

Through the kindness and courtesy of Sr. Lie. Alfonso Torro, Jefe, Departamento de Monumentos, Secretaria de Educacion Publica, the writer on behalf of the University Museum, University of Pennsylvania was unable to visit the ruins of Yaxchilan (Menche) in Chiapas, on the left bank of the Usumacinta river from April 16 to April 24, 1935; with permission to make certain minor excavations in connection with architectural studies and to excavate in Structure 87 for the purpose of obtaining a good photograph, otherwise impossible, of Lintel 55, discovered by Sr. Ulises de la Cruz, guardian of the ruins, in 1932.

Dr. Sylvanus G. Morley of the Carnegie Institution of Washington, knowing of our intention of visiting Yaxchilan, and desiring a proper photograph of the above mentioned lintel for reproduction in his forthcoming work on the Inscriptions of Peten, independently sought for and obtained from the department the same permission with respect to Lintel 55, on our behalf; and subsequently obtained for us permission to excavate for buried lintels in Structure 24, 54 and to either side of Lintel 55 in Structure 87. Excavations under both categories were prosecuted during the nine days mentioned. A report on the architectural studies, with photographs, will be submitted to the department in due course. Following is a brief summary of the results of the search for lintels, respectfully submitted through the Carnegie Institution of Washington. This is considered proper since this part of the work was undertaken by the museum on the request of, and with the advice of Dr. Morley, and in part at the expense of the Carnegie Institution.

The Yaxchilan party consisted of the writer and Mrs. Satterthwaite, a cook and six workmen. The Museum's major project in Central America, the excavations at Piedras Negras, Guatemala, on the right bank of the Usumacinta, was left in charge of Mr. Francis M. Cresson Jr. On April 13. Arriving at Yaxchilan April 15 work was begun on April 16 and brought to a close April 24. On a number of days, the services of local workmen were added to those of the museum's own group, and every effort was made to accomplish as much as possible in the short time available.

#### STRUCTURE 87

Lintel 55, which was hanging in a precarious position in its doorway, with one jamb ruined and the other going to pieces, was lowered to a place of safety and set firmly on edge about five meters in front of the center doorway of the building, in which doorway it was found. This work was done with block and tackle, under the immediate supervision of Sr. de la Cruz, the government caretaker. Carved surfaces were protected with burlap and the movement was accomplished without the slightest damage to this interesting carved piece. Photograph illustrating Lintel 55 is Field No. 85.

The stone was of poor quality from the first, and has weathered considerably, since it was never buried. Certain imperfect parts of the sculpture were filled out or repaired with plaster. The over all dimensions are 1.20 by .95 by .18 meters. The height of the design panel is .74 m, its width .82 m. The doorway spanned by this lintel is .75 m wide, the thickness of the piers forming the jambs being .95 m. The width of the room, which was the span of the roof vault, was 2.65 m. The pier thickness is therefore 36 per cent of the vault span. The vaults were very flat, perhaps making the piers thicker and this percentage higher than they otherwise would have been.

When in position the bottom of the panel was to the right of an observer facing the building. This is known with certainty because the plain end beyond the top of the panel still rested, in part, on the jamb to the left of such an observer.

The doorway of Lintel 55 is between two piers forming three doorways, centrally placed with respect to the building. The lintel to the right (observer facing building) is still in semi-position, and was found to be plain. The doorway to the left was completely cleared, and what are probably the fragments of its lintel were encountered. They also are plain. It is certain that no sculptured fragments lay in, in front of or behind this doorway.

The excavations in this doorway revealed a secondary partition wall just to its left. A small doorway through this gave access to a room of which the roof remains intact. This fact enabled us to learn much more of this structure than could have reasonably been expected from so small an excavation. As a result we know that the triple central doorway originally served a central room, and that there are side rooms on either side. It is therefore highly probable that doorways, now hidden by debris, led to each of these rooms through the front facade. Since carved lintels, as pointed out by Dr. Morley, seem to occur in general in threes, it is quite probable that two more carved lintels await discovery toward either side of this building.

#### STRUCTURE 54

The Carnegie Institution of Washington discovered lintel 54 during 1931. It lay in the debris at about the center of a long mound. Dr. Morley, reasoning that the mound is too long for a single-chamber building, and deducing from his studies the hypothesis that doorways occur only in odd numbers, predicted the presence of carved lintels on either side of lintel 54. These were searched for and found by us. The ruin of this building is almost complete. We were able to locate both jambs of the central doorway, one jamb of the left doorway, and the approximate position of one jamb of the right doorway. From these points, taken in connection with the positions of the lintels, it is known that the expanse of wall between the doorways on either side of the central one was about 3.95 m. The width of the central doorway, at the base, was 1.05m.

Lintel 57 was found at the base of the debris, in front of the left doorway on the platform supporting the structure, its nearest point about 1.00 m from the facade line. It was face down, as expected, and was unbroken. Its long axis did not depart greatly from a position parallel to the facade. Assuming that in falling it did not turn almost completely end for end, a most improbable supposition, the bottom of the design was originally placed toward the left of an observer facing the building, the reverse of Lintel 55.

Lintel 58 was found lying face down in front of and part of it to the <sup>right</sup> left of its doorway, at the base of the debris on the supporting platform, its nearest point about 1.60 from the facade line. Under one end was a specially worked corner stone from the jamb, and immediately over the lintel was a specially beveled stone from the medial moulding. Again the position of the lintel left little doubt that the bottom of the design was at the left jamb of the doorway, the observer facing the building.

Lintel 57 is shown in Photograph Field No. 92. The overall dimensions are 1.97m by .74 m by .27 m. The design panel is .92 m by .65 , with the long dimension increased to 1.03 m at the upper right. The doorway spanned by this lintel was 1.12 m wide at the top, as shown by plaster marks on the lintel. It is perhaps worthy of note that the scene portrayed on this lintel shows a figure seated on a tapering-legged table or throne, similar to Altar XVII and the seat shown in stucco on the roof comb of Structure 33; and similar to those recovered or represented at Piedras Negras and at Palenque.

Lintel 58 is shown in Photograph Field No. 93. The overall dimensions are 1.88 m by .75 by .31 m. The design has a maximum height of .96 m and a maximum width of .65 m. Close examination of the stone indicated a doorway width at the top of 1.10 although actual plaster marks were absent.

It should be noted that the quality of the stone of Lintel 58 is very good, and that in this respect as well as (to a superficial observer) the style of carving it agrees with the center lintel from this building, Lintel 54. In both these respects however, both stones differ from Lintel 57 at the left of the same building, and agree more or less with Lintel 55 from Structure 37, which is far distant. However, in dimensions all three lintels of this structure (54) agree closely.

The ruin was so great that it was not possible to determine with precision the front wall thickness of the building, the inner corner of the only jamb completely cleared being either in position or pushed to the rear a few centimeters. This condition enables us to say positively that the wall was not more than .75 m thick. This established the fact that single stones spanned the doorways, the lintels being .74 and .75 m wide. Taking .75 as the true thickness of the front wall, it was established that the width of the room or rooms was 2.90 m. The debris left no question that the roof was supported on masonry vaulting. Using these figures, the maximum percentage of front wall thickness to vault span was 26 per cent, next to the lowest thus far measured at this site.

The two lintels in question, Nos. 57 and 58, were moved about three meters forward of the facade line of the building and supported firmly on edge. Nearby large trees were felled, which might otherwise have injured them in the future. The three lintels of the building will be found in correct relative position - that is, Lintels 57, 54, and 58 lie in this order on a line from left to right, facing the mound.

#### STRUCTURE 24

Excavation along the front of Structure 24 resulted in discovery of a third lintel for this building (Lintel 59), as predicted by Dr. Morley. The position of its doorway was definitely established as central, between those of Lintels 27 and 28, discovered long since by Teobert Maler. It is shown in Photograph Field No. 111.

Like those the new lintel is carved with a glyphic inscription on the outer edge only, the under side being plain. It differed from them markedly in dimensions. A reconstruction of the facade from known points gives a total length for the facade of 8.90; a left (facing the building) doorway 1.14 in width, placed 1.96 m from the left corner of the building. The facade was followed from the <sup>left</sup> ~~right~~ corner for a distance of 1.30 and if we add .66 m to make it symmetrical with the <sup>right</sup> ~~left~~ side, plus a doorway of equal width (as required by the dimensions of the side lintels) there is left only 2.70 m along the facade for the central doorway and the two piers on either side of it.

The overall length of the lintel 59 is 1.35, the width .50 m and the maximum thickness .20 m. Comparable measurements for the right lintel (No. 28) are 2.00 m by .84 by .35m. Although the front wall and the observed left pier were falling forward wherever observed, we were able to establish their thickness as not over .90 m, and they were as thick as the width of the lintels, about .85 m, and probably no thicker at the top.

The length of the inscription on the new lintel 59 is .65 m as compared with 1.18 m and 1.07 m for the left and right side lintels respectively. If we reconstruct the central doorway as equal in width to the length of the inscription on its lintel, that is .65 m we have only 2.05 m left for the two flanking piers, which would thus be almost square. It therefore seems clear that the central doorway was always narrow, and not

✓ secondarily made so, as in Structure 30; and further that the shortness of this lintel does not result from the use of a negatively "stepped" doorway, as in Structure 25, for instance. Because of the narrowness of the lintel, .50 m as compared with the pier thickness, somewhere between .85 and .90 m, this central carved lintel was probably supplemented with another stone, though the side doorways were not.

It is of course impossible to determine from the facts of excavation, whether this markedly different central doorway was planned for the lintel (which in such case would be re-used) or whether the doorway was planned for its own sake and the lintel dimensions chosen accordingly. The secondary narrowing of the central doorway of Structure 30 argues, perhaps, for the latter hypothesis, and if the three lintels are found to agree in glyph style their contemporaneity seems reasonably certain.

It should be noted that the positions in which the two lintels of Maler were found by us, taken in connection with our excavations, leave no doubt that the order of the lintels was 27, 59, 28, from left to right as the observer faces the building. Maler, because of lack of suitable space, had dragged Lintel 27 well to the right of its original position, and Lintel 24 was placed by us to its left. Lintel 28 was left by Maler, and by us, more or less over its original position as determined by our reconstruction of the facade. The other two are from one to two meters in front of the facade line. All lie with the bottom side down, the carved faces vertical.

It is a pleasure to state that the local caretaker for the government, Sr. Ulises de la Cruz, while, as he should be, meticulous in examining our credentials and in watching our work constantly, gave us all possible assistance.

Finally it will be of interest to Mayanists and to the Mexican department concerned to point out that Dr. Morley's hypothesis that facades, in this region at least, always had an odd number of doorways, seem well substantiated by the trial which we made of it at his request. We should perhaps repeat that there are probably two additional doorways in the front of Structure 87, now obscured by debris. An examination of Structure 2 (a mere mound) indicates that its length was not less than that of Structure 24. One lintel was found here by Maler and it is quite probable that two more await discovery. Maler found two lintels in the debris of the nearby Structure 3, and another may be postulated here, though with less reason, since a well defined mound is absent. Excavations along the facade of Structure 22 showed with little doubt that the known fragment of Lintel 20 comes not from a fourth doorway in the facade, as shown by Maler, but from an end doorway which became an inner doorway by the later addition of a wing to the left. It seems quite certain therefore that the rest of Lintel 20 lies buried in this mound and could be recovered with a minimum of labor.

Respectfully submitted

Linton Satterthwaite, Jr.  
Assistant Curator, University Museum

Philadelphia, Penna,  
Aug. 1, 1935

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Memorandum re Piedras Negras Publications

Five field seasons and large sums of money have been invested in Piedras Negras, the larger portion of the funds and by far the largest portion of time having been expended on the collection of scientific data. The human-interest side of the work - the recovery of the monuments - has been well published by Dr. Mason in semi-popular periodicals. Limitation of funds has restricted the planned publication of Preliminary Papers to four. It would require five times this number of unit reports to bring factual reports up to date. Several have been ready for some time and others are partly done, but there is no prospect of early publication of these.

The expedition's work has been cumulative, and has now reached a point where, had factual reports been published as planned, significant general deductions could be drawn from them. Meanwhile work proceeds in other parts of the Maya area, other workers being in ignorance of the Piedras Negras contributions, which in a number of ways, would be of great importance to them, affecting not merely current theories respecting Maya history generally, but through them (one must hope and suppose) the specific objectives of current excavations in other areas.

Our position from the point of view of scientific responsibility, while it is the fault of conditions beyond our control, is thus an unhappy one. If the project is soon brought to a close our colleagues will look for publication with increased expectancy; At the same time full publication fades into the indefinite future - even when money may be made available the preparation of reports must be a slow process due to the separation in space of collaborators and the necessity of doing much of the work in spare time.

It seems to the writer that we should adjust ourselves to the facts as far as possible. The preparation of unit reports should go on, as they are necessary preliminaries for final publication, whether they are published from time to time as Preliminary papers (mimeographed) or not. But we should interpret all available data, whether reduced to unit manuscripts or not, and publish as individuals, wherever we can, such interpretations as seem sufficiently well grounded in existing data, for the use of other students, and for the credit of the museum.

This is the only way we can publish results without expense to the museum. The general method of approach suggested is this:

a. Select a major conclusion arising from Piedras Negras work or one which is affirmed or negated by such work.

b. Write paper on the selected subject, assuming all P.N. work is published to date, making full use of information from other sites.

c. Select all P.N. unpublished material which is essential to the argument; reduce it as much as possible to plans, drawings

and tables so that the essence of the information can be published with the paper by way of illustrations and tables.

d. Note in the introduction or by footnotes that all P.N. material is the result of the museum's expeditions, and which of this material is as yet otherwise unpublished.

e. Detailed description to be kept to a bare minimum (as it must be for this sort of paper, the emphasis being on significance). In writing general papers based on results as a whole it will be necessary for the writer in frequent instances to use (and first publish) data secured by a colleague, and responsibility and credit should be accordingly assigned, with reference to unpublished notes or manuscripts where the latter exist.

In the opinion of the writer a fair number of such papers can be produced. We are at the moment exceedingly fortunate in having the volunteer services of Miss Proskouriakoff, a graduate architect and accomplished ~~xxxxxxx~~ artist as well, so that plans, restorations and drawings of objects can be prepared at very slight costs - paper &c., and a little photography.

The quarterly "Maya Research" is publishing a summary of the last two seasons which is by no means entirely confined to bare statements of fact and indicates its desire for more material from us. Papers of the general ~~xxxxx~~ sort outlined above will probably be acceptable by the American Anthropologist, and by the newly established Antiquity, the organ of the American Society for American Archeology. Short papers might be published by Art and Archeology which has in the past paid considerable attention to the Maya field. Another possibility is the the series of Contributions to American Archeology of the Carnegie Institution of Washington, which has published monographs not produced by members of ~~kk~~ its own staff.

Subjects should be selected with several factors in mind: the necessary length and number of plates, in relation to the limits imposed by the journal in question; the importance of the conclusions; the ~~gr~~ completeness of the evidence. For instance, if a conclusion is of definite though relatively minor importance, but the P.N. evidence for it is complete, or conclusive without being complete, it is ready for publication. On the other hand, even if a conclusion of ~~major~~ cannot be established with certainty, if it is of major importance and there is a fair body of evidence for it, the time is ripe to publish that evidence, whether or not we look forward to going back to complete the evidence by further excavation.