
Curtain Holes in the Standing Architecture of Palenque

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This is a preliminary investigation into the occurrence and function of small architectural features which appear throughout the site of Palenque. Different people investigating the ruins at one time or another have referred to these features by different names. Holmes (1897:176) called them dumb-sheave cordholders; Maudslay (1889-1902, IV:15) referred to them as niches with stone staples, Tozzer (1913: 177-178) as tie-holes. Today, however, they are generally called curtain holes.

Were they really used for curtains? I have not tried to make any definitive statements concerning function at this time. I have tried only to account for the presence of all holes as they occur in the temples and Palace structures and to suggest possibilities based on their locations and associations with other architectural features.

Previous Accounts

In surveying the literature, I have found a paucity of detailed description concerning these features, by either early explorers or later archaeologists and other investigators. It is understandable that such early visitors as Walker and Caddy (Pendergast 1967), Stephens and Catherwood (Stephens 1841), and Charnay (1887) would have been more interested in the site as a whole, with its stunning edifices and artwork, and would have devoted all their energies to clearing, cleaning, and recording. However, in the course of these initial investigations, mention is made of the presence and possible function of some of the more obvious holes. Both the Caddy-Walker and Stephens-Catherwood expeditions apparently investigated the same area of the Palace, the Northeast Court. Both made mention of the large cylinder inserts found in House A. Says Caddy:

In the wall of each side of the centre doorway and within a few inches of the edge, both at top and bottom, there are semicylindrical holes cut in the stone having a strong bar down the middle of them; they appear to have acted as parts of rude hinges. (Pendergast 1967:126)

Stephens also describes these holes, as well as those found along the medial molding. He gives an interpretation of their function:

... our impression was, that an immense cotton cloth, running the whole length of the building, perhaps painted in a style corresponding with the ornaments, was attached to this cornice, and raised and lowered like a curtain, according to the exigencies of sun and rain. Such a curtain is used now in front of the piazzas of some haciendas in Yucatan. (1841, II:312)

Charnay goes further in his speculations, drawing comparisons with the central highlands of Mexico:

It may not be irrelevant to add that neither temples nor palaces were provided with doors, and that stuff or matting curtains were used for all apertures, indicated by the large and small rings fixed on the pilasters on each side of the entrances, and the whole length of the inner cornice. We know that neither the Toltecs nor Aztecs had doors to their houses, which seems to show great respect for property. (1887:252-253)

Even with the advent of more systematic investigations of the ruins, little more, if any, light was shed on these features; their presence was simply acknowledged. Maudslay (1889-1902, IV) again describes the House A holes and also includes brief descriptions of Houses C and E, the Temple of the Inscriptions, and the Temple of the Cross. Holmes (1897:151-209) also describes House A. He briefly notes the holes in each temple of the Cross Group as well and includes a drawing of a composite temple, showing more holes than actually exist. Seler remarks on the general traits of medial-molding holes found throughout the Palace. He also makes note of the capstone holes found in House B (1976:11, 47).

Hole Types

This investigation has brought to light two basic types of holes, which I define as any specially constructed feature through or around which a cord or rope could be passed and secured. Although the general usage of "curtain holes" is more prevalent today, perhaps "cordholder" is a better, more descriptive term. The two basic types are fairly consistently restricted to certain areas on the interior and exterior surfaces of temple and Palace structures, with very few exceptions.

I refer to one type as a simple biconically drilled hole. To make this type, two holes are drilled perpendicular to each other until they meet. The basic type is found exclusively on the edge of the medial molding (Fig. 1) and on the spring of the vault (Fig. 2). A variant of this hole type is found only in the capstone of the vault (Fig. 3). The sole exception is in House C, where a number of these holes appear on the underside of the medial molding. The hole is horseshoe-shaped, for two holes are drilled into the flat surface and then curved inward toward each other until they meet.

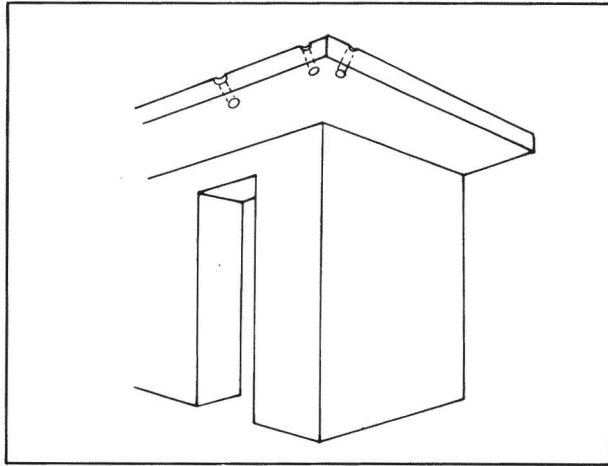


Fig. 1 Palenque. Holes of the medial molding.



Fig. 2 Palenque. Holes of the vault spring: (a) holes in the medial support wall, Temple of the Sun; (b) detail of holes, Temple of the Cross.

The second type of hole I refer to as the insertion type. Such holes are found on both interior and exterior surfaces: walls, façades, and piers. Very rarely do they occur in the upper zone, above the vault spring, and in only two instances, in Temple XIV, do they occur on substructures.

The insertion type has three variants. One I call the doughnut insert (Fig. 4). This variant appears as a rounded stone with flat sides, biconically drilled at or near the center. A niche is prepared in the wall or pier, and the stone is inserted and cemented in place, then

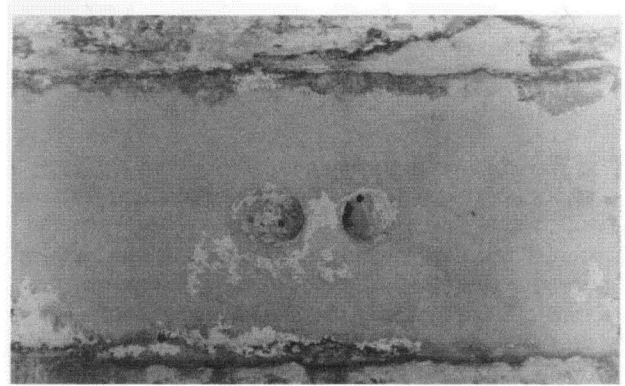


Fig. 3 House C, Palace, Palenque. Holes of the capstone.

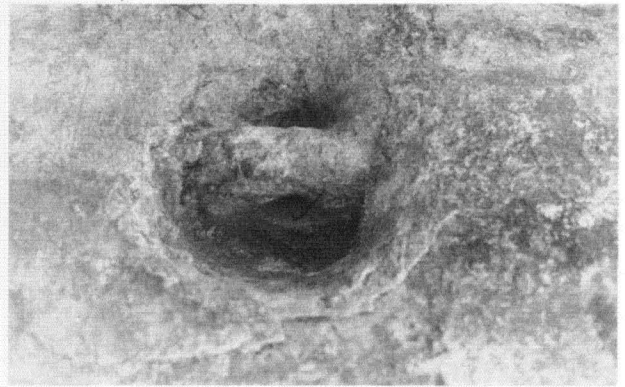


Fig. 4 Temple of the Sun, Palace, Palenque. Doughnut insert.

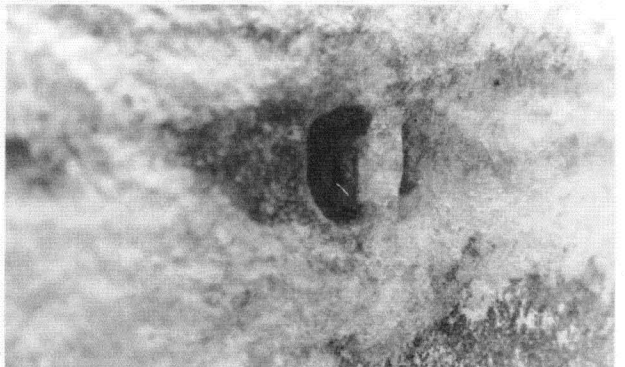


Fig. 5 House A, Palace, Palenque. Doughnutoid insert.

plastered over, leaving a space for the cord or rope. It is difficult to tell whether the niche was made during construction or carved out after the building was finished. There is also a doughnutoid manifestation of this variant, where the hole is drilled nearer the edge of the insert (Fig. 5).

A second variant is the cylindrical insert (Fig. 6). This is the variant that has been referred to in the early accounts of the Palace. With this variant, a long, slender cylindrical stone is fitted into a prepared niche in the wall or pier. There is no drilled hole, but the space to either side of, and to the rear of, the insert allows for a cord or rope to be passed around and secured. Another manifestation of this variant is a relatively unshaped, but roughly rectangular, stone inserted in a similarly prepared niche (Fig. 7). The niche for both these manifestations was allowed for during construction, not added after the structure was completed.

The last variant of this type is found only in the Subterraneos. At present, I have no explanation for this. It resembles the cylindrical insert variant in that there is no hole per se; a space is created around the sides and back of the insert. But it does not appear to be an inserted piece. The hole seems to have been planned during construction, and a relatively flat, rectangular stone is placed across the opening (Fig. 8). The spanning stone is flush with the rest of the wall, whereas the other two variants either project from (doughnut) or are recessed into (cylindrical) the wall or pier.

drical) the wall or pier.

By my best count, there are 1,116 holes of all types found in the standing architecture of the ruins. The most numerous type is the simple biconically drilled type (602), followed by the doughnut-doughnutoid (466), cylindrical (40), and special Subterraneos (8) variants. As mentioned above, the simple biconically drilled holes are found exclusively in the medial molding, vault spring, and capstone. The three variants of the insertion type, with very few exceptions, are found on the lower zone interiors and exteriors. One major exception is House E, where 38 insert-type holes are found above the vault spring. They line up perfectly with holes found below the vault spring and have corresponding holes across the room on the opposite vault. The partition, whatever it was, appears to have extended from the floor to the capstone. The majority (319) of holes in the lower zone appear to be associated with doorways, regardless of variant. Ninety-seven examples are found on wall areas with correspondences across room spaces or with no apparent correspondences of any kind. Structures of the Palace, excepting the Tower and Houses A, AD, F, and I, show some exterior holes. These have no apparent correspondences or associations. It is possible that the holes were used in conjunction with other earlier structures, subsequently replaced as the Palace complex grew, or that they had some function related to those later structures.

Something that Table 1 does not show but that is interesting to note is the occurrence of a few patterns of general hole placement in certain of the temples. In my initial survey of the Cross Group, I noticed, after examining the Temple of the Sun, that certain areas of the Temples of the Cross and the Foliated Cross had holes in similar locations, though not necessarily similar types. The pattern observed was the following: holes present in the medial molding and vault spring of the medial support wall, one capstone hole in the central inner chamber above the shrine housing the tablets, two rows of holes on the backs of piers, holes flanking the entrance to the central chamber and inner shrine, and holes flanking the doorway entrances to inner side chambers. Certain features of the Temples of the Cross and the Foliated Cross

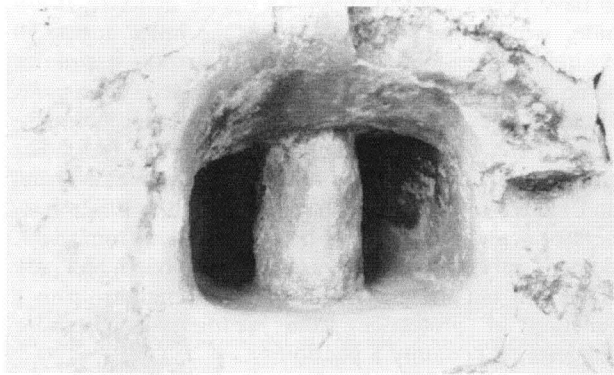


Fig. 6 House A, Palace, Palenque. Cylindrical insert.

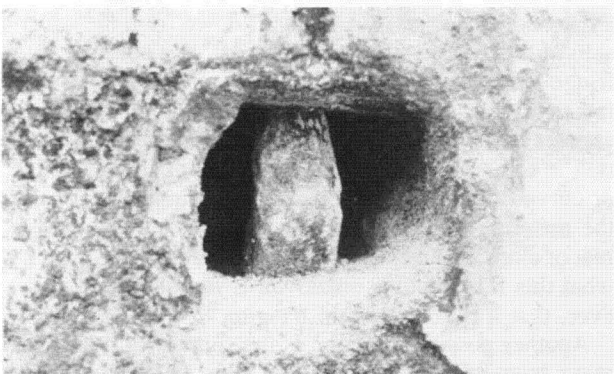


Fig. 7 Temple V, North Group, Palenque. Cylinderlike insert.

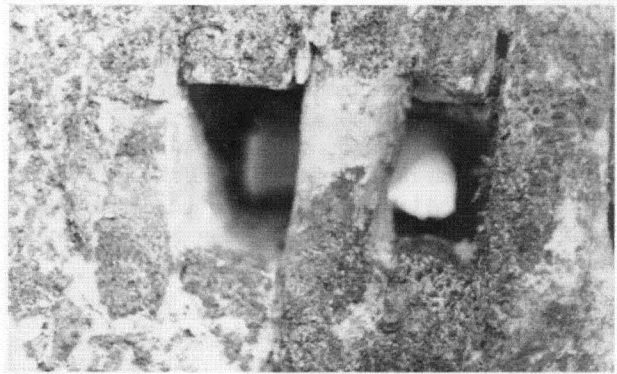


Fig. 8 Subterraneos, Palace, Palenque. Special Subterraneos type.

are missing – for example, piers – but the pattern seen in what remains makes me confident of a Cross Group pattern. “The TC, TFC, and TS almost certainly were designed and built as a single group” (Schele 1974a:8). If this is indeed the case, a Cross Group pattern of hole placement would make sense.

When looking at the Temple of the Inscriptions, one notices an almost Cross Group-like manifestation of hole locations. Holes are present in the medial molding, on pier backs, and on walls flanking entrances between piers and entrances to side and central inner chambers. The Temple of the Inscriptions, however, lacks an inner shrine; there are no capstone holes, and vault-spring holes exist only on the part of the medial support wall that faces the outer chamber. (Normally, in the Cross Group, holes in the vault spring are seen on both sides of the medial support wall.) Only the Cross Group and the Temple of the Inscriptions share these vault-spring holes. Schele states that “the last building attributable to Pacal is . . . the Temple of Inscriptions” (ibid.:7). But when one examines the other structures attributed to him, Houses E, B, and C (ibid.:4-6), the omission of similar holes in the vault springs is immediately noted. In fact, none of the other Palace structures manifests holes in this area, and the same is true for the remaining structures of the site. Might it be that these holes had some special purpose for the person who caused the construction of the structures they are in? We know that Chan-Bahlum built the Cross Group (ibid.:8) and that he also finished the Temple of the Inscriptions (Greene Robertson 1979a: 131-132). Might not he have embellished the monuments of his father, Pacal, and himself with a special set of features for which he had a particular design or purpose? This, of course, is all in the realm of speculation, but it is the pattern that is seen.

Another apparent pattern, which can be only partially determined at this time, is shared by El Olvidado and the Conde. Although El Olvidado has undergone some recent damage – a partially collapsed roof – and appears to be half-filled with debris, it is possible to make the following observations. On the medial molding, both structures exhibit a similar size of hole, in this case, of a much smaller diameter than those seen elsewhere at the site. The interiors of both structures also exhibit a similar placement pattern. In both, pier backs have holes placed toward the center rather than toward the edges, as in the Cross Group or Palace structures. Also, the jambs of entrances into the interior chamber or chambers of El Olvidado exhibit flanking sets of holes, as noted in the Conde. (It is impossible to know just how many holes are present on the piers in El Olvidado, because they are obscured by debris.) Whether the other architectural features of the two structures bear any resemblances to each other is uncertain at present.

Function

What were the holes used for? The general consensus of all who have come to Palenque and those who have noted similar features elsewhere in the Maya area seems to be that they were used for curtains or hangings. Totten

says, “No doors are known but there are holes in many jambs suggesting the use of curtains” (1926:34). As mentioned above, Stephens, Caddy, and Charnay have speculated on a curtain-related function. We also have the ethnographic account of Clavigero (in Tozzer 1941:86), which notes the Aztec use of doorway curtains.

Certainly, the location of holes suggests something functional. A large number of holes are associated with doorways and would seem to suggest some sort of covering across that space, either to block one’s view into the interior or to prohibit entrance by unauthorized persons. The type or type variant of hole may suggest usage differentiation. The cylindrical insert variant is quite large in most cases and appears to have been meant to bear a great load, perhaps a wooden barrier of some sort. These holes are found only in a few strategic areas. In House A, they flank the only direct passageway between the outside of the Palace and the Eastern Court. In the Temple of the Inscriptions, they flank the entrance to the central inner chamber, where the passageway to Pacal’s tomb was found. In the Cross Group, they flank the entrance to the central inner chamber and the entrance to the inner shrine and tablets. Of interest is the fact that this hole variant is seen on the back of the remaining pier of the Temple of the Cross. In each case, these holes appear intended to help protect something or some place from unwanted intrusions.

The doughnut-doughnutoid variants do not appear to be as sturdy as the cylindrical insert variant; they seem to have been meant to support a lighter material, like a hide, woven mat, or cloth. Capstone holes appear in positions where one would logically assume a lamp or some sort of illumination to be suspended. This gives House B special significance, for twenty such holes are noted there, usually three or more to a room. All other structures with such holes have only one. Vault-spring and medial-molding holes are questionable. Large banners or screens could have been suspended from them, perhaps only on special occasions, as a modern ball park is decked out for the World Series. Relationship to a function of protection from weather, as Stephens suggests, is certainly a possibility.

One possible clue to function is provided by the Codex Madrid, which exhibits templelike structures with a figure seated inside (Fig. 9). Above the figure’s head appears a fringe of some sort, which hangs down from the underside of what looks to be either a roof or a cornice. This fringe does not hang down all the way to the floor but, rather, as far as the head of the seated figure. The fringe appears to have been made from different types of material; in one version it is seen as a series of single straight or curved fibers with a dotted border along the edge of the material, and in the other it appears to be a woven mat or cloth, again ending with the dotted border. Exactly what this represents is unknown; it would appear, however, that it is some sort of hanging.

Another possible function is the support of poles carrying banners or torches. Only three holes that could have functioned in this way are evident. One is in the right inner side chamber of the Temple of the Sun. The

Locations, Concentrations, and Patterns

Table 1 shows the location of all occurrences of holes. The categories of positions are medial molding, capstone, vault spring (only on the medial support wall), wall (not

related to doorways), pier, doorway (not including piers), exterior surface (not including doorways), and other, a catchall category to note exceptions to general trends.

Table 1 *Curtain Hole Index*

Location	Medial Molding	Capstone	Vault Spring	Wall	Pier	Exteriors	Doorway	Other
Cross Group								
Temple of the Sun	72	1	21	7	12		12/10	1
Temple of the Cross	47	1	41	7	6a	1	6/9	
Temple of the Foliated Cross	50	1	33	14			13/3	
Temple XIV								2b
Palace								
House A	4	1		2	6		6a	
House B	40	20		9		2	18	
House C	18	1		13		1	6	8c
House D	10			5		7	9	
House AD							2	
House E	19	1		17		32	38	45
House F	13			4				
House G				3		1	7	
House H	7	1		9		2	24	2d
House I								
Subterráneos				5		1	19	8e
Tower							6	1
Temple of the Inscriptions	72		28		21		16/6	
North Group								
Conde	27			2	4		10	
Temple V							9	
Temple IV								
Temple III							4	
Temple II	12				4		14	
Temple of the Lion	12						2	
Temple XII	35				2			
Olvidado	6				2		4	

Note: Wall, pier, exterior, and other holes are expressed in the doughnut or doughnutoid variant, except where noted. Doorway holes are expressed as follows: doughnut(oid)/cylindrical.

- a. Cylindrical insert.
- b. Found on substructure.
- c. Capstonelike holes found on medial molding.
- d. Found in area above vault spring.
- e. Special Subterráneos variant.

other two are on the substructure of Temple XIV, flanking the staircase. In all cases, the stone projects almost completely from the wall so that the hole is easily accessible.

Holes are also seen in association with benches, although this is not a strong association, and the correspondences are absent in several cases. It does appear, however, that some sort of partition may have been set up to create a private space for the occupant of the bench. Whether these benches were for sleeping or for mortuary purposes is debatable; they probably served both functions at one time or another. Whatever the purpose, it seems that some degree of privacy was sought. Harrison (1970:176-181) discusses associations of “sub-spring beam holes” and benches in the Central Acropolis of Tikal.

A hint as to function is seen in M. D. Coe’s *Lords of the Underworld* (1978). Two decorated ceramic vessels, numbers 1 and 2, from the Calakmul area, are executed in the “codex style”. Both portray a seated figure upon a bench. Above the figure’s head is a curtain of some kind, rolled up and knotted to keep it in place. These

curtains appear without decoration, except for a border along the edge of the material.

One factor that inhibits confident interpretation is the amount of damage to the structures and the amount of subsequent reconstruction. In many instances, damage to part of a building has removed evidence of possible hole correspondences. In the North Group especially heavy coats of lime melt have covered wall and pier surfaces, probably hiding some hole correspondences. Reconstruction also appears to affect the presence of holes. It seems that, where salvage or reconstruction work has occurred, holes are absent. The best example of this is the Temple of the Sun. In the outer chamber along the pier backs and walls which define the entrance ways, there are six rows of holes, three to a row. Only in the first row, to the left as one looks toward the Temple of the Foliated Cross, is this pattern interrupted; the top hole is missing, and one can discern evidence of reconstruction in that area. Only the repeated pattern of three holes per row makes one confident of assuming that a hole is missing.

Reconstruction can also create associations that do not exist. Behind the Temple of the Cross, in the base upon which the temple sits, there are two holes drilled into the top of the stone. At first, I thought that this was a perfect correspondence with the holes in the medial molding, providing places to secure a banner or curtain from top and bottom. But, such holes were not found anywhere else at the same position, on any other building that had medial-molding holes. It was later pointed out to me, and I confirmed this by closer inspection, that this section had been reconstructed and that the slab used to complete the work had been part of a medial molding at one time. However, there is also evidence of more careful reconstruction and attention to detail. In House D, a restored section of the medial molding along the southwest corner has holes drilled into the concrete material, in imitation of the prevalent pattern. These holes were not included in the count in this essay.

Palenque and Other Sites

How does Palenque compare with other sites of the central Maya area?

Harrison (1970:174-175), reporting on the Central Acropolis of Tikal, found that “the apertures that served as curtain holders on the interior sides of doorways, on the wall near the doorjamb above the floor and below the lintel, were noted in every exterior doorway of the Central Acropolis.” This description conforms with what is observed at Palenque. Harrison observed three types of insertions: a “masonry rod” in Early Classic structures, bone or wooden rods during the Late Classic, and a “ceramic insert,” apparently a later introduction during the Late Classic. At Palenque, only stone inserts are present.

Harrison concludes his discussion of the holes with the idea that their primary function was to insure privacy and that they were ill suited for protection against weather or the actual intrusion of animals, insects, or people. At Palenque, I feel that the cylindrical inserts were con-

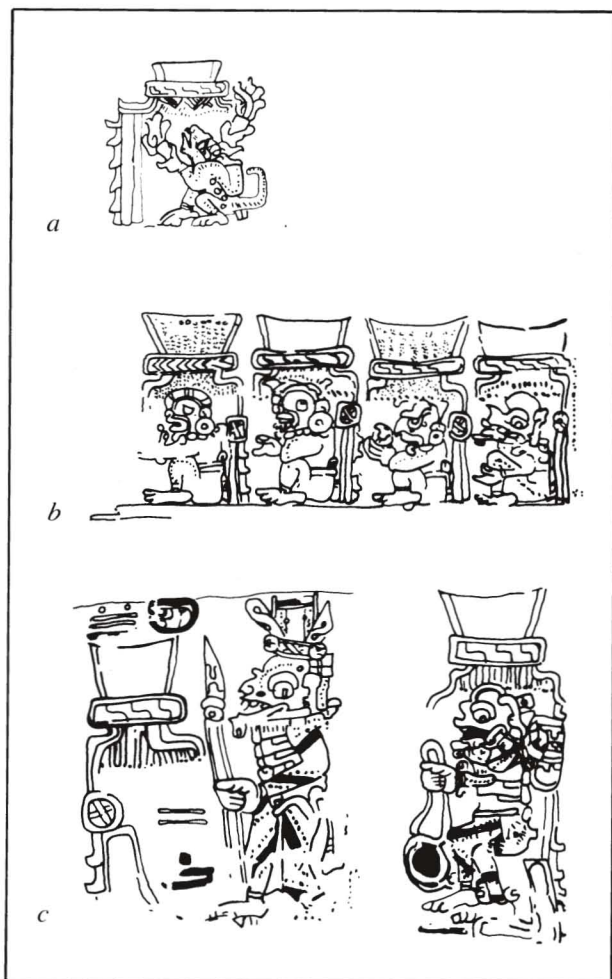


Fig. 9 Codex Madrid: (a) page 63, fringe above seated figure’s head; (b) page 87, single straight or curved fibers; (c) page 90, woven material.

structed and situated in such a manner as to prohibit unwanted human access.

In the Ruppert, Thompson, and Proskouriakoff report on Bonampak, Ruppert, in the architecture section, noticed holes on exterior façades of several structures. Most holes noted were located beneath the moldings of the structures and did not appear associated with doorways. The East Chamber of Structure 1 was described as having a “dumb sheave placed at either side of doorway at top and bottom” (1955:17). One interesting manifestation of what he designated a cordholder was noted on Structure 5: “One in form of stucco face appears in center of east wall directly below molding. Cord passed through eye sockets” (ibid.:20).

In a preliminary investigation of Nakum, Guatemala, Tozzer (1913:177-178) found only one example of a “tie-hole,” which he described as having a wooden insert. In reporting on San José, Belize, J. E. S. Thompson (1939a: 27) noted thirteen “curtain sash holders or tie holes,” which seemed similar to the Nakum example “except that all rods at San José were of bone.”

This brief survey is by no means complete or comprehensive, but I hope it points out that such holes, regardless of construction type or material used, were widespread throughout the central Maya area. Pollock (1965: 405-406) noted them in the Puuc area, and Totten (1926: 34) makes mention of them in general terms for the whole

Maya area. Is this a Mesoamerica-wide trait? Certainly Clavigero (in Tozzer 1941:86) saw a sort of curtain being used in Mexico. Other Mesoamerican groups must await further investigation.

Conclusion

I think it is safe to say that the need for privacy is a feature in every person's life. There are times when we all need to retreat to our own little place, for whatever purpose. Religion has also made use of the need for privacy. Privacy helps heighten and impart a sense of mystery to rites and rituals. It helps maintain the distinctions that set apart priest and peasant. Curtain holes, tie-holes, stone staples, cordholders, or whatever probably played a tiny role in the functioning and maintenance of a great society and civilization.

Acknowledgments

I would like to thank Merle Greene Robertson, whose guidance and assistance during the course of my research made this paper possible.

Note

The illustrations in this essay, with the exception of Figs. 1 and 9, are by the author. Figs. 1 and 9 are by Merle Greene Robertson.