. In later seasons the restorer Alejandra Sánchez Ruvalcaba also contributed her expertise.



**Figure 1.** Structure 1 Sub of El Castillo, Tulum: (top) complete drawing of east wall of passageway, north side; (bottom) drawing of east wall of passageway, south side (drawings: Mónica López Portillo Guzmán; digitization: Vania Pérez Gutiérrez and Octavio Esparza Olguín). For this figure at larger scale see [www.precolumbia.org/pari/publications/journal/1804/Castillo.html](http://www.precolumbia.org/pari/publications/journal/1804/Castillo.html).



Figure 2. El Castillo, Tulum, west view.

elements were revealed for the first time, complementing the iconographic designs documented by previous investigators (Lothrop 1924; Fernández 1945; Miller 1982). Once the surface had been stabilized and freed of a thick and sticky layer of biofilm,<sup>2</sup> the restoration team proceeded to draw the different layers of plaster in order to record the mural composition.<sup>3</sup> Later, through the preparation of digitized graphic renderings, the details of each element were enhanced (Figure 1).

### Description of the Building

The coastal settlement of Tulum reached its peak during the Postclassic period, forming an important political unit in the coastal region together with Tancah (Con Uribe and López Portillo Guzmán 2014). Due to its strategic location it was one of the most important maritime ports, acquiring the rank of regional capital on the eastern coast of the Yucatan Peninsula (Galindo Trejo 2007).

The emblematic structure of the Castillo, strategically erected facing the sea on a steep cliff,<sup>4</sup> is the largest construction in the settlement, belonging architecturally to the East Coast style (Figure 2).<sup>5</sup> It was constructed in three phases, the first and oldest of which corresponds to what is known today as Structure 1 Sub, a palace with double galleries standing on a large platform with an

<sup>2</sup> Biofilms are communities of microorganisms that proliferate in a matrix of exopolysaccharides (high-molecular-weight polymers composed of sugar residues) adhering to an inert surface.

<sup>3</sup> The maximum dimensions of the mural are 2.35 m in height by 4.10 m in length (north side) and 2.2 m in height by 4.15 m in length (south side).

<sup>4</sup> The great cliff, located facing the Caribbean coast, measures 12 m in height (Maldonado Cárdenas 2001:81).

<sup>5</sup> This style is principally characterized by the construction of buildings of trapezoidal shape, often with small lime-plastered sanctuaries, with vaults and flat roofs, as well as columns and recessed lintels.

access stairway on the western side (Figures 3 and 11).

While there are no remains of the roof that covered the enclosures on the north and south, there are indications that it was built of beams and masonry. The first enclosure of the eastern end had columnar elements supporting a flat roof by means of two parallel rows of eight columns with square capitals, forming the nine entrances to the palace. Attached to the walls is a bench, and the north and south faces have small openings for vents while the rear enclosure has three entrances as well as a pair of vents on the east side (Con Uribe and López Portillo Guzmán 2014).

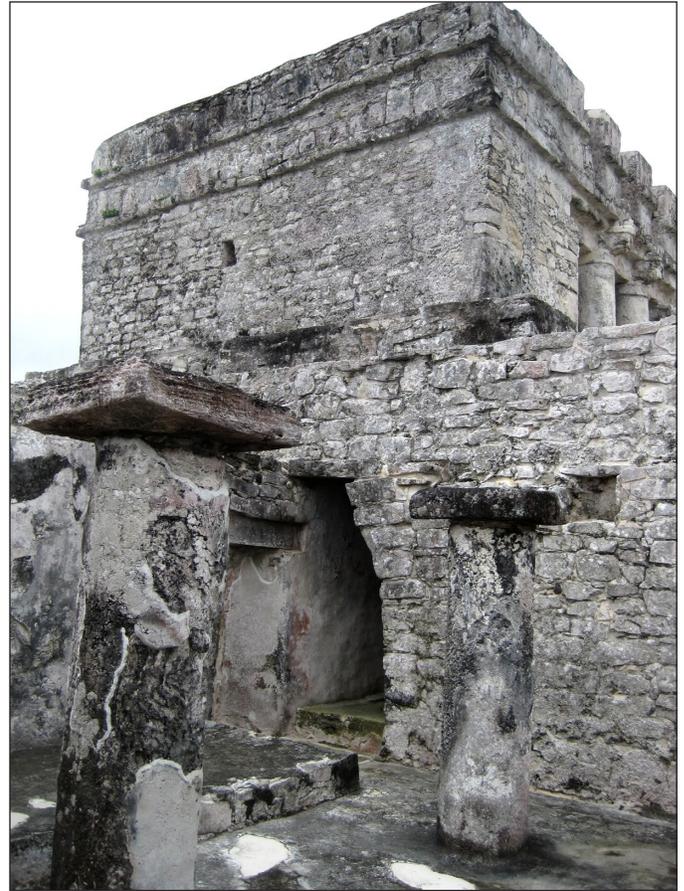
The second construction phase entailed the building of a higher platform surmounted by a temple, so the central portion of the substructure was filled and a buttress added at the eastern end as a reinforcement. To allow circulation between the separate rooms a semi-vaulted passage was built on a north-south alignment, which is why the mural on the eastern wall of the passageway was preserved.

On that wall there are four overlapping layers of plaster, the last two with polychrome anthropomorphic, phytomorphic, and zoomorphic motifs, painted under a skyband. Several researchers have pointed out that they allude to agricultural and celestial themes (Lothrop 1924; Fernández 1945; Miller 1982). They differ on the precise date of execution, although generally we can say that they date to the Postclassic (Lombardo de Ruiz 1987; Con Uribe and López Portillo Guzmán 2014).

In addition, various pictorial elements cover the entire walls of enclosures C and E (Figure 11), according to the description of Lothrop, who detected the presence of motifs painted in blue, red, yellow, and black. Subsequently, Miguel Ángel Fernández (1945:98-99) mentioned that when he cleared the gallery he counted five layers of plaster, both on the walls and on the columns. However, it deteriorated when the flat roof of the rooms collapsed, as the walls were exposed for centuries to the coastal and tropical environment.

The stone and stucco reliefs that Lothrop describes remain attached to the walls, albeit with a greater degree of erosion, including a relief on one of the columns. The latter was confirmed by the senior author, who found the stone relief of a zoomorphic character on the south side of room E, attached to the center of the seventh column of the second row, counting in a north-south direction (Figure 4). The head of this zoomorphic figure was described by John Lloyd Stephens (1843:2:391) as that of a rabbit. Years later, Lothrop (1924:80) failed to find this element and reported it as lost. Miguel Ángel Fernández does not mention it in his detailed description. Accordingly, on the basis of a close inspection of the relief, it is likely that what Stephens described as the head of a rabbit is in reality that of a feline (Figure 5).

One of the three zoomorphic reliefs located on the south wall of enclosure E documented by Lothrop may correspond to the head of a jaguar (Figure 6, indicated



**Figure 3.** Passageway of Structure 1 Sub in which the mural is located (photo: Mónica López Portillo Guzmán).

by the number 2). In this connection, the senior author noticed the existence of new elements that confirm that it is indeed the head of a feline (which preserves traces of blue and ochre paint) and that in addition it has a body that is projected above the head, similar to the typical position shown in images of the diving god (see Figure 24). In this way, the relief possibly corresponds to the figure of a “diving” or “descending jaguar” (Figure 7), comparable to a similar feline in the House of the Jaguar at Xelha.

In the same room but on the west wall is a stone relief of a skull with a necklace of large beads that in Lothrop’s drawing (1924:81) shows now-lost elements such as circular beads on the skull and others arranged as earflares (Figure 8).

In enclosure C on the north and west walls the three zoomorphic reliefs reported by Lothrop still survive, as well as other elements painted in blue, yellow, and red and outlined in black, like the figure of a headless jaguar with portions preserving traces of blue, as described by Miguel Ángel Fernández (1945:103).

Returning to the modifications of the second story, the ancient Maya built a vaulted upper sanctuary with two galleries, its facade with double molding and three



**Figure 4.** Zoomorphic relief on column in Room E reported by Stephens (from López Portillo Guzmán 2011).



**Figure 5.** Possible relief of the head of a feline, located on one of the columns in Room E (drawing: Carlos Jiménez Santacruz).

entrances facing west (Figure 9), corresponding to the temple that currently crowns El Castillo. Anthropomorphic sculptures were placed in three niches built into the façade, and today a diving god can be seen in the central niche and a standing character in the northern one, while in the southern the figure has been completely lost. In addition, the two columns that divide the entrances to the temple preserve two layers of bicrome stucco, with remains of black and blue paint,<sup>6</sup> the capital of the north column having vertical lines and celestial imagery,<sup>7</sup> as well as remains of red pigment on the bottom.

There are benches on the sides of the first gallery, while in the second a wide bench runs along the length of the rear wall and meets the side walls. The entrance with recessed lintel providing access to the galleries was decorated with two layers of blue, framed by black lines, with a white rectangular element in the center. On the rear wall of the first bay is a flower painted in black, similar to those in Structures 5 and 16.

In 2009, Mónica López Portillo discovered three red crosses on the access jambs to the interior sanctuary (Figure 10). Although it is difficult to determine precisely when these were executed, there are two possibilities: the first, that they were painted in the nineteenth

century when the temple was a shrine for the rebel Maya during the Caste War when the Holy Cross was in the town of Tulum; and the second, that they were painted at the beginning of the twentieth century, when the upper temple of El Castillo was still being used as a shrine (Con Uribe and López Portillo Guzmán 2014: 122).

Lothrop reported that the wall dividing enclosures A and B was painted red on the north side and blue on the south; however, we have not found remaining evidence to confirm this.

<sup>6</sup> Miller (1982:60) considers this painting of lower quality of manufacture and much later, venturing that it could have been made during the Colonial era. Other researchers, such as Fettweis (1981) and Lombardo de Ruiz (1987), disagree and date it to the Late Postclassic (Con Uribe and López Portillo Guzmán 2014:2).

<sup>7</sup> Miller describes how these are figures framed by intertwined cords, indicating that it is possible to simplify the designs of the alternating solar ray and Xux Ek in the skyband. The jaguar-skin band over the underworld (the black band) is marked by rows of hooks and circles.

<sup>8</sup> The cross on the northern jamb is 67 cm high and 14 cm wide; another on the edge is 25 cm high and 15 cm wide. On the southern jamb the cross measures 61 cm high and 14 cm wide.



**Figure 6.** Location of the reliefs on the south and west walls of Room E (photo: Mónica López Portillo Guzmán).



**Figure 7.** “Descending jaguar” on the south wall of Room E (drawing: Carlos Jiménez Santacruz).



**Figure 8.** Relief of a skull with bead necklace on the west wall of Room E (photo: Mónica López Portillo Guzmán).



Figure 9. West facade and upper temple of El Castillo (photo: Mónica López Portillo Guzmán).

Finally, the third construction stage of the building consisted in joining two lateral sanctuaries (enclosures G and H) to the north and south of the stairway (Figure 11). The recessed lintel of the southern sanctuary preserves traces of blue (Con Uribe and López Portillo Guzmán 2014) (Figure 12).

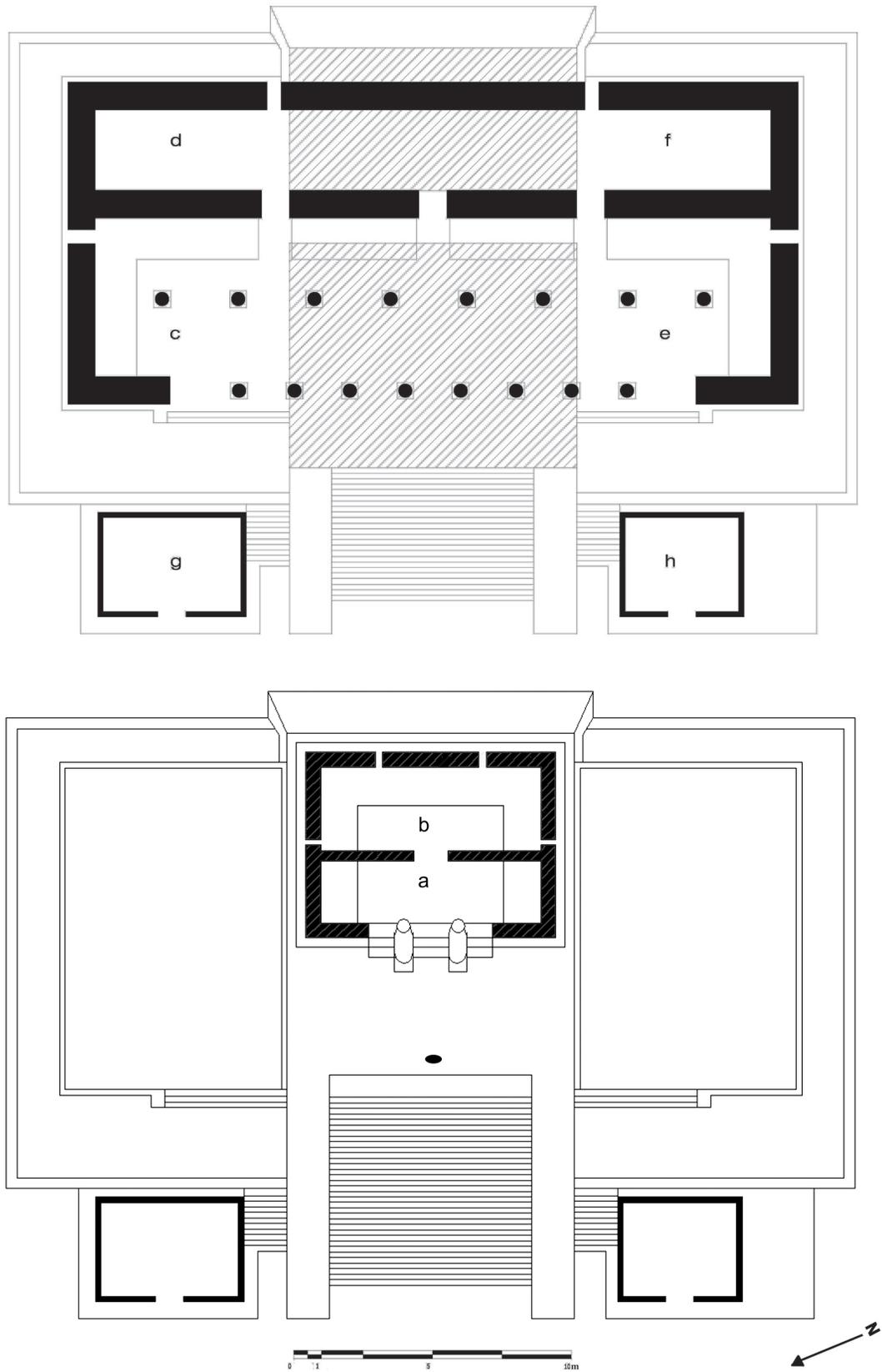
### Discovery of the Mural Painting of Structure 1 Sub

It was Stanley K. Lothrop who, during the expeditions of the Carnegie Institution of Washington to Tulum, carried out the first studies of the murals of the substructure of El Castillo (Lothrop 1924). Even given the poor preservation of the mural, Lothrop was able to identify some elements such as a band of glyphs on the upper part, which he describes as a constellation, and which correlates with the painting on the facade of Temple 5. On the lower part, to the north of the east wall of the corridor, he mentions the presence of symbolic animals and deities in the style of the Mexican and Mayan codices (Figures 13 and 14). He discovered a central figure that he identified as God D, in addition to a character carrying an animal in his hand, probably a deer (Figure 15). On the upper part he recorded the figure of what he considered to be a scorpion, as well as the head of God C in the lower section (Lothrop 1924:52-53).

Later, Miguel Ángel Fernández arrived in Tulum with the Mexican Scientific Expedition of the Southeast, and in



Figure 10. Cross painted in the sanctuary doorway (photo: Mónica López Portillo Guzmán).



Figures 11 and 12. Architectural plans showing the three construction phases of El Castillo (modified from Lothrop 1924 and Fernández 1945b).

1938 he carried out several operations in El Castillo, including the cleaning and consolidation of the paintings of Structure 1 Sub, where he detected the presence of four pictorial layers.<sup>9</sup> In the first of these, on the north side of the wall he identified the figures of a dog and an Indian, as well as the depiction of a snake's head (Figure 16). He also mentions a hunting scene which no longer exists.

On the south side of the wall, in the third layer, he indicated the presence of a character identified as a priest with a mask of turquoise and shell, who carries an offering of a vessel and a turkey in his hands (Figure 17). In front of this he noticed the presence of a large snake head that he attributed to the god Quetzalcoatl, which unfortunately has since been lost.

As a result of the comprehensive work of cleaning and consolidation of the west wall in 2009 (Figures 18–20), we were able to detect once more the pictorial elements observed decades ago by other researchers, as well as new ones recorded in layer three. The pictorial technique used by the ancient Maya to execute the paintings of Structure 1 Sub was tempera, also known as “fresco seco,” in which pigments are applied to lime plaster that has already set. The pigments are of both organic and inorganic origin. It has been suggested that the binders were made from mucilage obtained from plants or tree resins (Staines 2004).

The chromatic palette that was used includes the colors red, yellow, black, and two shades of blue (light and dark), which were applied to the light background of the wall. The figures shown, belonging to the Schematic Polychrome style,<sup>10</sup> vary in size, although the more important ones are larger and are located in the upper part, under the celestial band, such as the figure of the descending god, unlike the associated elements that are smaller in size. The thickness of the line that serves as contour to the figures is not consistent, with variations according to the location and dimension of the pictorial element.<sup>11</sup>

### Previous Interventions

During the thirties of the last century, Miguel Ángel Fernández undertook a partial intervention of the paintings, reporting cleaning, descaling, and application of varnish in the following terms:

I proceeded to clean the walls where the most interesting frescos of the substructure and its corridor are found ... because a thick layer of lime carbonate had formed, which I detached by making use of water mixed with caustic soda, being careful to rinse them perfectly so that there was no residue of soda, and after drying them I took care in varnishing them with Dulux. (Fernández 1945:101, translated from the Spanish)

In 1975, Roberto Peralta coordinated restoration technicians of the Centro Regional del Sureste, who

carried out a superficial cleaning and fumigation of the substructure wall, which they called “the Castillo tunnel.” Between 1990 and 1998, the staff of the ENCRyM<sup>12</sup> limited themselves to the application of biocides due to water infiltrations into Structure 1 Sub, which were remediated in 2007 through consolidation work carried out by archaeologists Alejandro Martínez Muriel and Carlos Ruiz Ulloa.

### The Mural and Its Pictorial Elements

Since the first recording of the paintings by Lothrop, researchers have made various studies of the iconographic elements in the pictorial scenes of Structure 1 Sub. Thus, anthropomorphic figures have been identified, specifically deities, who hold plates with offerings<sup>13</sup> and interact in a torrential watery environment alongside various animals such as crocodiles, fish, and snakes.<sup>14</sup> The combination of all these elements seems to indicate that the theme of the murals is linked to different propitiatory ceremonies, mainly for fertility and abundance, as well as rites of agricultural renewal and the relationship to natural forces (Lothrop 1924; Fernández 1945; Miller 1982; Fettweis 1987; Lombardo de Ruiz 2001; Con Uribe and López Portillo Guzmán 2014).

Although the paintings were discovered decades ago and have been studied by various researchers, it is surprising that new iconographic elements have been documented,<sup>15</sup> notably the representation of the Diving God located on the north wall (Figures 21 and 22).

### The Diving God

The Diving God is a widespread deity in Tulum and other sites on the East Coast, whose figure is usually seen adorning the friezes of structures. This character

---

<sup>9</sup> We agree with Fernández that there are four layers of superimposed plaster that vary in thickness, texture, and porosity. For example, the first layer has a smooth texture and finish, the second is extremely thin and poorly made, while the plaster in the third is more consistent despite its irregular surface, which has led to its preservation.

<sup>10</sup> This style is characterized by polychrome surfaces bounded by a black line (Lombardo de Ruiz 2001:136).

<sup>11</sup> The thickness of the line varies between 2 and 7 millimeters.

<sup>12</sup> Escuela Nacional de Conservación, Restauración y Museografía Manuel del Castillo Negrete, INAH.

<sup>13</sup> We have examples of this in Murals 3, 4, and 5, where various effigies appear holding vessels with different types of gifts. One of these figures, in the southern mural, has been identified as Xiuhtecuhtli, a Central Mexican deity associated with fire, who bears a turquoise mosaic mask, a typical object in the paraphernalia of this god (Taube 1992).

<sup>14</sup> Images of such beings are recorded on practically the entire surface of the murals of Structure 1-Sub, snakes being the most frequently depicted.

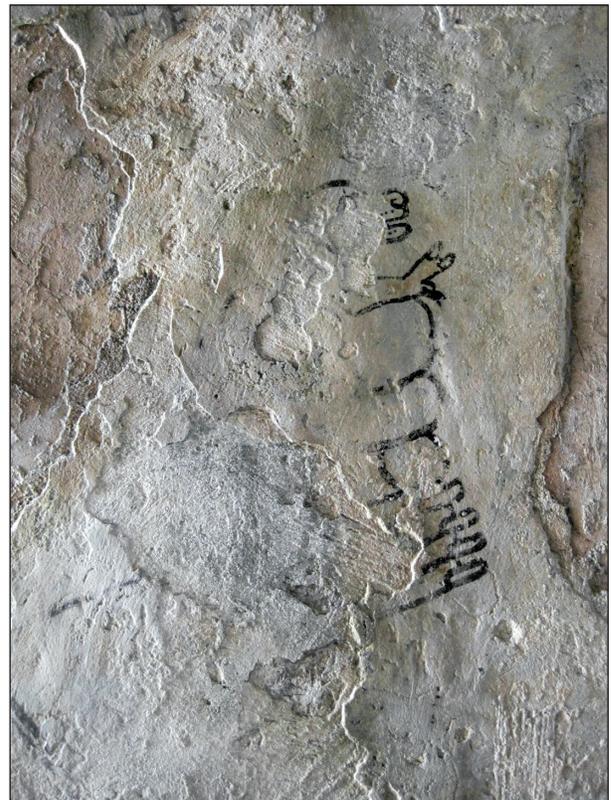
<sup>15</sup> It is important to note that these elements are represented in layer three, which is the most complete and best preserved.



**Figure 13.** God B depicted in layer three of east wall of passageway of Structure 1 Sub (photo: Mónica López Portillo Guzmán).



**Figure 14.** Reptile depicted in layer three of east wall of passageway of Structure 1 Sub (photo: Mónica López Portillo Guzmán).



**Figure 15.** Stratigraphy of the different layers and part of the figure of a deity holding a deer (photo: Mónica López Portillo Guzmán).



**Figure 16.** A dog, a figure with feathers, and a snake's head depicted in layer one (photo: Mónica López Portillo Guzmán).



**Figure 17.** Figure with mask of turquoise and shell, carrying an offering (photo: Mónica López Portillo Guzmán).



**Figure 18.** Recording and conserving the east wall of the passageway of Structure 1 Sub (photo: Mónica López Portillo Guzmán).



**Figure 19.** Cleaning and consolidating the east wall of the passageway of Structure 1 Sub (photo: Mónica López Portillo Guzmán).



**Figure 20.** Conserving the east wall of the passageway of Structure 1 Sub (photo: Mónica López Portillo Guzmán).

appears in an “upside down” position, with legs and arms flexed, giving the impression of falling (Figure 23). From the back of his upper extremities protrude small bands in the manner of feathers, indicating that he is a winged deity, and from the top of his head elongated protuberances emerge simulating shoots of vegetation, a feature that identifies him as the Maize God (Taube 1992).

In some depictions, such as the stucco sculpture over the entrance to the sanctuary of Structure 16 of Tulum (Figure 24), he holds an object in his hands that has been identified as a human heart (Houston et al. 2006). The link between this last element and the deity is revealed in a passage of the *Relación de las cosas de Yucatán* referring to the sacrifices and offerings carried out during the New Year ceremonies associated with the day K’an:

... they built in the court of the temple a great pile of stones, and they placed the man or dog whom they were going to sacrifice on something higher than it, and throwing down the bound victim from the height on to the stones, those officials seized him and took out his heart with great quickness, and carried it to the new idol, and offered it to him between two platters. (Landa 1941:143)

A similar event is recorded on page 35 of the Codex Madrid, where a deity falls on the body of a sacrificial victim, who is placed in turn on a stepped structure similar to a temple (Figure 25).



**Figure 21.** The diving god located on the east wall of the passageway of Structure 1 Sub (photo: Mónica López Portillo Guzmán).

While it is true that these data allow us to link the diving god to human sacrifice and the collection of offerings, the newly discovered image of the deity in the murals of Structure 1 Sub seems to relate more closely to the abundance generated by receipt of the offered gifts. This last hypothesis makes more sense if one considers that the diving god had strong agricultural connotations (Taube 1992).

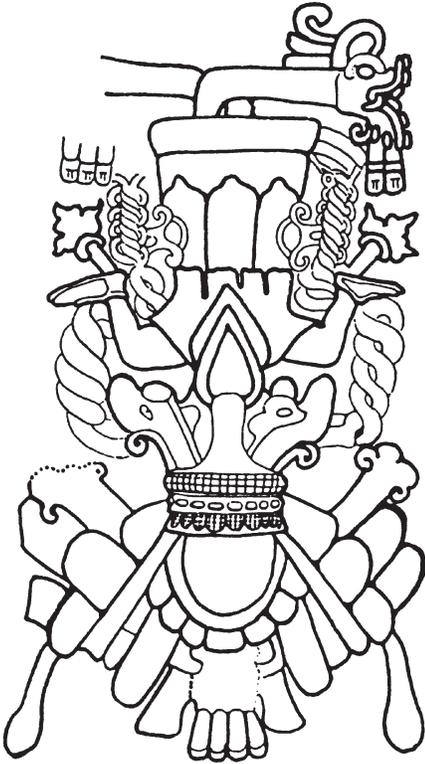
### The Diving God of Structure 1 Sub

The figure that concerns us is located on the north end of the eastern wall of the building. His body displays the typical position of the diving god, with his face in profile and sprouts emerging from the top of his head, a distinctive feature of the Maize God (Figure 26). He has a knotted ribbon below the nape of the neck and a discoidal ornament placed between the legs, the circumference of which is adorned with four small circles (Figure 27). Although the identification of this last element is difficult, it bears certain similarities to a motif of stellar connotations registered in the upper band of Mural 3 of Tulum Structure 16 (Figure 28). Other Maya deities carry similar objects between their legs, as can be seen on page 9 of the Madrid Codex, where the god Chaahk appears with a kind of inverted vessel with a globular body adorned with four small circles (Figure 29).

Above the necklace worn by the diving god we see



**Figure 22.** The diving god (drawing: Mónica A. López Portillo Guzmán).



**Figure 23.** Stucco sculpture from Tulum Temple 25, representing the Diving God as the personification of the Maize God (drawing by Karl Taube [Taube 1992:Fig. 18a]).

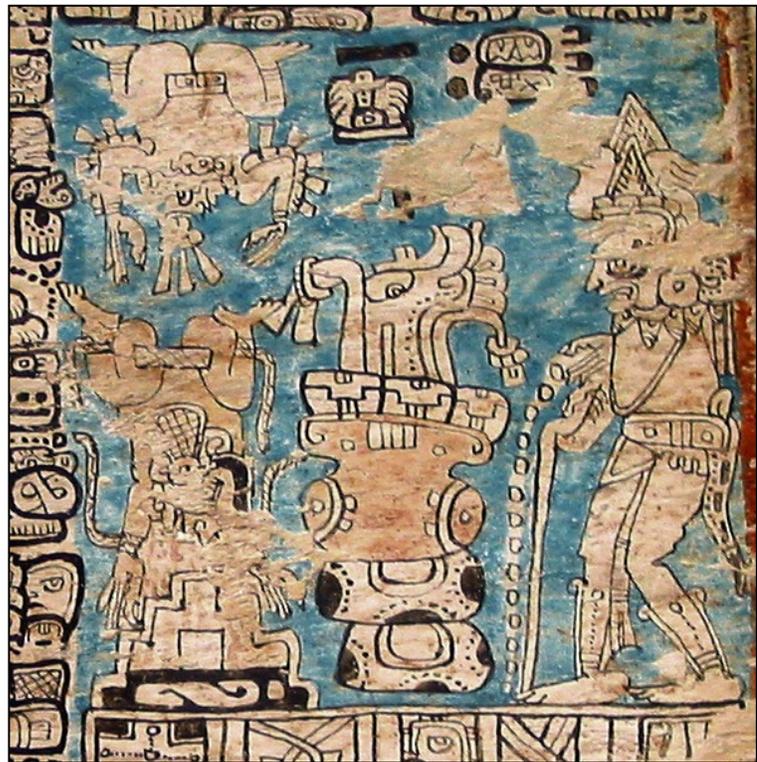


**Figure 24.** Stucco relief of Diving God from the sanctuary of Tulum Temple 16 (drawing by Karl Taube after Miller 1982:Pl. 37 [Taube et al. 2010:Fig. 55d]).

an undulating line that projects horizontally towards the ends of the mural in a north-south direction. Above this line are circular and “drop” shaped elements, some of which contain thin straight lines and a small semicircle, simulating the shape of a half-open eye (Figure 30). In general, this set of symbols resembles the representation of the skyband embodied in other buildings at Tulum, as is the case of Mural 5 of Structure 16 or the upper façade of Structure 5, although in these examples the pattern tends to be more homogeneous. This image of the sky in Structure 1 Sub is strongly associated with water, since torrents of liquid fall from it, represented by sinuous lines of blue and black.

Thanks to the remains of pigment that still survive, it can be inferred that the body of the deity, or part of it, was painted blue. Residues of this color can still be seen in the upper part of the head and legs, as well as in the left foot, where a series of perpendicular lines can be clearly seen. Another element painted in blue is the set of “feathers” located behind the left arm.

Associated with the figure of the diving god is the representation of an inverted vessel from which emerges a zoomorphic being of brown color, similar to a frog or toad, as well as a torrent of water, represented by thin wavy lines of black and blue (Figure 31). The vessel is located just below the face of the deity, and although the state of preservation of the mural does not allow it to be established with certainty that the character holds the container in his hands, it is clear that the object is linked to the figure of the god. Although several images of Maya deities are known to carry vessels spilling liquid, notably Goddess O, whose most emblematic representation in this context is on page 74 of the Dresden Codex (Figure



**Figure 25.** Depiction of a diving god associated with a sacrificial offering, Madrid Codex, page 35 (photo: Alexandre Tokovinine)

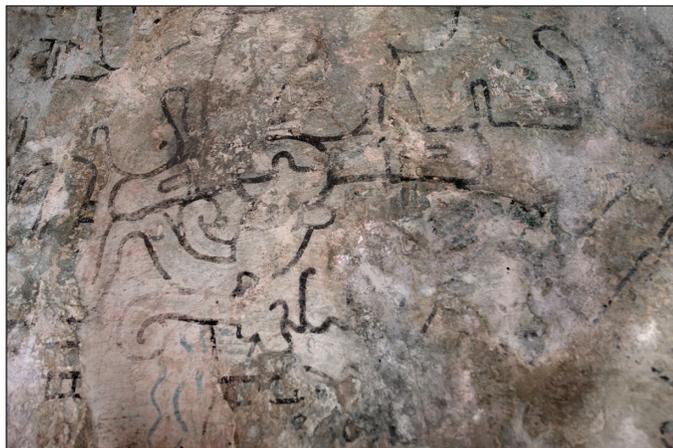


Figure 26. Diving god with sprouting vegetation on the upper part of the head, Structure 1 Sub, Tulum (photo: Vania Pérez Gutiérrez).



Figure 27. Circular element between the feet of the Diving God, probably representing a star, Structure 1 Sub, Tulum (photo: Mónica López Portillo Guzmán).

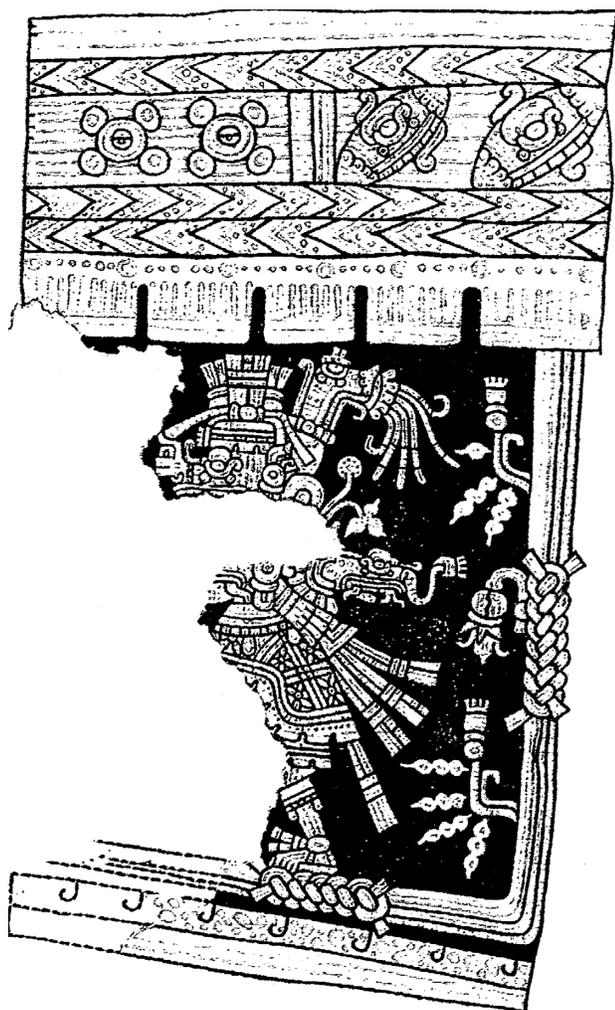


Figure 28. Skyband with star iconography in Mural 3 of Structure 16, Tulum (from Miller 1982:148).



Figure 29. Image of the god Chaahk with a globular vessel between the legs; Madrid Codex, page 9 (from the facimile of the Cortesianus available at [www.wayeb.org/resources-links/wayeb-resources/ethnohistorical-sources](http://www.wayeb.org/resources-links/wayeb-resources/ethnohistorical-sources), courtesy of Wayeb).

32), it is not common to find this type of element as part of the paraphernalia of the diving god. However, there are several scenes where the Maize God carries a pot of water for sustenance during his resurrection journey and to dispense for the well-being of the crops. This theme is widespread in Prehispanic Maya art, and a very early example is known from the North Wall mural

of Pinturas Sub 1-A of San Bartolo, Guatemala (Saturno et al. 2005)

The associated image of the frog or toad probably relates to abundance of water, as can be seen on page 31 of the Madrid Codex (Figure 33), since the Maya thought that the croaking of frogs attracted the rains. Even in modern times, during the rain ceremony known as *ch'a'*



**Figure 30.** Star iconography within skyband in the murals of Structure 1 Sub, Tulum (photo: Mónica López Portillo Guzmán).



**Figure 31.** Sinuous lines in blue and black, resembling torrents of water falling from the sky (photo: Mónica López Portillo Guzmán).



**Figure 32.** Goddess O pouring liquid from a vessel; Dresden Codex, page 74 (photograph courtesy of Sächsische Landesbibliothek, Staatsund Universitätsbibliothek, Dresden, [digital.slub-dresden.de](http://digital.slub-dresden.de)).

*chaak* children imitate the sound of frogs to petition for rain (Thompson 2008).

Based on the above we think that the representation of the Maize God as a descending deity in association with various aquatic elements takes us back to a context of abundance, in accordance with the prevalent themes embodied in other remains of mural painting in Tulum, where “most of the characters ... participate in offering rites, surrounded by allusions almost always related to natural forces [and] deities associated with fertility of the land, vegetation, and agriculture” (Fettweis 1987:83, translated from the Spanish).

We should mention that the newly discovered depiction of the diving god in the murals of Structure 1 Sub is exceptional, being one of the few documented examples in the long tradition of mural painting in the Maya area. Another representation of this deity at Tulum seems to be portrayed on the central column of the sanctuary door of Structure 16 (Figure 34). In this case, we can see part of the body of a snake and the figure of the diving

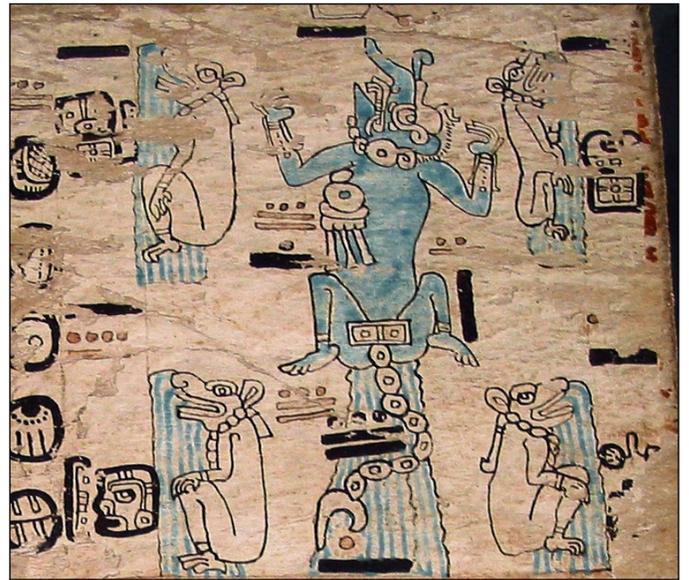


Figure 33. Frogs or toads associated with torrents of water and the god Chaahk; Madrid Codex, page 31 (photo: Alexandre Tokovinine).

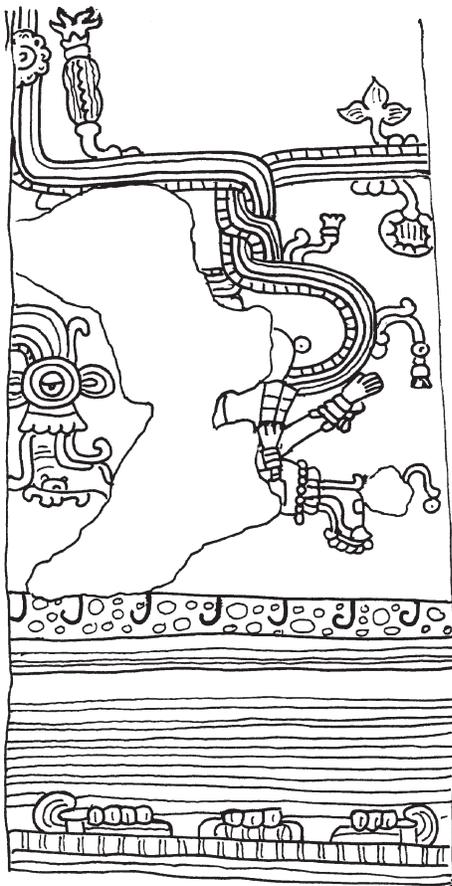


Figure 34. Maize deity descending toward a body of water; mural painting of Structure 16, Tulum (drawing by Karl Taube after Miller 1982:Pl. 40 [Taube et al. 2010:Fig. 55e]).

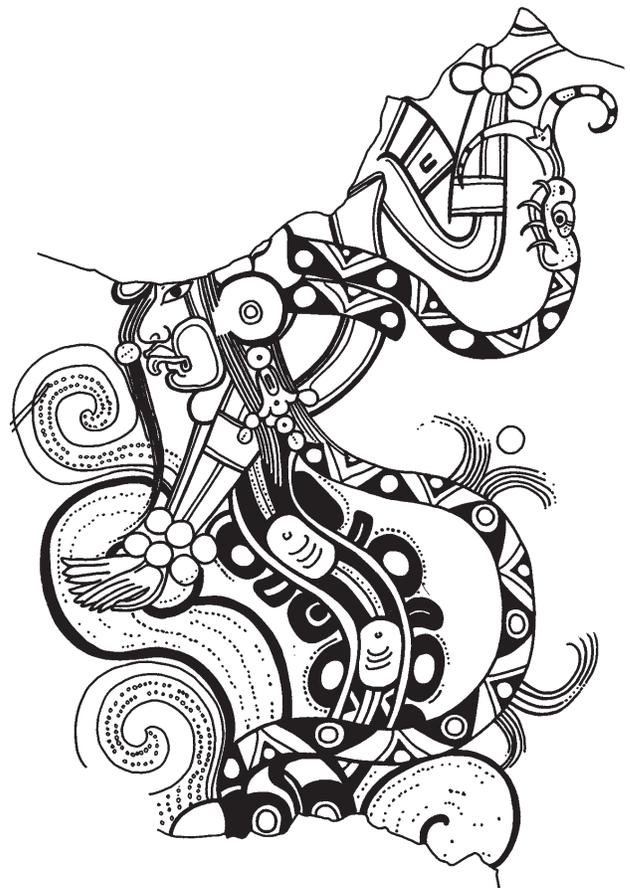
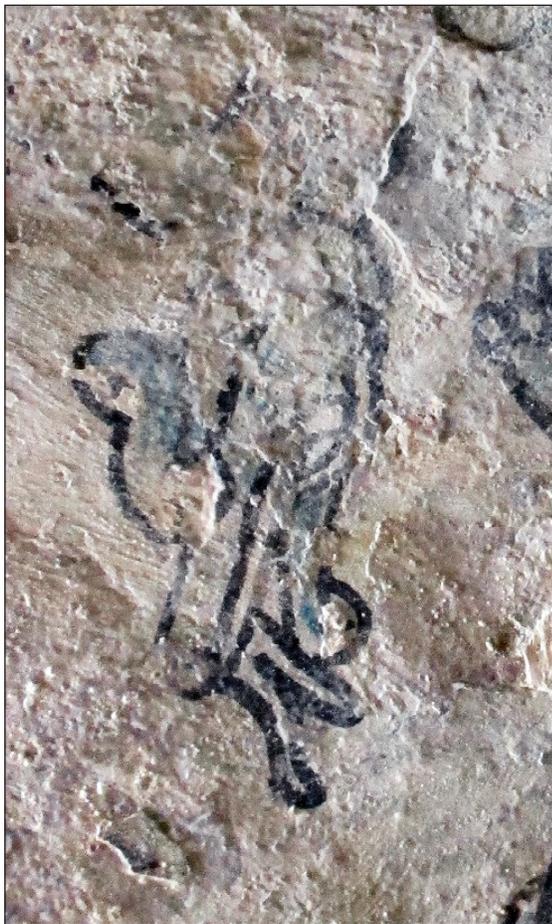


Figure 35. Maize deity in diving position falling into a torrent of water, West Wall of Pinturas Sub 1-A, San Bartolo (detail of drawing by Heather Hurst [Taube et al. 2010:Fig. 54]).



**Figure 36.** Zoomorphic figure, probably personifying a deer, North Mural of Structure 1 Sub, Tulum (photo: Mónica López Portillo Guzmán).



**Figure 37.** Head of a serpent, North Mural of Structure 1 Sub, Tulum (photo: Mónica López Portillo Guzmán).

maize god falling into the water, an act associated in Classic Maya writing with the *och ha'* "water-entering" metaphor for death, which in this case seems to refer to the journey of the deity through the watery underworld (Taube 1992; Taube et al. 2010). A similar theme seems to be reflected in the West Wall mural of the Pinturas Sub-1 Structure of San Bartolo, where a descending maize god in the coils of what appears to be a coral snake falls towards a torrent of water (Figure 35) (Taube et al. 2010).

### Other Iconographic Elements

In the first section of the north wall, below the skyband, can be seen a zoomorphic figure with an elongated snout and a small appendage that protrudes from the top of the head, an element that could well be identified as a deer antler. Below the animal's head, which is on the viewer's left, part of the body can be seen even though this section of the mural has deteriorated (Figure 36).

Moving to the south, just to the right of the image of the diving god described above we can distinguish two figures that seem to detach from the skyband. First we see the head of a snake, painted in black and blue, showing the supraorbital plate and its open jaws, from which two large fangs protrude (Figure 37). What remains of the second figure is a human head, seen in profile, with an eye, nose, and mouth (from which an elongated appendage similar to a tongue seems to emerge); the body of the individual is obliterated (Figure 38). The precarious state of preservation of this figure makes it extremely difficult to identify diagnostic elements that allow us to establish whether it is a specific deity or some other type



**Figure 38.** Individual in profile located below skyband, North Mural of Structure 1 Sub, Tulum (photo: Mónica López Portillo Guzmán).



**Figure 39.** Probable representation of a zoomorphic form, perhaps a fish; South Mural of Structure 1 Sub, Tulum (photo: Mónica López Portillo Guzmán).



**Figure 41.** Iconographic element located below skyband, South Mural of Structure 1 Sub, Tulum (photo: Mónica López Portillo Guzmán).



**Figure 40.** Undulating serpent with headdress, South Mural of Structure 1 Sub, Tulum (photo: Mónica López Portillo Guzmán).



**Figure 42.** Iconographic element in an enlarged form, South Mural of Structure 1 Sub, Tulum (photo: Mónica López Portillo Guzmán).

of character. Like the image of the serpent, the face of this last figure is painted blue and black.

Also on the south wall are a number of unusual designs. The first may correspond to a zoomorphic being painted in sienna, perhaps a fish with an elongated mouth, although this assessment is questionable due to the state of the mural's deterioration (Figure 39). At the southern end is the undulating body of a serpent<sup>16</sup> projecting below the skyband, whose head is adorned with a kind of headdress composed of three small horizontal bars, as well as other elements shaped like feathers that protrude from the top. The serpent's mouth is delineated, together with two large fangs, from which come a pair of undulating bands that end in a point. At first these might appear to represent a forked tongue, although given their thickness they could well correspond to some other type of element.

From the middle part of the band that projects downwards, a spiral-shaped object emerges. Like the rest of the composition, this is painted blue with a black outline. Below the body of the snake is an elongated element that hangs down, composed of three small circles, a trapezoidal object,<sup>17</sup> and two thin rectangular strips. By its shape it seems to correspond to a kind of rattle (Figure 40).

In front of the head of the snake, just at the lower limit of the skyband, there is a motif similar to the "rattle" that the reptile carries in the lower part of its body; the main difference between the two is in the lower bands: here the ends are rounded, while the snake's have a rectangular outline (Figure 41).

Finally, to the right of the second "rattle" is an elongated object, vertically oriented below the skyband, composed of a circle at the top with a pair of trapezoidal elements and a thin strip that ends in a rounded form. On the lower part of this is a long and sinuous appendage, similar to a feather, whose tip is almost opposite the head of the serpent located on the left side (Figure 42).

### Final Considerations

The new pictorial elements detected within Structure 1 Sub of El Castillo complement to a significant extent the iconographic program studied in previous eras, and they contribute relevant data to the accumulated knowledge of the murals. A highlight is the representation of the Diving God, whose appearance seems to reinforce

the central theme of the paintings, which according to various researchers is oriented to propitiatory rites or ceremonies involving agricultural cycles, abundance, fertility, and the relationship with the forces of nature. The existence of this deity within the pictorial corpus of Tulum is surprising due to its scarcity in mural paintings currently known from Maya sites. Undoubtedly, the new findings in the murals of Structure 1 Sub give us a more complete vision of the artistic work that was expressed on the walls of the building, and they are a reference of utmost importance for future studies and interpretations bearing on the pictorial tradition of Tulum, the ancient city of dawn.

### Acknowledgments

In this space we wish to express our sincere gratitude to the National Coordination of Conservation of Cultural Heritage of INAH for their support in undertaking the project of conservation, restoration, and study of Tulum's murals, with the collaboration of the restorers Mariana Contreras del Cueto, Carlos Lozoya Martínez, and Alejandra Sánchez Ruvalcaba, as well as María José Con Uribe. We thank them for all their help during the research process and throughout the preparation of the text. Likewise, we would like to thank Vania Pérez for her assistance in the work of registering the pictorial elements and, finally, the editors and reviewers of *The PARI Journal*, for making possible the publication of this article and for the excellent translation.

### References

- Con Uribe, María José, and Mónica A. López Portillo Guzmán  
2014 El Castillo de Tulum: historia de un edificio. In *Prácticas funerarias y arquitectura en tiempo y espacio*, edited by Antonio Benavides Castillo and Ricardo Armijo Torres, pp. 114-141. Universidad Autónoma de Campeche, Mexico.
- Fernández, Miguel Ángel  
1945 Las ruinas de Tulum II. *Anales* 6(1):95-106. Instituto Nacional de Antropología e Historia, Mexico.
- Fettweis, Martine  
1987 Iconografía de la pintura mural. In *La pintura mural maya en Quintana Roo*, pp. 79-96. Colección Fuentes. Instituto Nacional de Antropología e Historia; Gobierno del Estado de Quintana Roo, Mexico.

<sup>16</sup> The figure of the reptile is painted blue and outlined in black.

<sup>17</sup> This element is distinguished by being painted in sienna and not in blue like the rest of the complex.

Galindo Trejo, Jesús

2007 La pintura mural de El Castillo de Tulum como marco de la definición de una unidad calendárica mesoamericana. *La Pintura Mural Prehispánica en México, Boletín Informativo* 13(26):31-36. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico.

Houston, Stephen, David Stuart, and Karl Taube

2006 *The Memory of Bones: Body, Being, and Experience among the Classic Maya*. University of Texas Press, Austin.

Landa, Fray Diego de

1941 *Landa's Relación de las Cosas de Yucatan: A Translation*. Edited with notes by Alfred M. Tozzer. Papers 18. Peabody Museum of American Archaeology and Ethnology, Harvard University, Cambridge.

Lombardo de Ruiz, Sonia

2001 Los estilos en la pintura mural maya. In *La pintura mural prehispánica en México, II, Área maya. Tomo III, Estudios*, edited by Leticia Staines Cicero, pp. 85-154. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico.

López Portillo Guzmán, Mónica Alejandra

2011 Querer siempre lo que se hace: Alejandro Martínez y el Proyecto de Restauración Tancah-Tulum. In *Voces por Alejandro. Homenaje al doctor Martínez Muriel*, edited by Luis Alberto López Wario and Pedro Francisco Sánchez Nava, pp. 169-186. Instituto Nacional de Antropología e Historia, Mexico.

Lothrop, Samuel K.

1924 *Tulum: An Archaeological Study of the East Coast of Yucatan*. Publication 335. Carnegie Institution of Washington, Washington, D.C.

Maldonado Cárdenas, Rubén

2001 Los mayas del norte de la Península de Yucatán. In *La pintura mural prehispánica en México, II, Área maya. Tomo III, Estudios*, edited by Leticia Staines Cicero, pp. 67-84. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico.

Miller, Arthur

1982 *On the Edge of the Sea: Mural Painting at Tancah-Tulum, Quintana Roo, Mexico*. Dumbarton Oaks, Washington, D.C.

Saturno, William, Karl Taube, and David Stuart

2010 *Los murales de San Bartolo, El Petén, Guatemala, parte 1. El mural del norte*. Boundary End Archaeology Research Center, Barnardsville.

Taube, Karl Andreas

1992 *The Major Gods of Yucatan: Schellhas Revisited*. Studies in Pre-Columbian Art and Archaeology 32. Dumbarton Oaks, Washington, D.C.

Taube, Karl A., William A. Saturno, David S. Stuart, and Heather Hurst

2010 *Los murales de San Bartolo, El Petén, Guatemala, parte 2. El mural poniente*. Boundary End Archaeology Research Center, Barnardsville.

Thompson, Eric

2008 *Historia y religión de los mayas*. Serie América Nuestra 7. Siglo Veintiuno Editores, Mexico.



God L, East Jamb, Temple of the Cross, Palenque  
(rubbing by Merle Greene Robertson).



Lady Sak K'uk' and K'inich Janaab Pakal I, Oval Palace Tablet, Palenque  
(rubbing by Merle Greene Robertson).



Lady Tz'akbu Ajaw and K'inich Kan Bahlam II, Tablet of Temple XIV, Palenque  
(rubbing by Merle Greene Robertson).