A PRELIMINARY STUDY OF THE
RUINS OF COBÁ
QUINTANA ROO, MEXICO

BY

J. ERIC THOMPSON
HARRY E. D. POLLOCK
JEAN CHARLOT

CARNegie INSTITUTION OF WASHINGTON
March 1932
LIST OF ILLUSTRATIONS

PLATES

Frontispiece, Map of Maya Area with principal archeological sites

**PLATE** 1. Stela 1, Macanxoc (front)
   2. Stela 1, Macanxoc (back)
   3. a, Stela 1, Macanxoc, on its platform
   b, Stela 4, Macanxoc, in its shrine
   4. a, Stela 2, Macanxoc
   b, Stela 3, Macanxoc
   5. a, Stela 5, Macanxoc (front)
   b, Stela 11, Cobá
   6. Stela 6, Macanxoc
   7. a, Stela 7, Macanxoc, in front of building
   b, Stela 8, Macanxoc, in shrine
   8. a, Stela 9 and 10, Cobá, in shrine
   b, Stela 15, Cobá
   9. a, Stela 12, Cobá
   b, Stela 13, Cobá
   10. a, Stela 16, Group D
   b, Stela 21, Nohoch Mul
   11. a, Stela 17, Nohoch Mul
   b, Stela 81, Cobá
   12. Stela 20, Nohoch Mul
   13. Sketch map of District of Cobá
   14. Plan of Ruins, Cobá
   15. Cross-section of Ruins, Cobá
   16. Plan of Ruins, Nohoch Mul
   17. Plan of Ruins, Macanxoc
   18. Plan of Ruins, Kukulcan

TEXT-FIGURES

**FIG.** 1. Aerial view of Cobá .......................................................... 17
   2. District of Cobá, looking north to lakes ................................... 24
   3. Central group of ruins at Cobá .............................................. 28
   4. View of lakes, Cobá: a, Lake Cobá; b, Lake Macanxoc .............. 29
   5. Structure I, Cobá, and Uxul Mul beyond Lake Macanxoc ............. 30
   6. Restored plan and cross-sections of Structure I, Cobá ............. 31
   7. Structure I, Cobá: a, masonry of substructure; b, northwestern corner of pyramid; c, small temple with stela ........................................ 33
   8. Plan and cross-section of shrine of Stela 11, Cobá .................. 34
   9. Vaulted passage beneath stairway of Structure IV, Cobá ........... 36
   10. Sections of room in northwestern wing of Structure IV, Cobá .... 36
   11. Eastern façade and vault of southwestern wing of Structure IV, Cobá ... 37
   12. Cross-section of Structure VI', Cobá .................................... 39
   13. Ground plan of Structure VIII', Cobá ................................... 40
   14. Interior of Structure IX', Cobá ......................................... 41
   15. Structure IX, Cobá: a, ground plan; b, section through doorway; c, longitudinal section .............................. 42
ART ANALYSIS OF THE MACANXOC STELÆ

By Jean Charlot

SUBJECT-MATTER

Of the eight stelae found at Macanxoc, Stela 7 was too badly weathered to show any sign of sculpture; the others, however, without exception present the same subject-matter: a ruler, priest or deity holding diagonally across his breast an elaborate ceremonial bar. Usually, though not always, this figure stands upon the back of a prostrate human figure, possibly a captive, with smaller subsidiary figures in imploring attitudes on one or both sides. Similarity of detail is so constant in all these monuments as to permit the description of one to serve for all (figs. 61–68, and Plates 1–7).

The principal figure is seen in front view with the head in profile, looking to its right, with the feet pointed outward, the usual, if not natural, position in Maya sculpture. The chest and shoulders are covered with a mosaic collar or cape made of square plates. A necklace of inverted T-shaped elements hangs down to about the knees, where it seemingly is attached to an oval-shaped object from which project three lateral flaring elements on each side with multiple bead terminations. The wrists are concealed by heavy bracelets. The belt, where it can be distinguished, includes as its principal ornament three medallions representing human heads, the middle one being in full front, those on the sides in profile. From these heads hang ornaments which can be identified as shells. The skirt is divided into two sections by a fringe, the lower part being embroidered with a design that resembles a lattice pattern. Another fringe ends the skirt. The sandal strings, passing between the toes, are knotted in a decorative way on the ankle in such manner as to leave the big toe visible. The head-dress consists in the majority of cases of a monstrous reptilian head, itself heavily ornamented and the whole adorned by a profusion of waving plumes. Confining ourselves to a discussion of the subject-matter only and leaving aside chronological considerations, it may be noted that head-dresses similar to those encountered at Macanxoc are commonly found in the southern area, notably at Piedras Negras (Stelae 13 and 35), at Naranjo (Stelae 3 and 14, fig. 69), at Ixkun (in the head-dress of the chief on the left of Stela 1), and on the early Stela 6 at Yaxchilan. In the north we find it on Stela 1 at Tulum.

The profiles are of the Maya type with aquiline noses, except Stelae 4 and 6 which show a Roman nose type. The ear and part of the cheek are concealed by heavy earplugs. The ceremonial bar, which is rigid and held diagonally across the breast, is most elaborate. Unfortunately the ends are too effaced to permit the identification of all the details, but they seem to be of a well-known type, representing human heads that issue from the jaws of highly conventionalized serpents.
The bar itself is decorated with pairs of V-shaped elements, one being inverted in each pair. The dates of these monuments add a special interest to this type of ceremonial bar. We have on the Macanxoc stelae representations of what Dr. Spinden in his work on Maya art believes to be the most highly developed form of this object, in spite of the fact that these Macanxoc stelae are contemporaneous in date with Early and Middle Period stelae at Copan (Stelae P, 1 and 2) which in turn present what is believed to be the earliest type of the ceremonial bar, namely a flexible serpent body held horizontally. As great metropolitan centers like Copan would hardly have made use of ceremonial paraphernalia of an earlier type, at any given time, than did provincial centers like Macanxoc, it seems probable that the con-

![Fig. 69—Head-dress from Stela 3, Naranjo.](image)

temporary use of the rigid and the flexible bar in spite of the resemblances suggesting a common source, is in reality due to a double origin, viz., the rigid evolving from the ceremonial staff or stick, and the flexible one from the living form of the snake itself. They would appear to have been coexistent, and indeed we find both types, again contemporaneous, much later at Yaxchilan—the flexible bar on Lintel 39 and the rigid one, very similar to the Macanxoc type, on Stela 4 (fig. 70).

Beside, or below, the feet of the principal figure are captives, carved on a much smaller scale. They are represented nearly naked, though a few wear complicated head-dresses. All have their arms and wrists tightly bound. The features of the captives are not strikingly different from those of their conquerors. Some are kneeling in an attitude of supplication with
arms or head raised toward the principal figure which stands on the back of another, crushing him to the ground. This last representation of the captive as supporting the principal figure is common throughout the southern area, and it is interesting to follow its different manifestations—from a strong realistic handling carrying the idea of conquest and war, especially in the long series of captives at Naranjo, to the higher and more elaborate forms found in the representations of astronomical data like the pedestal figures in the Temple of the Sun at Palenque. If any order of development could be suggested for such a series, it would be from naturalistic to symbolic, and yet the tablets of Palenque are chronologically early and actually contemporaneous with the Macanxoc stele, whereas the Naranjo monuments are notably later. Here again personal or other local influences, unknown to us, have reversed what otherwise would seem to have been the logical cultural evolution.

![Ceremonial bar from Stela 4, Yaxchilan (after Spinden).](image)

**ART STYLE**

In attempting to characterize the style of the Macanxoc stele we must limit our study to Stelae 1, 4 and 6 (figs. 61–62, 65, 67) and to parts of Stelae 2 and 8 (figs. 63, 68). The carving on Stela 7, if there was any, is now utterly destroyed. Of Stelae 3 and 5 (figs. 64, 66) the subject-matter, although still apparent, is so badly weathered that little can be gathered as to their style. Stelae 2 and 8 are in very much the same condition, except that their lower parts, which were buried beneath an accumulation of earth and débris, have their reliefs preserved with almost all their original delicacy.

The general impression gained from these monuments is one of severity, and traces even of archaism (Stela 8) are to be found. The similarity of composition and details, as in the case of the collars being made of inverted T-shaped elements running through the entire group, suggests that all the stele were sculptured within a relatively short period. The style is one that logically might be a forerunner of the flamboyant period, so characteristic
of many of the southern cities, if it were not for the fact that the chronological data available contradicts this assumption. In any event, the style is more sober and, indeed one might almost claim, more classical.

Although no traces of paint survive, we can not doubt that these monuments were originally painted. This probably accounts for the low relief typical of the group as a whole, which should not be taken as evidence of incapacity on the part of the sculptor, since some of the best examples of Maya art, for instance, the wall tablets at Palenque, were handled in this technique.

I would suggest also that the relative lack of naturalistic qualities is not necessarily a token of archaism. It must not be forgotten in this connection that in theocratic cultures, conception, and especially religious conception, rules representation. To propose here any stylistic sequence based on the natural (photographic) aspect of the objects under consideration would be to apply to these creations our own stylistic criteria. The most careful analysis of Maya art that has so far been attempted, namely the study of the Copan stele by Doctor Spinden, well illustrates this fact. If minor details, as for example the placement of the feet, have a tendency toward increasingly naturalistic presentation as time went on, the principal figure, which is of fairly natural proportions in the archaic stele, on the contrary suffered increasing deformation with the advance of skill and technical perfection, to the point that in the most glorious period of sculptural art at Copan the proportions of the human body are actually anatomically monstrous. This indicates that more important than illusionistic rendering was the carrying of a meaning throughout the whole subject—the creation of a plastic entity. On a minor scale we have very good evidence of this at Macanxoc. The chiefs, or priests, are represented in full front with their heads and feet in profile. This was not due to any inability on the part of the sculptors to depict the face in full front and the feet foreshortened, but rather to the fact that plastic and ritualistic considerations ruled perspective. This is shown by the very fine mask shown in full front on the waist of the figure on Stela 6 (fig. 67) and by the extreme subtlety of the three-quarter rendering of the right foot of the captive at the right in support of the principal figure on the back of Stela 1 (fig. 62b).

Similarly the different scales employed for the principal figure and subsidiary ones undoubtedly served to accentuate differences in social rank, as for example, the miserable condition of the diminutive captives aggrandizing by scale the powerful appearance of the larger principal figure.

ART SEQUENCE

Although our group of monuments does not present striking differences in style, it is interesting, as a study in method, to attempt to establish a chronological sequence based upon the stylistic criteria, and then to check it by the actual chronological order of the monuments.
Stelae 5 and 1 being the only monuments which are carved on both faces and sides as well, would, *a priori*, appear to be the latest, even though Stela 5 (fig. 66) is of rather mediocre carving.

If now we confine our attention to the study of a single motif, and compare its variations throughout the group, it will be found possible to carry the chronological sequence even further, without recourse to the actual dates. Such, for example, is the slave motif, especially as used for the pedestals beneath the feet of the principal figures.

Although as we have seen in many cases, treatment, which to us appears faulty, may be attributed to tradition or to a different concept of art; in other cases it must be attributed to the simplest of causes, namely, sheer lack of skill on the part of the individual artist. Traces of such lack of skill, rather than of archaism, are to be found on Stela 8 (fig. 68). Here the heads of the captives, which form the pedestal, fit badly on their bodies. It is apparent that the artist tried to give them an upward cast, but in so doing he failed to express the movement and volume of the neck. Stela 4 (fig. 64) presents the same motif, but great improvement is visible. The movement of the heads is very satisfactory and the figures recall in their half-animal, half-human appearance, the sphinx motif.

Stela 1 (figs. 61, 62) shows this same idea carried to a much higher degree of complexity and beauty. We find the "captive" pedestal brought to such a state of plastic and emotional perfection as to make improvement well-nigh impossible. Such an achievement alone marks Stela 1 as the latest of the entire group.

If we consider now the perfection of the carving, we find that Stelae 4 and 6 make a homogeneous group, better both in design and technique than all the other Macanxoc stele, except Stela 1. A careful analysis of designs on Stelae 4 and 6 (figs. 65, 67) made from the originals, both as to stylistic resemblances in minor details and the type of faces depicted, would allow us, in fact, to attribute these two monuments to the same artist, and to place them as late as possible in the monumental sequence directly before the latest ones, *i.e.*, Stelae 5 and 1.

Stelae 2 and 3 (figs. 63, 64) without striking characteristics either good or bad would thus make a group by themselves which by negative evidence may be placed after the archaic Stela 8 but before Stelae 4, 6, 5 and 1. Our proposed sequence based upon a study of the stylistic criteria is therefore as follows:

\[
\begin{align*}
\text{Stela 8, Stela 4, Stela 5, Stela 1} \\
\text{Stela 2 and 3, Stela 4 and 6}
\end{align*}
\]

If we check this sequence with the true order as given by the dates themselves, which is as follows, Stelae 6, 4, 3, 2, 5 and 1, we find that it confirms the placing of Stelae 5 and 1, but reverses the positions of the group containing Stelae 2 and 3 and Stela 4 and 6.
This well illustrates the difficulty of attempting to force all art phenomena into a single mould and to interpret such phenomena by a single set of rigid rules. Although the different manifestations of style—archaic, classic, flamboyant—appear historically in logical cycles, the personal capacity and individual taste of each artist were as dominant and variable then as today, and were sufficiently strong at times to disturb the natural order of aesthetic evolution. Especially was this true in provincial centers where the artists must have been fewer in numbers. For example, here at Macanxoc when the sculptor who probably carved both Stele 4 and 6 died or left this far-flung frontier town to return to one of the larger southern cities, a long period of comparative mediocrity had to elapse, during which the lesser artists at Macanxoc could not rise above the standard of art shown in Stele 3, 2 and 5. Finally a new artist arose, more skilful even than the creator of Stele 4 and 6, capable of carving such a magnificent monument as Stele 1.

STYLISTIC COMPARISONS

The stele at Macanxoc, being homogeneous in style, may be compared with contemporaneous monuments in the southern cities. It appears probable that at this early date the Old Empire civilization, the principal centers of which were in the South, did not flourish in northern Yucatan except in the form of remote colonies. That is to say, the Macanxoc of the monuments would have been dependent upon some great southern center, which it should be, therefore, possible to identify by the art similarities of the two cities.

One of two hypotheses appears fairly reasonable: either the Macanxoc stele were created by artists who had emigrated from some southern center, or native born artists consciously copied the monuments of that great southern metropolis, whichever it may be, whose emigrants founded Macanxoc originally.

In our search for the Old Empire center from which Macanxoc, judging by the art of its monuments, could most likely have been colonized, we may consider first Uaxactun, because its art sequence roots farther into the past than any other center. Although its earliest dated monument (Stela 9) is 290 years older than the earliest Macanxoc stele, it shows even in its truly archaic stone carving a taste for "baroque," which is the seed of all the later expressions of this style, but has little points of contact with our Macanxoc art. Stela 20 at Uaxactun, for example, although more than a century earlier than the earliest Macanxoc monument, is nevertheless essentially different in style, in spite of such similarities of subject-matter as prisoners kneeling at the sides of the principal figure and the use of the rigid ceremonial bar.

None of the Tikal stele are contemporaneous with those of Macanxoc, but the older ones (100 to 175 years earlier) show in their slow improvement from monument to monument similar subject-matter, namely a man in
profile holding a ceremonial stick, treated with a more simple and naturalistic feeling than the same motifs in the Uaxactun stelae. On the other hand, this same simpler and more naturalistic treatment, together with the use of relatively plain backgrounds, brings the Tikal stelae very close to our Macanxoc monuments, although the Tikal technique is still much more angular. When the limitations of archaism disappear at Tikal, we have monuments that have many resemblances to those of Macanxoc, such as Stela 11, of a much later period.

In the monumental sequence at Piedras Negras the first stela representing human figures are exactly contemporaneous with the ones at Macanxoc, the first of them being actually only five years earlier than Stela 6 at Macanxoc. Points of similarity can not be carried beyond a brief comparison of the subject-matter, as for example the general resemblance of the kneeling captives on Stelas 26, 4, 35 and 8 to the same motif at Macanxoc. This is true because the skill in stone work, modeling and composition shown by the Piedras Negras sculptors is much better than even the best work at Macanxoc.

There is only one monument at Naranjo (Stela 23) which is contemporaneous with the Macanxoc stelae. This is obviously the most primitive human representation in the city. Seen in front with head in profile, it holds diagonally a rigid ceremonial bar, and is sculptured in very low relief in a naturalistic caricature genre. It seems in skill and art far behind the Macanxoc group, and really stands isolated in the whole field of Maya art.

The stelae of Copan comprehended in this comparison include only the earlier monuments of the archaic angular type, and of this series even the later ones, though less rigid, are still entirely influenced in the arrangement of their designs by the original shapes of the boulder from which they were carved. Although the more ambitious and at the same time unique attempt made at Copan at sculpture in the round makes difficult any comparison with other centers, it seems that the contemporaneous Piedras Negras stelae, though in an easier medium of high and low relief combined, show a more advanced state of art.

The best sculpture at Palenque dates from exactly the same period as the Macanxoc stelae. It has been argued that Palenque was a sort of esoteric center where art had the opportunity of developing earlier than anywhere else, or at least attained there its most refined forms. If this be true of the subject-matter at Palenque, it seems less so technically, since we have little right to compare works of art made in such opposite media as carving in stone and modeling in stucco. If we compare the stone work of Palenque with the contemporaneous sculptures of other centers, we see that some of it is frankly archaic, like the figures at the sides of the stairways in the Palace Group, while the best of it, drawn in the easy medium of very low relief, has a purity of design that equals but does not surpass the best work of the other centers. The stela in front of the Temple of the Cross at Palenque,
which shows the same angular treatment of the body as the contemporaneous work at Copan, is much inferior in technique and beauty. On the other hand the stucco work at Palenque can be compared with fairness only with the modeled clay figurines found in other Maya sites, many of which are exquisitely fashioned in similar media. Palenque affords few points of contact with Macanxoc. We find at both these sites the pedestal-like figure, though in a more conventionalized form (Temple of the Sun), and a sensible use of plain background, that points to an art at its most equilibrated moment.

The Tulum stela which is dated 50 years earlier than the earliest Macanxoc stela, a reading now fully justified by the new discoveries at Macanxoc, ought to be of great stylistic importance as both its date and geographic position indicate it as the most probable direct ancestor of Macanxoc. And yet the figure shown on its best-preserved face, seen in front view, holding the flexible ceremonial bar, similar to the ones carved some fifty years later at Copan, has that angularity of silhouette and floridity of background that make it in subject-matter and style incompatible with Macanxoc. A monument, 30 years later than the Tulum stela, discovered by Doctor Gann at Chetumal Bay, presents a human figure, but unfortunately it is too much weathered to afford any evidence of style.

There appears below a list of the monuments presented in the above discussion, which are either slightly older than the Macanxoc stelae or are contemporaneous therewith:

<table>
<thead>
<tr>
<th>Site</th>
<th>Monuments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uaxactun</td>
<td>Stela 6</td>
</tr>
<tr>
<td>Tikal</td>
<td>None</td>
</tr>
<tr>
<td>Piedras Negras</td>
<td>Stela 25</td>
</tr>
<tr>
<td></td>
<td>25, 26, 31, 33, 35, 36, 37</td>
</tr>
<tr>
<td>Naranjo</td>
<td>Stela 25</td>
</tr>
<tr>
<td>Copan</td>
<td>Stelas 7, E, P, 12, 16, 19, 23, 1, 3, 1 and I</td>
</tr>
<tr>
<td>Palenque</td>
<td>Temple of the Sun, Palace House C</td>
</tr>
<tr>
<td>Tulum</td>
<td>Stela 1</td>
</tr>
</tbody>
</table>

The foregoing analysis of contemporaneous or earlier monuments in Old Empire times indicates Tikal as being the site which presents the closest stylistic similarities with Macanxoc; and yet the differences here are so great as to render it impossible that Tikal could have been the center from which the Macanxoc sculptors derived. It seems probable that the site from which Macanxoc drew its esthetic inspirations is still to be found, or else the non-existence of such a site would show that Macanxoc was an original center of creative art, which presupposes an establishment of the Maya in northern Yucatan, long before the erection of these monuments took place.