AN INTRODUCTION TO

CHENES, PUUC AND RIO BEC PALACES:

The Example of Three Palaces

at Santa Rosa Xtampak, Campeche, Mexico

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Nicholas M. Hellmuth

June 1989

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Front Cover Photo: Santa Rosa Xtampak, Main Palace, north end, second story pilaster with vertical flute and basal molding with corner band, a detail that needs to be added to elevation and perspective renderings of the palace.

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comments on omissions and errors are welcomed by the author

Abstract

The Main Palace of Santa Rosa Xtampak is Rio Bec-Chenes in design, with certain traits shared with later Uxmal, a Puuc relationship. The multi-storied aspect of the Santa Rosa's Main Palace could itself be considered analogous to the many three-storied Puuc style palaces of Labna, Sayil, Halal, and Chacmultun, yet there is a monumental difference--that of Xtampak was erected in a single building campaign--all the Puuc counterparts were the result of up to centuries of accretions. Thus an origin of the Xtampak palace concept must be sought elsewhere. That it is indigenous to the Chenes region is always possible--but

unlikely, since no other Chenes area site has a grand edifice even approaching this magnitude or magnificence.

Among the many palaces of largely one-storied quadrangle group plan at Xtampak are two of special interest, the Southeast Quadrangle and the Cuartel. The former has many Puuc traits, the latter is essentially Chenes in design style--yet evidencing facade features which also occur in the Rio Bec area. These three palaces and the three greater Yucatecan-Campeche Classic Maya architectural styles are the subject of this report.

The Southwest Building (part of another palace complex) is added to the discussion as it exhibits strong Puuc traits. From these buildings at Xtampak it is possible to get an initial feeling of the degree to which portions of Santa Rosa are Puuc, and not necessarily "Chenes-Puuc," but actually Puuc. This slight difference in denoting the non-Chenes sectors of Xtampak is a subtle distinction, among others, from the outstanding labors in the Puuc and Chenes field of George Andrews, Paul Gendrop and their colleagues at UNAM.

These buildings at Xtampak are compared and contrasted with counterparts (or equally important, lack of counterparts) in the rest of the neighboring Chenes area, in the Puuc regions immediately to the north and west, and to the Rio Bec area to the

south. An up-to-date list is provided of style traits which set apart, and link, these different architectural forms.

In addition to introducing previously unrecognized features of Xtampak itself, the following study of monumental Maya architecture documents inter-relationships among the varying regional styles that put to a test the pan-Yucatecan model of Potter (1977). Whether his model should be accepted in light of better perspectives on overall Maya architecture is a question posed throughout this discussion.

This report also serves to contribute both factual data (specific observations on actual architecture) as well as theoretical implications to assist the model proposed for Santa Rosa Xtampak by William Folan. Herein I do not myself address his model (that Santa Rosa was a regional capital) because he will be doing that himself in his own articles, based more on settlement pattern and general theoretical aspects within anthropology.

INTRODUCTION

This report should be read in conjunction with Photography and Analysis of Standing Architecture at Santa Rosa Xtampak (Hellmuth 1989a). That forms in effect, a "Vol. I" and the present is like a “Vol. II." Photography and Analysis... was conceived as a report on our

activities of the first session of the first season, so it naturally included a discussion of Puuc, Chenes, and Rio Bec, but not in the depth of the present "Vol. II." Thus, there is some repetition between the two reports, but in general the data of the present text is more in depth and supersedes that of Photography and Analysis.... Both are needed, though, as Vol. I covers the actual structures at Santa Rosa, Vol. II covers the comparative material at other sites. More details will be provided when the reports on the later sessions of the first season become available.

GOALS IN THE STUDY OF CAMPECHE ARCHITECTURE

The goala of most analyses of the architecture of the State of Campeche are dedicated to learning more about two crucial points, first, the relationship among Puuc, Chenes, and Rio Bec architectural styles; and second, whether Chenes and Rio Bec should be considered as a single greater style, as two regional variations of a greater style, or as two separate styles that share certain features. Both of these considerations seek to contribute information on the path (directions) and sequence of diffusion of the key traits among these regional styles.

Fig. 1. The challenge facing the archaeologist in Campeche is to develop a terminology and classification that can distinguish between Chenes, Puuc-Chenes, Puuc, and Chenes-Puuc. This photograph shows a room in the Main Palace, a Chenes-Rio Bec edifice, where the masonry is considered "local Xtanipak." The vault beam just under the capstone may be the last such vault pole in the entire site still in place. Santa Rosa Xtampak.

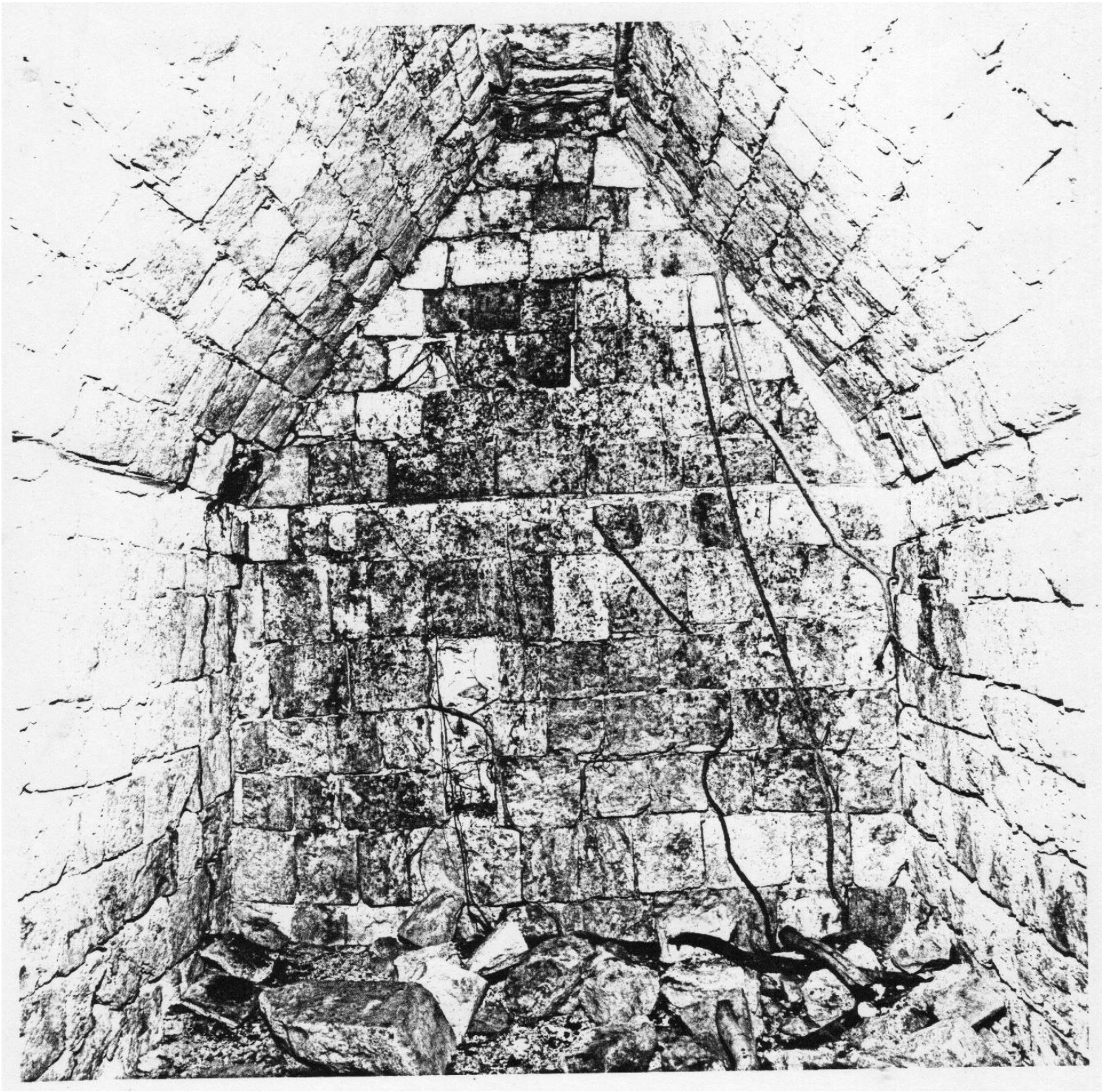

Fig. 2. Here the room has a Puuc spring on the end wall, the room is wide, and the wall and soffit stones have more even edges and corners than in most Chenes rooms--yet the masonry here is not "as Puuc" as that of the Southwest Building. Southeast Quadrangle, East Range, Room 2, looking north. **451608-15-Neg.34.**

Fig. 3. The spring is on all four walls--definitely Puuc; the first course of the soffit is nicely cut; the right vault is rounded and overall the stones are more closely fit (because they are better hewn) than in a pure Chenes rooms. Southwest Building, upper level, Room 7. **451608-11-Neg.28.**

Fig. 4. Here is the standard for pure Puuc (at Xtampak at least)--yet we must also recognize that this would have changed over time. The finely squared vault stones are especially diagnostic of Puuc workmanship, as are the stone lintels and door jambs of mono lithic size--the entire width of the door formed by a single stone (though almost always two or three stones high). Southwest Building, Room 3, looking east. **451608-12-Neg.13.**

Architectural historians Paul Gendrop and George Andrews have each dedicated their entire last decade to these problems, whereas I am only beginning in this field. Yet a fresh viewpoint is always fruitful. Sorting out architectural styles shares many methodological situations in which I have had success in two decades with iconography and style in Maya ceramics. The reader may judge by the end of this report whether the discussions herein merit to be continued with additional field research or not. The reader of this particular version will realize that these pages need several hundred illustrations to document their points. That material will have to be gathered, but in the meantime, I felt it worthwhile to get my preliminary ideas down on paper, and out for colleagues. It has been all too common an excuse of archaeological field workers for not producing their field reports that "I kept waiting for more data..., I just needed "one more photograph...." Twenty-four years of that have kept crucial Tikal reports from appearing, resulting in considerable, and understandable, irritation.

This entire report, as well as Photography and Analysis of Standing Architecture at Santa Rosa Xtampak, Campeche, Mexico, are both the results of just five days research at Santa Rosa. Were 50 days available, the report would have been correspondingly different. Nonetheless, the present and the Photography and Analysis... report may be taken as fulfilling the goal of prompt presentation of field data, both to respond to the courtesy of the

regional INAH permission to undertake the photography, to respond to the courtesy of the Universidad Autonoma del Sudeste's Centro de Investigaciones Historicas y Sociales, as well as a general contribution to Maya studies. The ACKNOWLEDGMENTS to this present report may be found in the Photography volume.

The three Xtampak manuscripts also serve as reports to the Department of Anthropology, Washington University, and to the Peabody Museum of Natural History, Yale University, on research accomplished under two simultaneous appointments at these institutions.

In some aspects the Xtampak project itself is a result of teaching a course in pre-Columbian architecture at Karl-Franzens-Universität, Graz, and then at Rollins College, Winter Park, Florida. I made a special trip with Eldon Leiter in August 1989 to photograph in the Puuc and Chenes regions to increase the architectural section of the Maya photographic archive of the Foundation for Latin American Anthropological Research. My undergraduate major at Harvard was in architecture; all my work at Tikal, Yaxha, Nakum, and Topoxte Island was architecture and urban planning. Thus Xtampak was a natural extension of my long-term interests, combined with the need to preserve the tottering Main Palace, one of the great buildings of ancient Campeche. Whether we ourselves have charge of this restoration or not is not what is important. There have been countless proposals in the

last five years to rescue the palace, but no actual action that produced results. Folan boldly acted; myself and two benefactors put up the funds on the spot, and we initiated a feasibility study. We hope that whoever carries out the actual work will take care of the palace in a way that its majesty, fragility, and uniqueness deserve. The Main Palace is irreplaceable. "Salvage projects" have handled other Chenes and Rio Bec sites in a way that would never be accepted under international standards of scientific research. Let us hope that this time the "patient" survives the life-saving operation with as few amputations as possible.

Chenes

Architectural historian George Andrews has spent the last several decades photographing and measuring virtually every Puuc and Chenes Maya temple and palace that exists. After surveying hundreds of Maya sites throughout Yucatan and Campeche Andrews has concluded that:

> "Santa Rosa Xtampak is probably the largest and most important site in the Chenes region and should be considered as the "capital" city.... The central core area thus described is considerably larger than the core area of Becan, for example… [and] includes large pyramidal structures, ballcourt, carved stelae, three-story "Palace", and several large quadrangles featuring important range-type buildings, meets all the criteria we have laid down earlier for urban centers (Andrews 1975). The larger structures in the core area, both individually and collectively, are larger and more impressive than those at Dzibilnocac. (Andrews (1987: 71).

A hundred thousand visitors a year pour through the Puuc area ruins of Uxmal. Yet just two hours away the Maya ruins of Santa Rosa Xtampak receive an average of 0 visitors a day. Actually, other than curious archaeologists and local hunters the total number of tourists who visited Xtampak in all 1989 was fewer than a dozen.

In April of 1989, after completing a one-week reconnaissance at Xtampak (during which time not a single visitor appeared on the horizon) we drove towards Merida and stopped in the Hacienda Uxmal for a refreshment. The parking lot was packed with tour buses. Inside the hotel were more than 200 tourists who from their brevity of clothing appeared to have come straight from the beach resort of Cancun. Yet the site of Xtampak, which George Andrews has listed as "nearly as large as the entire group of major structures at Uxmal" (1987: 71) got a grand total of one "tour group" in the last two years--and that was one I organized--consisting of 3 individuals. Santa Rosa Xtampak, so close to the luxury hotels that it could be an easy one-day excursion with picnic lunch, offers the visitor a veritable seminar on the Maya past. We will return to Xtampak as a mirror of greater Yucatec and Campeche architectural styles after we review the three styles one after the other, starting with Uxmal.

At Uxmal all tourists get exposed to Puuc architecture throughout the site; those visitors who really want to learn about the local

culture have the chance to see an outstanding example of a Chenes reptilian monster facade--the middle temple on the "back" of the Adivino (Temple of the Magician).

The intrepid student who has done background reading before heading for Mexico can also see Chenes facades elsewhere at Uxmal. H. E. D. Pollock's article on Chenes architecture is still in print, and available at all state university libraries and most large city libraries--or can simply be ordered from the publisher. Those who do advance reading can track down the several Chenes facades off the main trails at Uxmal (Pollock 1970: 66-80) in addition to the sole specimen on the Adivino that is presented to the standard tour group.

There is also a Chenes building at Kabah, Str.1A1, but it is not likely the average visitor would find it. I have yet to find it myself. Indeed, Pollock himself overlooked it when he wrote the 1970 article on Chenes in 1966. The illustration of the Chenes aspect of Kabah did not appear in print until a decade later, in 1980, within Pollock's monograph on Puuc architecture (1980: Fig. 289). An even more hidden example of a Chenes reptilian facade is just 6 km from Labna, at the seldom visited ruins of Huntichmul (Seler 1916: Taf. XII; Pollock 1970: 65ff). The place where most visitors to Mexico have a chance to see a Chenes-influenced building would be the East Wing of the Nunnery at Chichen Itza, or Temple 22 at Copan.

But right down the highway from Uxmal, and then a simple 20 miles on an all-weather gravel road, is a complete Maya city which has a much fuller repertoire of Chenes buildings, and also Puuc architecture, as well as architectural features of the Rio Bec style. This cosmopolitan city even has an entire plaza modeled after groups commonly found all over the district of Peten, Guatemala. The South Plaza at Xtampak is a Solstice-Equinox Observatory Complex, a fact first noticed by William Folan during his 1989 reconnaissance of Xtampak before initiating his project. One of the archaeologically best known comparable groups is at Uaxactun, Group E. There are the same kind of temple-pyramid groups at Yaxha (about A.D. 100-400), Nakum (A.D. 700-800) (Hellmuth 1978: 85 [Yaxha], 94 [Nakum]), and one of the largest such astronomical-astrological groups known is at Calakmul. Calakmul is an immense Maya capital which occupies 30 sq kms. Calakmul has been mapped by a seven-year Mexican project overseen by archaeologist William Folan of the Universidad Autonoma del Sudeste, Campeche. Mexican archaeologist Abel Morales Lopez has been involved in the excavation of this Peten-related area of Calakmul and is interested in the comparable Solstice-Equinox Observatory Complex at Santa Rosa Xtampak. Xtampak is the first (and so far the only) Maya city to have all three northern styles together (Puuc, Chenes, Rio Bec) and likewise the only to have such a Peten complex as well.

Santa Rosa Xtampak takes on an importance far over and above the beauty and magnitude of its well-preserved buildings. Andrews has proposed that:

> " There is every reason to believe that the classic Puuc Colonnette and Mosaic styles are derived almost entirely from influences emanating from the Chenes and Rio Bec regions to the south since all of the diagnostic architectural and decorative features which are the hallmarks of classic Puuc architecture are found in the classic Chenes and Rio Bec styles which are now known to antedate the classic Puuc styles. I also believe this position is further strengthened by the presence of some amount of Chenes-Puuc architecture in the border zone between Chenes and Puuc regions which served as kind of "stepping-stone" between the south and north. In this case, the Chenes-Puuc style buildings can be viewed as prototypes for the fully developed classic Puuc architectural styles." (1985:38).

PUUC ARCHITECTURE

The visitor to Mexico as well as the armchair traveler who enjoys the mystery of the Maya from vicarious travel through books is exposed to Puuc architecture principally from Uxmal, Kabah, Sayil, Labna, and Xlabpak. This is the "Puuc corridor," or Puuc heartland, yet in fact there are more than 150 other Puuc sites scattered throughout a more than 10,000 sq km area of not only Yucatan but also adjacent Campeche. Diluted Puuc influence reaches as far to the southwest as Edzna, near the modern capital city of Campeche. The extensive sector of Chichen Itza from the Red House to the Nunnery could equally well be considered Puuc, though these buildings are not included in any of the scholarly monographs dedicated to (heartland) Puuc architecture (Pollock

1980; Andrews 1986). Sharer, though, does correctly include the Iglesia area of Chichen Itza as Puuc (1983: caption to Fig.11.3) as does Kowalski 1987: 34, 39, 214). I would go further in such heretical observations and include Mayapan, although it is likewise never included in any Puuc monographs. Nonetheless the archaeologists who excavated Mayapan concluded that portions of some of the buildings were erected in Post Classic times with Puuc stones robbed from earlier Puuc buildings which were dismantled to provide stone. The Carnegie Institution of Washington archaeologists found no evidence of their being an actual Puuc city physically within the city walls of Mayapan. Thus they concluded the Mayapan builders had dismantled nearby earlier Maya sites, such as at Telchaquillo or Santa Cruz, only about a mile away (Proskouriakoff 1962: 92). In some cases the reutilization of Puuc elements at Mayapan bordered on archaism, the deliberate reinstatement of an earlier style by a later people. "the piers and front corners of the colonnaded hall Str. Q-151 were decorated with masks reassembled from Puuc elements." (ibid.: 95). I would also add Merida to the greater Puuc sphere of influence. It is known that Merida is built over the ruins of an immense pre-Columbian Maya city of Tiho. Tiho was dismantled in its entirety to erect colonial Merida.

If you look carefully at various churches in Merida you will notice certain stone sizes and shapes used for the corners of the overall church and for the door jambs. These are easy to spot

since they are usually the largest stones on the facade. What is needed is measurement and comparison to see if any are of the identical size and shape as those in churches known to have been erected from Puuc ruins (such as those near Puuc sites, such as Muna, etc.). Puuc masons had the habit of using especially large rectangular blocks for corners, for door jambs, for lintels, and for medial and cornice moldings. Since the Maya city of Dzibilchaltun, just a dozen miles from Merida, is decidedly an independent (that is non-Puuc) architectural style I would imagine that Merida-Tiho was comparable, but if there was Puuc influence as far south as Edzna one would expect Puuc influence could easily have reached a comparable distance north to Merida, especially considering that one of the larger Puuc sites known, indeed the earliest Puuc site dated, is Oxkintok, just about 40 miles south of Merida. Oxkintok has no modern city nearby so its buildings escaped most of the stone mining that robbed Dzibilchaltun of so much of its facing masonry. Indeed, if more of Dzibilchaltun remained perhaps we could notice more Puuc-related architecture there as well. Even the Island of Cozumel had Puuc architecture--a Puuc portal vault was first noticed there in the 1890's by William Holmes (Schavelzon 1985), who was as much the father of Maya architectural studies as Stephens and Catherwood.

Folan has been able to offer additional information on Puuc architecture outside of the Puuc hills region (personal communications, 1989). A useful supplement to Pollock's admirable

monograph would be "Puuc Masonry at sites outside the Puuc Heartland."

GEOGRAPHICAL HOMELANDS OF THE THREE MAJOR PALACE STYLES OF CAMPECHE

Puuc and the other peninsular styles include temples as well as palaces, but since pyramid-temples are rare in Yucatan, and not that common at Santa Rosa Xtampak in Campeche, this report will mainly deal with "palaces," or range structures as they are known in the academic literature. Puuc is theoretically the architecture of the Puuc hill region which begins just past Muna. That location has made Uxmal, Kabah, Labna and Sayil the type sites. The other 150 Puuc sites, many of them up to 100 km away from one another and some far outside the Puuc hill region, are totally forgotten except by the three or four Puuc specialists. The majority of Mayanists are dedicated to the Peten Maya, increasingly to the Belize Maya remains, or to Palenque or Copan. Perusal of any of the standard textbooks on Maya civilization reveals that the Puuc usually gets at best 3 or 4 pages, Chenes at most 2 pages, and Rio Bee is often mixed with totally unrelated sites but even then gets less than 4 pages. Palenque, Copan, and Peten sites may get entire chapters.

Chenes means “well” (of water). There is a section in the middle of Campeche state where most of the towns are named after the

wells: Hopelchen, Bolonchen, etc. But we will see shortly that Chenes architecture is found as far away as Tikal and even Copan in Honduras--and that actually most of the architecture of the Chenes homeland may actually have been derived from that of Rio Bec.

Rio Bec, "dry river," is the mid-section of the lower peninsula, cut right through the middle by the Escarcega-Chetumal highway. The Rio Bec area is perhaps the most intensely settled zone in the entire Maya area. Rio Bec sites go west at least to Manos Rojas (Km 132) and all the way east to Kohunlich, which has buried Rio Bec structures. Although the type site is Xpuhil the sites of Becan and Chicanna offer a greater variety of Rio Bec architecture in addition to the over-popularized tower-temples.

PUUC FEATURES

The Puuc that we know best features mosaic-like facade decoration. Uxmal, though, is quite late in the Puuc developmental sequence. Scholars still argue about the dates, but some buildings may be as late as A.D. 1000 which is well over a century after Tikal was abandoned. Uxmal is comparable to the Rococo excess of Baroque. The Codz Poop of Kabah is an excess in Chac-like monster visages as facade decoration.

Architectural historians Harry Pollock, Paul Gendrop, and George Andrews1 have documented a several hundred year sequence of development for Puuc architecture: Early Oxkintok, Proto Puuc, Early Puuc, Junquillo (Puuc), Mosaic (Puuc), Late Uxmal. The visitor to Kabah, Labna, and Sayil who are visually astute can find for themselves the Early Puuc facades there; the main touristed buildings date to after A.D.800. To find the really early Puuc buildings you would need to visit Oxkintok, which is actually readily accessible. Spanish archaeologists have been excavating and restoring at Oxkintok the last several years.

Having taught Maya architecture at universities both in Europe and America, as well as to tour groups traveling to the ruins themselves it is easy to impart the ability to distinguish between Puuc and Chenes architecture from facade features. But to flash a picture of an empty palace room and expect a correct answer as to whether it is Puuc or Chenes is asking for a blank look. I myself could certainly have been unable to answer such a question as a student, or indeed during the first decade of being

1 Kowalski's thorough report on the Palace of the Governor at Uxmal also includes a review of dating for Puuc architecture (1987: 25-51). Despite the 1987 publication date, the actual research was in 1976-1977, and at least part of the book was written in 1978. Although Kowalski is aware of George Andrew's research on the Puuc, it was not possible for him to cite any of Andrews' work past 1979, thus missing all the important Andrews monographs of the 1980's. In essence the dating in the Uxmal report seems based on the decade earlier 1960's work of E. Andrews IV which is useful to cite but has been superseded by work of G. Andrews and Gendrop. The work of virtually all the other author's cited by Kowalski in the section on dating have also been superseded. Since Kowalski is now working on the Nunnery of Uxmal. it would be fairer to judge his dating from a work of the 1980's. For that reason I have felt it fairer not to dissect his 1970's perspective. It is essential to point out, though, the need to compare the 1987 publication date with the actual date of the data therein, which is a full decade earlier.

an archaeologist. Maya studies today are so highly specialized that it would be hard to find even 10 prominent Mayanists today who could tell a Puuc from a Chenes temple from the inside, or even from the outside unless a monster facade were self-evident.

Puuc territory occupies twice as much area as Rio Bec and three times as much as Chenes. In fact, most of the sites in the Chenes well area, that is Chenes geographically, have Puuc buildings, especially on the entire west side: Tohkok is just a few miles from the Chenes well town of Hopelchen, yet has stone columns with stone lintels to form the doorways--a decidedly Puuc trait. Dzehkabtun (Pollock 1970: 40ff; Andrews 1985: 31) Dzibiltun (Pollock 1970: 22ff; Andrews 1985: 30) all display Puuc features and Yakal Chuc is just virtually Puuc. That leaves Nohcacab, Tabasqueno, Dzibilnocac, and Hochob as the only "fully Chenes" sites, since Xtampak has as many Puuc quadrangles as it does Chenes ones (though even Dzibilnocac has Puuc buildings). Was Puuc expanding and smothering an earlier Chenes realm, or was an expansionistic Chenes realm moving westward and Chenizing, Dzehkabtun etc. The traditional model has been that all sites physically within the well area were automatically considered to be culturally Chenes. By definition anything that was Puuc within this area was therefore "foreign influence." The Puuc presence allover western and northern Chenes was not considered as Puuc occupation, that is, not just a movement from Puuc into Chenes,

but rather an actual Puuc occupation. There is a difference between borrowing influence or receiving orders.

The Chenes heartland is a veritable laboratory for concepts of diffusion. Diffusion, the spread of cultural ideas (usually expressed as artifacts) has always been studied through pottery or art, either designs on the pots (as in Peru or Greek pottery) or rim sherds (as in most pre-Columbian analyses). Architecture per se has hardly ever been thought of as an artifact. The idea that models of process of development could equally well be ascertained from architecture has only once been considered, by William Coe at Tikal. Only recently has architecture re-entered the realm of academic theory, through the giant stucco faces on the sides of Protoclassic and Early Classic pyramids (Freidel and Schele 1988).

XTAMPAK AS A TEST CASE

Folan has proposed Xtampak as a regional capital which offers scholars the opportunity to ascertain once and for all the relative dates for Puuc, Chenes, and Rio Bec influence. This matter can be resolved in the traditional manner of stratigraphy, analysis of sherds and chipped stone artifacts, radiocarbon dating, settlement pattern studies, etc. But for once it will be possible to add architecture as an artifact to compare and contrast the

picture of cultural development and sequence in northern Campeche as mirrored at Xtampak. To understand the situation at Santa Rosa itself it helps first to recognize what is Puuc in Puuc territory, what is Rio Bec in that southern area.

PUUC ARCHITECTURAL CHARACTERISTICS

Pollock (1980: 564ff) has the most complete list of Puuc traits to date, based on his decades of research in this field. Unfortunately, this book does not produce a "reader friendly" review of these Puuc features; the list of Puuc traits is not illustrated at all, other than by laborious flipping through the 600 pages. Andrew's (1986) monograph is 500 pages briefer, yet is organized by successive style, and thus gives a non-Puuc specialist a far better idea of what was going on, and how Andrews himself reached these conclusions. Gendrop has produced a monumental book (1983) which includes Puuc architecture but it is not as easy to follow as that of Andrews. Kowalski and Bolles have each independently produced a monograph on an individual monumental Puuc building (Governor's Palace, 1987; Nunnery at Chichen Itza, Bolles 1977). Still, the sole work that really allows a normal reader, who is not required to be a Puuc specialist, to understand the entirety of Puuc architecture, its subject and its evolution, is the 1986 monograph by Andrews. The sequence of topics, the selection of drawings, the total first-hand command

of the material, and the fact that Andrews does not tie down his reasoning to the historical sequence of woefully inadequate earlier studies make the Andrew's monograph essential reading—hopefully it will eventually be available to the reader who cannot manage Spanish, though the illustrations and tables of architectural traits alone make it worthwhile even when the foreign language obscures parts of the text.

The following list is intended for the non-Puuc specialist, and to aid in understanding Puuc features at Xtampak and elsewhere in the supposedly Chenes region. This list is by no means exhaustive, which means that Pollock and Andrews should be consulted by the specialist. I believe that there are advantages to the single-site/area-wide form of comparing and contrasting. There is always a main focus, in this case Santa Rosa Xtampak. If all the buildings at Xtampak were excavated this list would be considerably longer. And, if teaching obligations in Graz had allowed me more than five days there would be illustrations to accompany this. The needed drawings will appear in a forthcoming revised edition. Better text with no illustrations than nothing at all. The numeral sequence of traits is not evolutionary or in a temporal sequence, but is rather in an order of the most obvious and in a sequence that ought to be easiest for the reader to, understand.

Puuc 1: Understairway Half-Vaulted Passageways

Especially easy to see at Kabah is an architectural trait which typifies Puuc architecture--a half vaulted passageway under virtually all stairways that go to a second floor. A more spectacular example is on the back of the Adivino at Uxmal. The origin and incidence of this trait need to be ascertained with more precision. For the moment this feature is definitely in the last two of Andrew's stages of Puuc architecture. This trait is particularly useful to characterize Puuc palaces since half-vaulted understair passageways are not widely found in Chenes or Rio Bec architecture, nor anywhere in the Peten. Exceptions are always likely but for the moment this is a pure Puuc feature. One rare example in the Chenes region is at Dzibilnocac, Area K, Structure 6 (DeBloois 1970: 58; Nelson 1973: 27). That same building also has Puuc vault springs.

The purpose of these special Puuc vaults is to allow access to the original lower story rooms at the same time as permitting access to the secondary second story. In Peten palaces all the secondary stairways to subsequently built second stories are at the end of the building. In Puuc palaces second story stairways are virtually always directly on the central axis.

The nature of the stairways will be easier to appreciate when the standard pattern of erecting Puuc palaces is understood. A typical palace begins with a basic building range, typically two

rooms deep. Later it is decided to enlarge this; the back room of the initial palace is filled solid with rubble in order to bear the weight of the subsequent second story. The second story is then built as a one room wide range. In effect the new palace consists of the front row of the bottom story and the top range. To reach the top range a special stairway is raised on a vault. The vault forms a passageway which allows access to the first-floor doorway on the central axis. Otherwise the first-floor doorway at that point would be sealed by the new stairway. The tradition of building a half-vaulted stair was so standard that even when there was no doorway on the first floor the half-vault was still created.

The resulting vault needed to be only a "half" since the front wall of the first floor served as the other half. The half vault tended to be 30 or 45 percent lower than the room vault. That meant that the spring was quite low. The opposing wall remained the (more or less) unaltered front wall of the original first story.

Could half-vaults potentially be located under stairways in Xtampak's Southeast Quadrangle? Andrews' map suggests them for a comparable palace-pyramid-palace quadrangle at Dzehkabtun, the North Quadrangle there (1985: Fig.56). but makes no mention of such a stairway possibility, probably since they are such a common feature in Puuc ruins. Pollock, though, describes them succinctly

at Dzehkabtun: "Half vault beneath stairway to upper story but no doorway leading from this passage to lower story room." (1970: 41). It is precisely because sub-stairway half-vaults are so purely Puuc that it is crucial to photograph and describe them when they are so close to the Chenes heartland. After all, Dzehkabtun is only 8 km from Hopelchen. Overall Andrews' maps and drawings are a considerable improvement over those of the Carnegie Institution. The next step is to have site maps surveyed by transit rather than merely by compass-and-pacing, or compass-and-tape-measure. The angles are as helpful as the measurements and any quadrangle worth mapping at all is worth mapping well, once and for all time.

Puuc 2: Monolithic stones: Jambs, Building Corners

Puuc masonry features monolithic stones as door jambs and at the four corners of the buildings. The door jamb stones are often the entire width of the jamb. The corner stones tend to be tall, set vertically. You can always tell when a Spanish colonial church was constructed from stones robbed from a Puuc site by looking at the church jambs and the church corners--the Spanish masons too took advantage of the specialized Puuc stones for these positions. On these grounds I suspect that the ancient Maya city of Tiho (now Merida) had Puuc-related buildings, or at least Puuc--related masonry.

Puuc masonry is evident in jambs at Xtampak, most notably (but not restricted to) the Southwest Building. The corners of these same buildings have not yet been analyzed.

Puuc 3: Stone Lintels

Stone lintels are found at Yaxchilan, Bonampak, Lacanja, the Lamb site (suggested by Ian Graham as almost certainly La Pasadita on the Guatemalan side of the Rio Usumacinta), and in several dozen Puuc sites. No Rio Bec site has yet been found with a stone lintel; stone lintels are equally rare at Peten sites. statistically stone lintels are a Puuc trait in peninsular architecture. In Puuc architecture stone lintels are found over regular doors or doorway series formed by columns. The Puuc association of stone lintels is so strong that the few rooms at Santa Rosa Xtampak which have stone lintels also have springs on all four walls as well as Puuc vault profiles (rolled, barrel-like curved). Dzibilnocac Area K, Str.6 has a stone lintel--and a Puuc vault (Nelson 1973: 27-28).

Puuc 4: Round Columns

Round columns of monolithic stone typify Puuc architecture. Doorways created by such columns are hardly ever found anywhere else. The rare Peten facade that has columns (such. as at Yaxha) has them of a meter in diameter of small stones mortared

together. Columns are especially noticeable in the main palace of Sayil but are also found in countless other Puuc sites off the tourist trail. At least one Rio Bec structure has columns, Peor es Nada, Str. II (Ruppert and Denison 1943: Fig.119)

Puuc 5: Square Pillars or Pilasters

Square pillars at Puuc sites tend to be of regular sized masonry and often with a bound motif at top. Whether this is pan-Maya, or related to the round pilasters of Rio Bec architecture has not yet been ascertained. Round columns occur occasionally in Rio Bec buildings but are certainly not dominant as in scores of Puuc palaces. Pillars in Puuc architecture are best known at Kiuic and Uxmal (lower buildings inside the Nunnery Quadrangle).

The pilasters (pillars which are not entirely free standing from the wall) on both ends of the Main Palace of Xtampak have a comparable top molding and central flute as pillars of the first-floor annex, north, of the Nunnery Quadrangle, Uxmal. This is usually presented as evidence that such fluting is Puuc when found at Xtampak. But the possibility exists that this trait is earlier at Xtampak than at Uxmal, in which case the Xtampak utilization of this motif is not automatically Puuc, the other way around. And a similar motif on half column at the Rio Bec site of Channa adds further uncertainty.

I had also originally considered the pilaster decoration at Xtampak to be a Puuc trait at the palace, based on comparison with Kiuic, Uxmal, etc., but the remarkable find of pilasters and pillars at the ruins of Tigre Triste, in the Rio Bec area (Gendrop et al. 1985), locks this trait into the Rio Bec culture. The deeper I get into the architecture of Campeche the more Rio Bec traits surface--and the fewer traits that can be considered to be indigenous Chenes or borrowed from Chenes. Only because Uxmal is so well known do we instinctively look to it as a source for a feature found there and at another Site XYZ, but all too often it turns out that site XYZ is earlier, and on the line of evolution between southern Campeche and central Yucatan.

Puuc 6: Vaulted Portals

Uxmal, Kabah, and Labna (Kowalski 1987: 126-131) display so many monumental examples of impressive vaulted portals that every visitor learns of them. A less noticed example is tucked into a corner of the Palace at Labna; though of course the best known of all is the Portal Arch across the plaza. Less well-known portal vaults are at Xculoc, Campeche (Pollock 1980: 382, 565) and 2 km away at Xcochkax (ibid.: 386, 565), and elsewhere.

Pollock mentions that the north range of the Dzehkabtun main palace quadrangle (Andrews' North Quadrangle) has a portal vault at the center (1970: 41). Andrews actually provides a photograph

Fig. 5. The largest corbel-related vault yet known for any Puuc site. The corbel vaults in this building divide the structure visually into three units (though not noticeable in this close up view). Notice that the corner stones are of a specialized size and shape (corner in right foreground is restored but with proper sized stones). Uxmal, Palace of the Governors. **451608-6-Neg.16.**

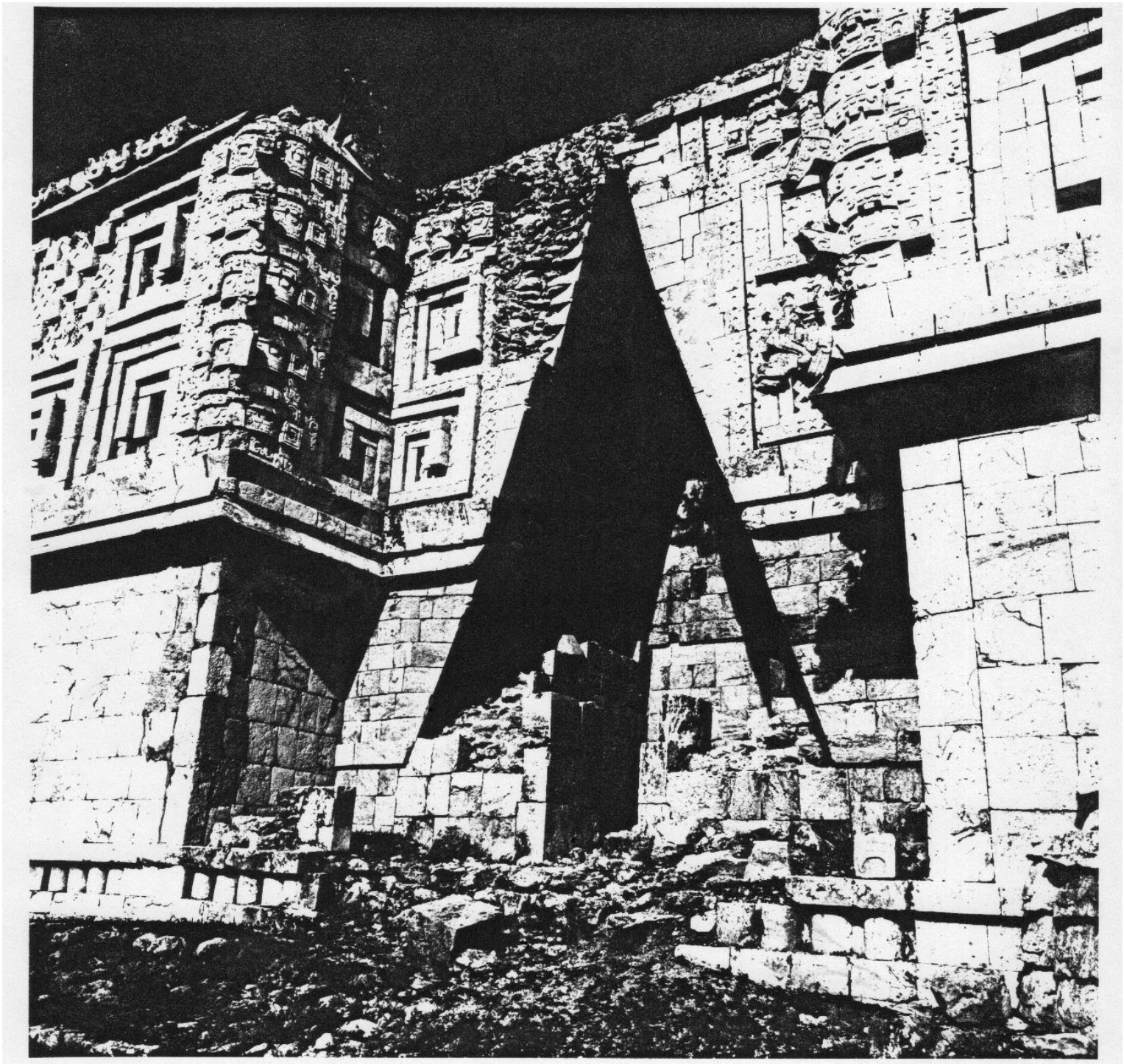

Fig. 6. The other corbel vault on the Palace of the Governors, Uxmal. The vault stones are "boot shaped." The wall masonry is typical of the best Puuc workmanship, so far found at Xtampak only in the Southwest Building, Rooms 2 and 3.

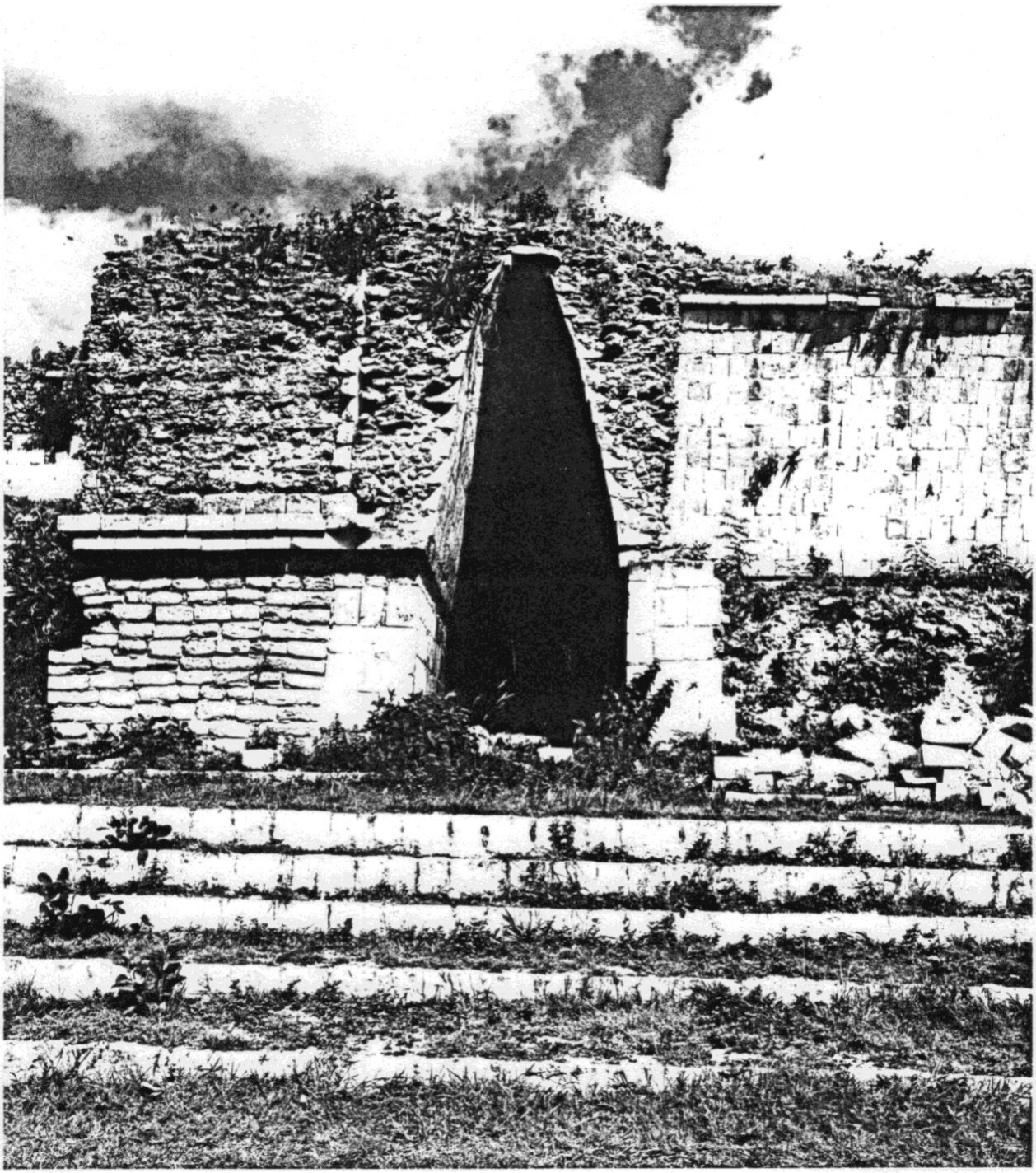

Fig. 7. The portal arch of the Nunnery Quadrangle and those of the Palace of the Governors are so well known that the other monumental corbel portal vaults of Uxmal tend to be forgotten.

This one on the Northern Long Building is just two meters behind the Nunnery. East end, looking west. Two periods of masonry can be seen, the rough horizontal stones to the left and the smooth squared stones of classical Puuc workmanship. Boot shaped vault stones are also visible. **451608-5-Neg.5.**

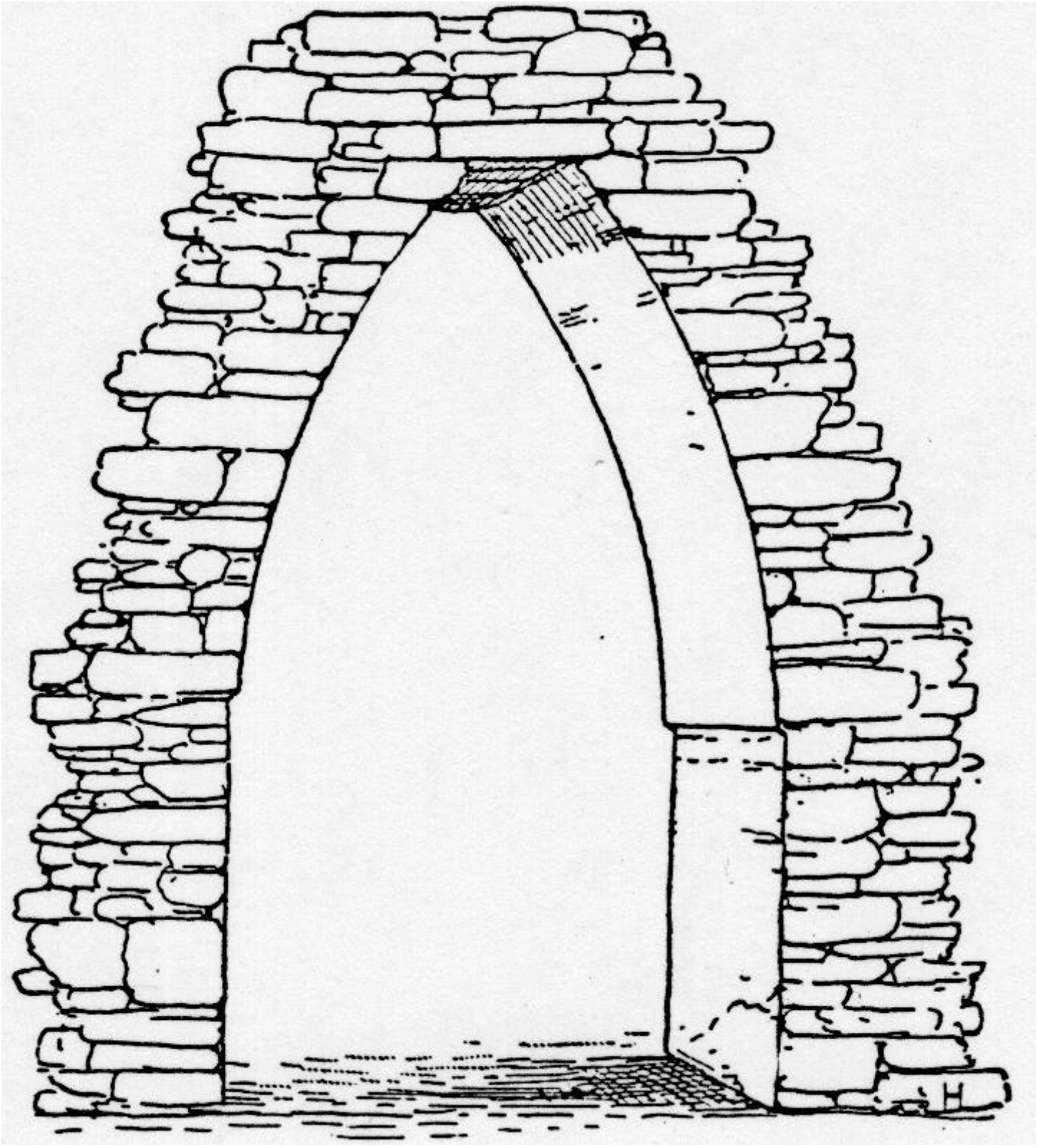

Fig. 8. What appears to be a portal vault similar to those of the Puuc heartland, but this far away at Cedral, Cozumel Island (Holmes 1895: Fig. 19). Although one room of the overall ruins is still standing evidently this specific arch is not.

(albeit from afar) of this pure Puuc feature. Other than the example at Cedral on Cozumel Island or at Oxkintok (Str. 2B8, Pollock 1980: 286-287), this Dzehkabtun portal arch is one of the few known outside of the Uxmal-Kabah-Labna Puuc heartland, though they can certainly be expected to be found elsewhere once other sites are cleared and excavated.

Vaulted entranceways are found in all the enclosures of Tikal Twin Pyramid Complexes as well as the single Twin Pyramid Complex known outside Tikal--that which Carlos Rudy Larios noticed at Yaxha. The inner rooms of Tikal's South Acropolis also have vaulted doorways, tiny vaults that have never been published in any drawing or photograph (personal observation). One inside door of Maler's Palace is vaulted (Hellmuth 1978: 36) as are doorways occasionally in other Peten style Maya buildings, but these are not intended to be portal vaults. The vaulted door as a dominating passageway is purely Puuc. This is one trait we cannot (yet) even suspect to be Chenes or Rio Bec in origin.

Puuc 7: Mosaic Facade Decoration

What makes Puuc architecture so easy to recognize is the repeated geometric decorations in large stone mosaic, especially along the upper zone but often the entire facade. Andrews has established that such mosaic comes mainly late in Puuc developmental sequence. Thus the lack of mosaic decoration on the otherwise

Puuc buildings at Xtampak may be attributed to any of the following factor(s): 1st, that the mosaic facing stones have not yet been found since they have fallen off, as virtually none of the upper zone facing masonry is still in place. 2nd, that the Xtampak Puuc buildings are early and therefore would not be expected to have mosaic decorations. 3rd, that the Puuc sites with which Xtampak had contact (Edzna, Ichpich, etc.) simply do not have mosaic decoration, so Xtampak was borrowing a mosaic-less Puuc. 4th, that the Xtampak architects are selectively accepting or rejecting individual Puuc features--they accepted Puuc jambs, masonry, vault springs, stone lintels--but not mosaic decoration.

Possibility #1 cannot yet be dismissed since no one has yet checked through all the rubble that is everywhere at Xtampak. with so much standing architecture no one has yet had time to look at the collapsed material. Although mosaic facade stones would tend to be buried under tons of the vault mass, tree fall should have churned up enough rubble to throw mosaic stones out on the surface if they exist. The collapsed buildings of Xtampak should be cataloged to ascertain how much information can be gathered from their remains. with more than 5,000 collapsed Maya buildings in Campeche there is no hope that they would all ever be excavated.

Andrews actually found in front of the Cuartel "four spools of two different sizes of the kind that are commonly used in 'banded colonnettes' in the Classic Puuc Colonnette and Mosaic architectural styles...." (1987: 79). He could find no place where they would fit in the Cuartel. The Cuartel itself is not especially Puuc, though the central doorway does indeed have a raised medial molding, typical of proto-Puuc (ibid.: 79; 1985). If this feature is also Proto-Puuc at Xtampak that makes this one of the earlier standing buildings at the site such an early date for this particular building in the Chenes context is not yet accepted. Since the raised Cuartel molding has no monster fangs in association with it is not immediately acceptable as an abbreviated Chenes doorway of the type presented in the Nunnery Annex at Chichen Itza.

So far, a strong case of Puuc features is in the Southwest Building where the Puuc traits are inside (the vault) and outside on the lower zone. The upper zone masonry has collapsed. Excavation, though, would immediately solve the enigma, since mosaic stones are mass produced and would stand out in the collapsed mass. Also, when the buildings fall often entire chunks fall as a giant unit, still preserving the original arrangement.

Scholars have searched in vain for an origin for Puuc mosaic stonework. The best review is that by Kowalski (1987: 203-218). Oaxaca is the most popular selection as a model (Sharp 1981),

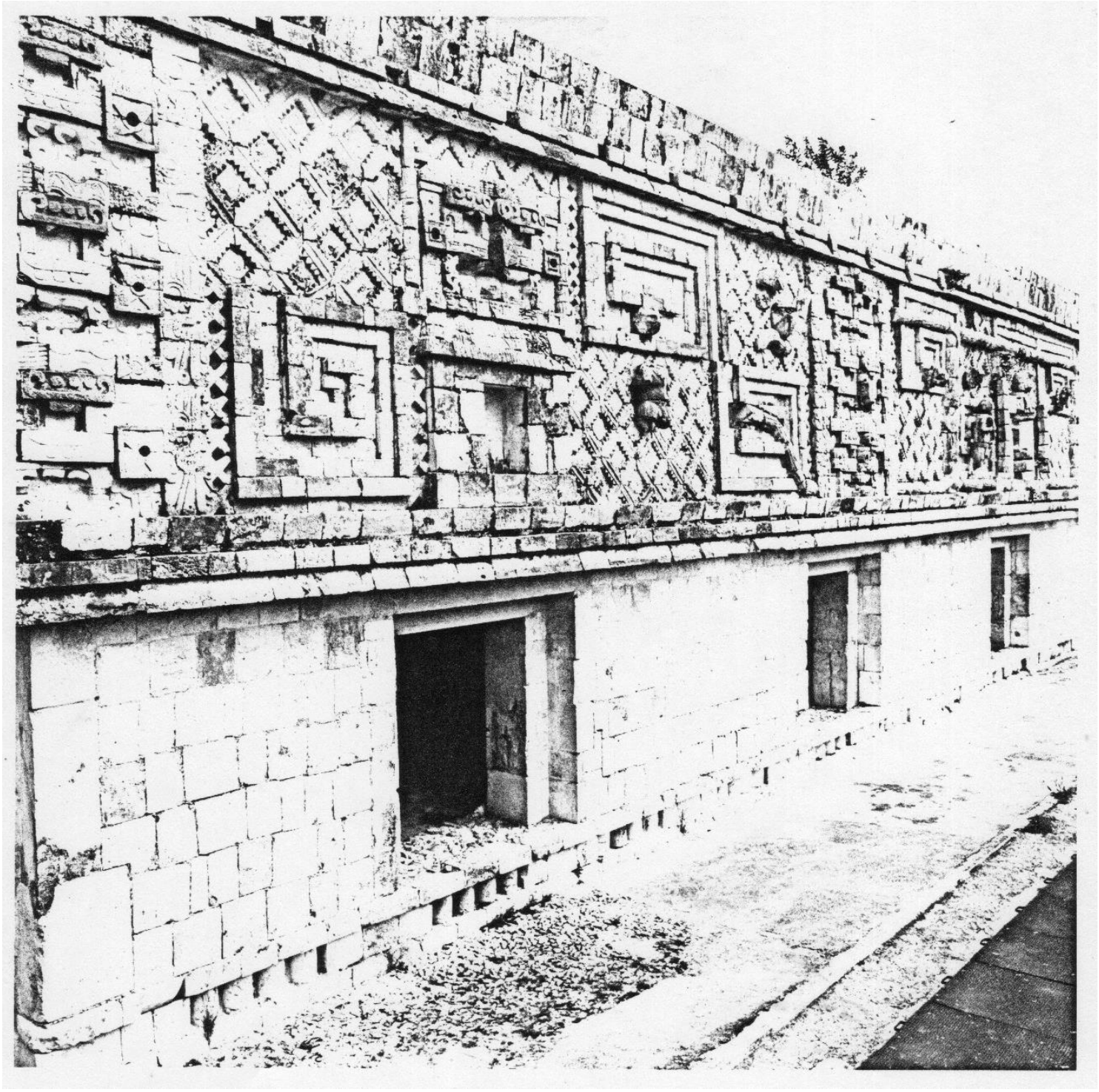

Fig. 9. Uxmal, Yucatan, Mexico, Nunnery Quadrangle, showing the typical Puuc arrangement of a plain lower zone with ornately decorated upper zone. Early Puuc buildings, though, do not have such fancy mosaic decoration covering such extensive areas. The origin and developmental sequence of Puuc facade mosaic is not yet known. The rectangular pattern of frets is common throughout Puuc facades of Yucatan.

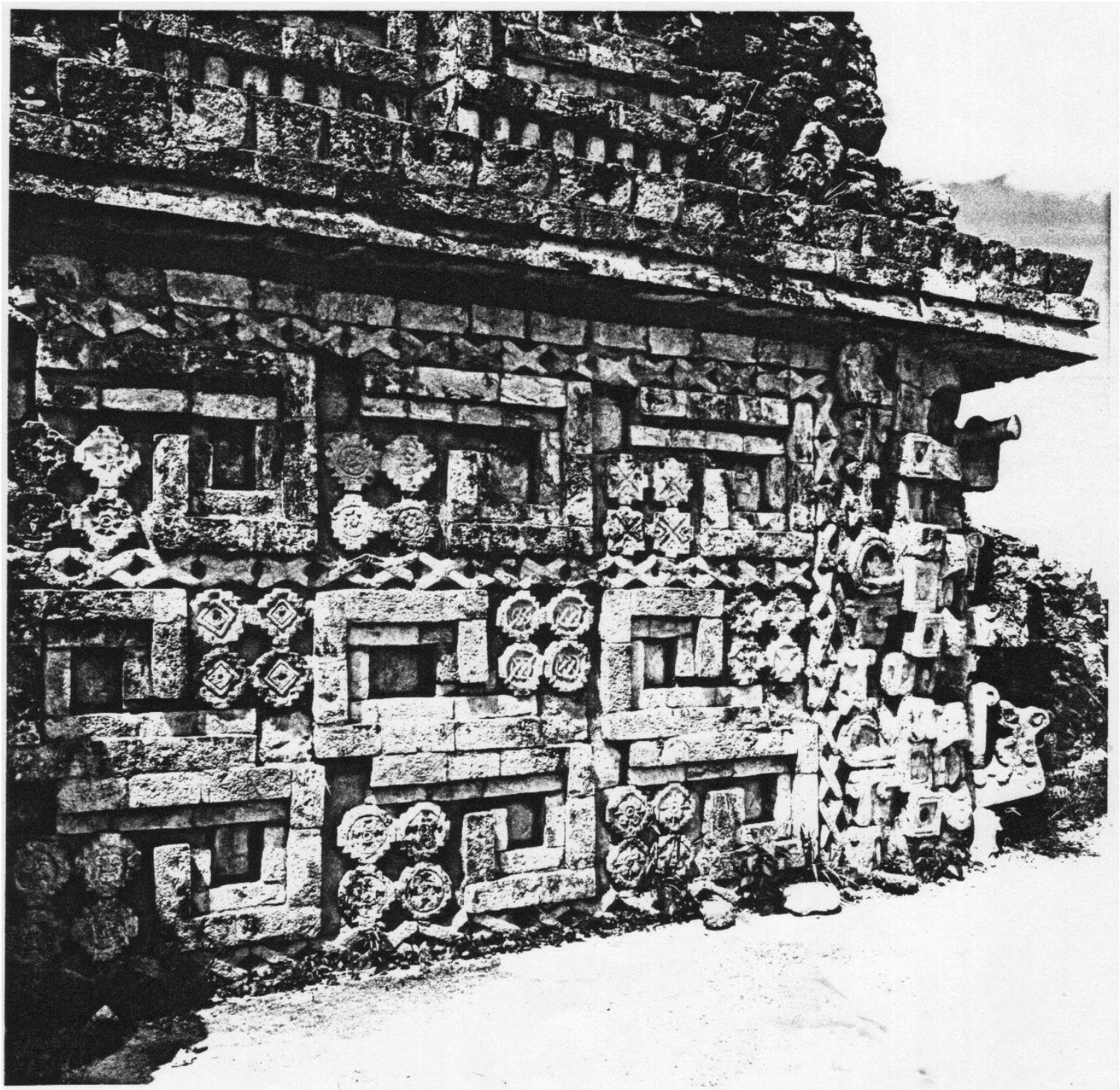

Fig. 10. Uxmal, Great Pyramid, an unusual instance of elaborate mosaic decoration also on the entire lower zone. The corners have stacks of long-snouted deity faces, usually a trait of Chenes and Chenes-Rio Bec facades. The repeated fret is typical of Puuc facades.

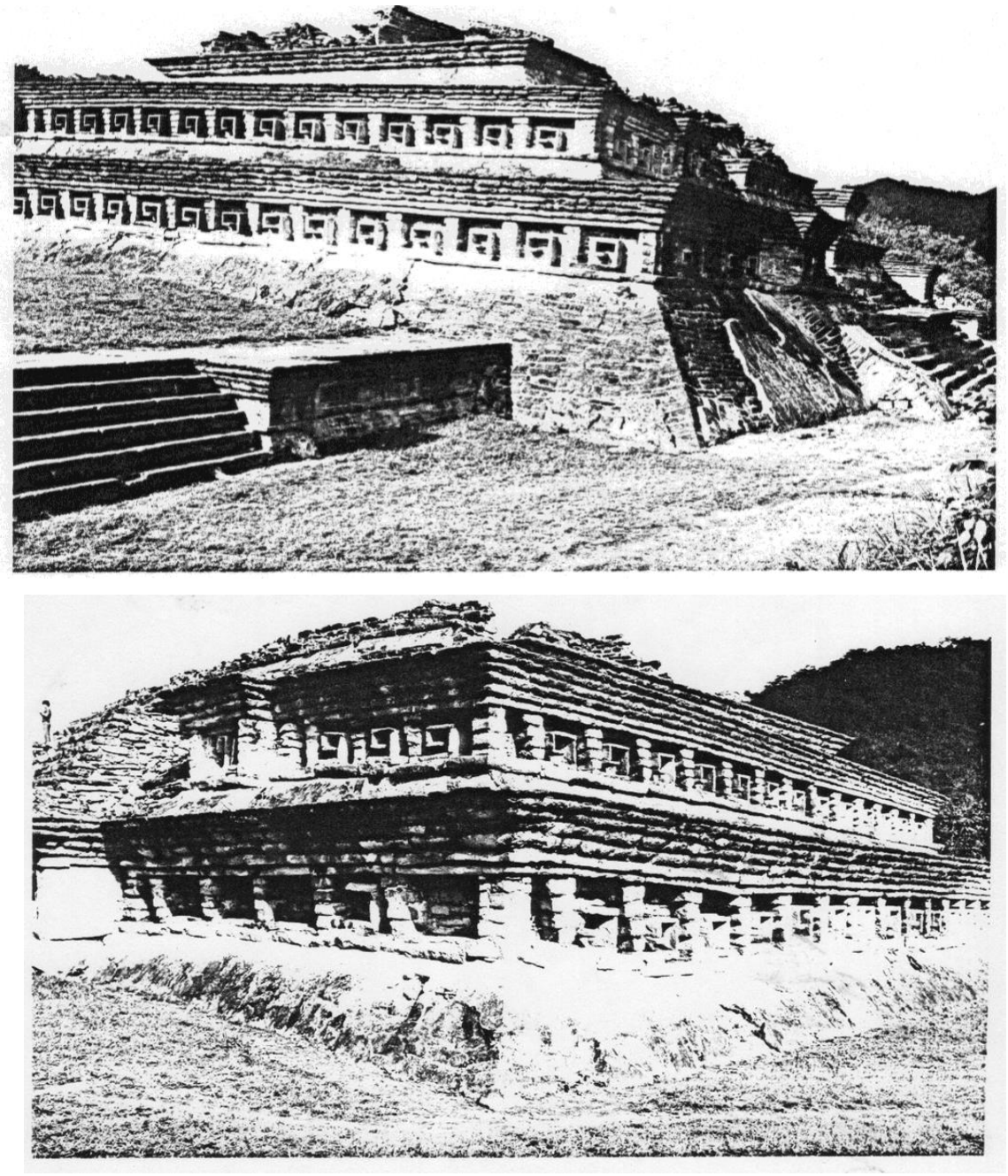

Fig. 11. El Tajin, "Tajin Chico," showing that repeated frets in facade architecture also had a home in Veracruz earlier than that known (so far) for Campeche or Yucatan. The relationship of EI Tajin and Oaxaca is not adequately known. Elsewhere in the Maya area EI Tajin motifs were "introduced by Teotihuacan or at least together with the advent of massive Teotihuacan influence". Teotihuacan murals are known for Xelha, Quintana Roo, so perhaps there was Teotihuacan-EI Tajin influence in Campeche and Yucatan. The cache of Teotihuacan-related pottery at Becan is typical of what will eventually be found elsewhere in Campeche. Considering that there is considerably more EI Tajin influence in the Maya area than there is Oaxaca influence, it would seem more likely that Veracruz should be analyzed as a potential source for later Puuc decoration.

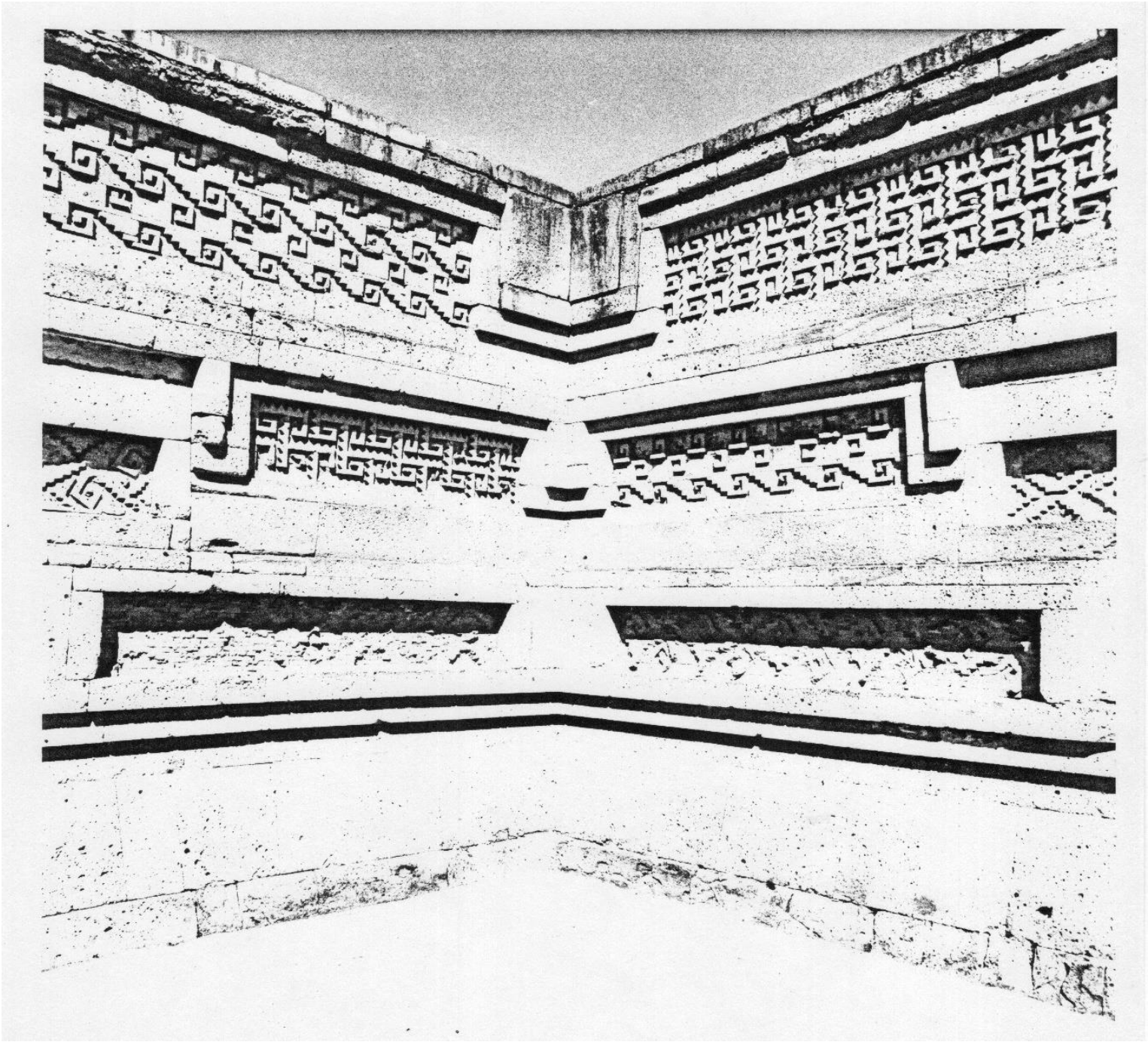

Fig. 12. Mitla, Oaxaca, Mexico. The facade mosaic of fitted stone is so well known here that Oaxaca has often been proposed as an origin for Puuc mosaic. But since Mitla itself is several hundred years later than Uxmal, the origin would need to be in pre-Mitla architecture of Oaxaca--which also has mosaic of stone on building facades.

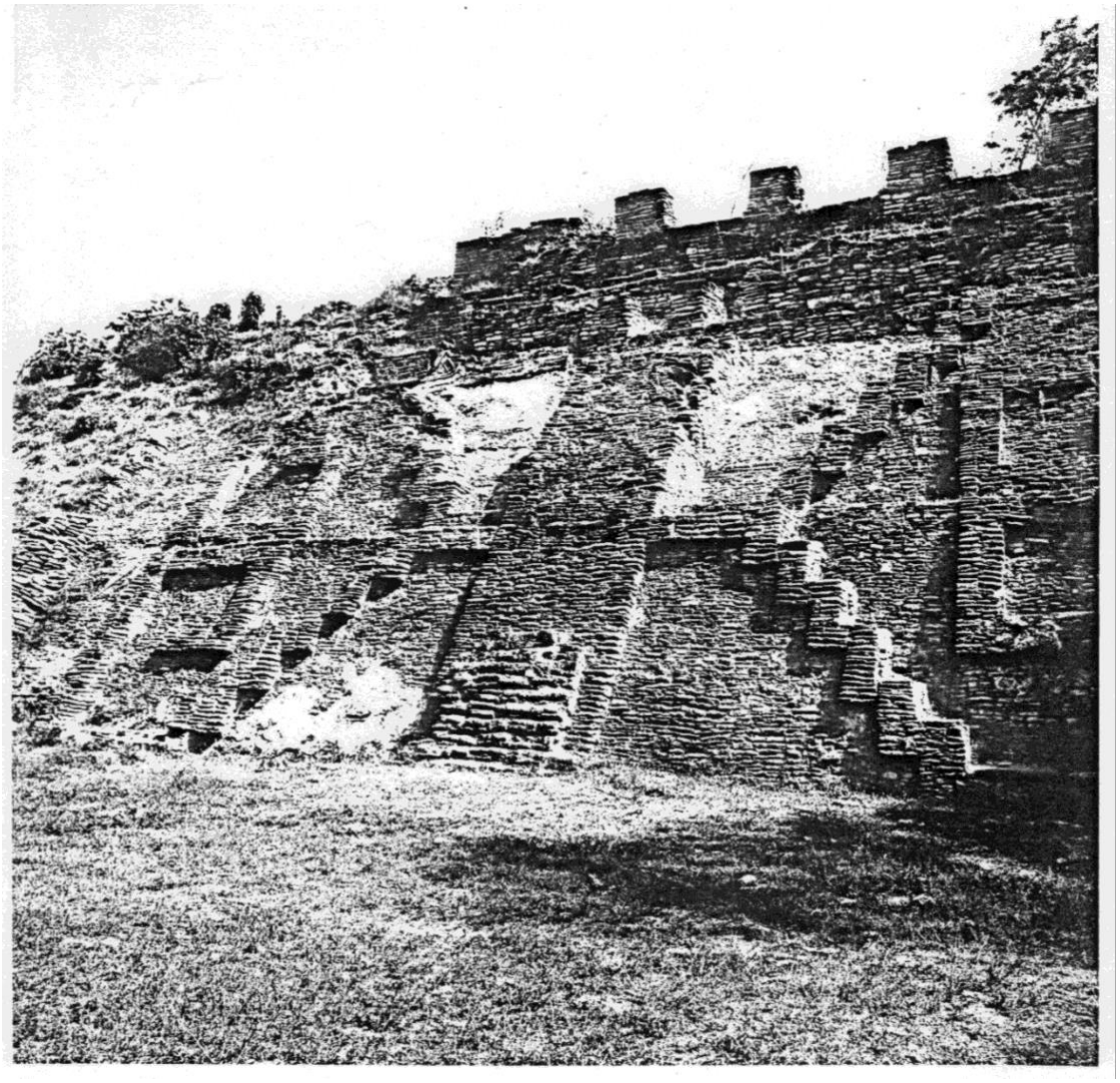

Fig. 13. Tonina, Chiapas, Mexico, terraced facing of a temple or palace complex excavated by INAH after the French excavations ended; largely unpublished to date. Late Classic, ca. A.D. 650-¬850. Photograph shows fret-like designs which could have served as steps for Hollywood type dance spectacles. Graffiti at other sites picture such lavish ceremonies including people standing on architecture. But this fret-like motif is illustrated in the present report to show that it is premature in our present state of ignorance about the full range of decoration of Maya buildings to pinpoint the origin of Puuc mosaic. This Tonina structure was not known at all until five years ago, is still not known until today because it is effectively not previously published, and thus could in no way affect anyone's model for the origin of the fret motif. There must be a thousand comparable examples of Maya architecture which depart from the "normal." The full richness and diversity of Maya architectural decoration has not yet been adequately cataloged, though the photographic archive of the Carnegie Institution of Washington was a beginning, followed by the several thousand architectural photographs of Andrews, and architectural photography of F.L.A.A.R. for the last two decades.

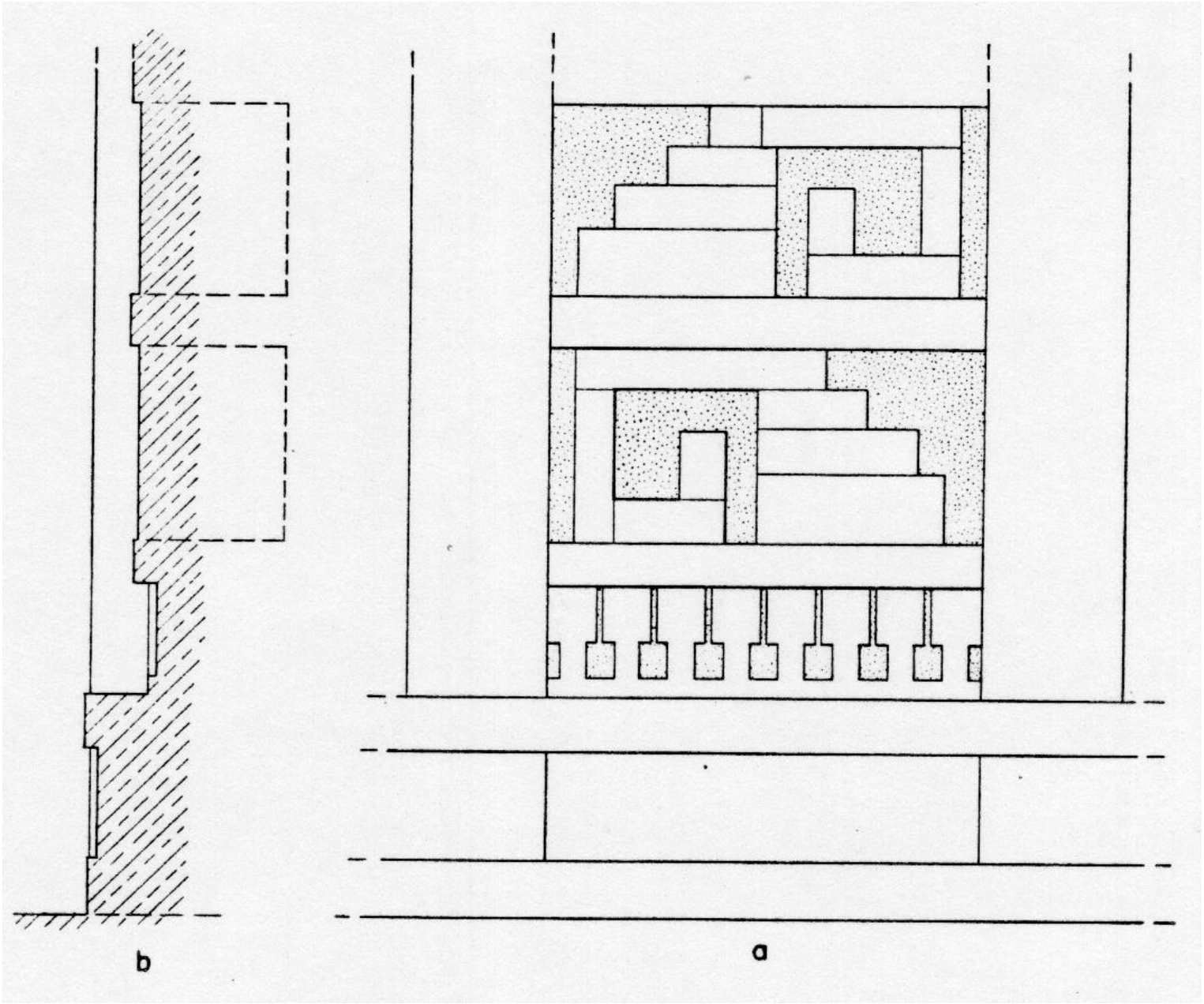

Fig. 14. Stepped frets at Rio Bec (Ruppert and Denison 1943: Fig. 25). Perhaps Rio Bec is a more likely source for Puuc mosaic decoration--though where did Rio Bec architects derive these motifs?

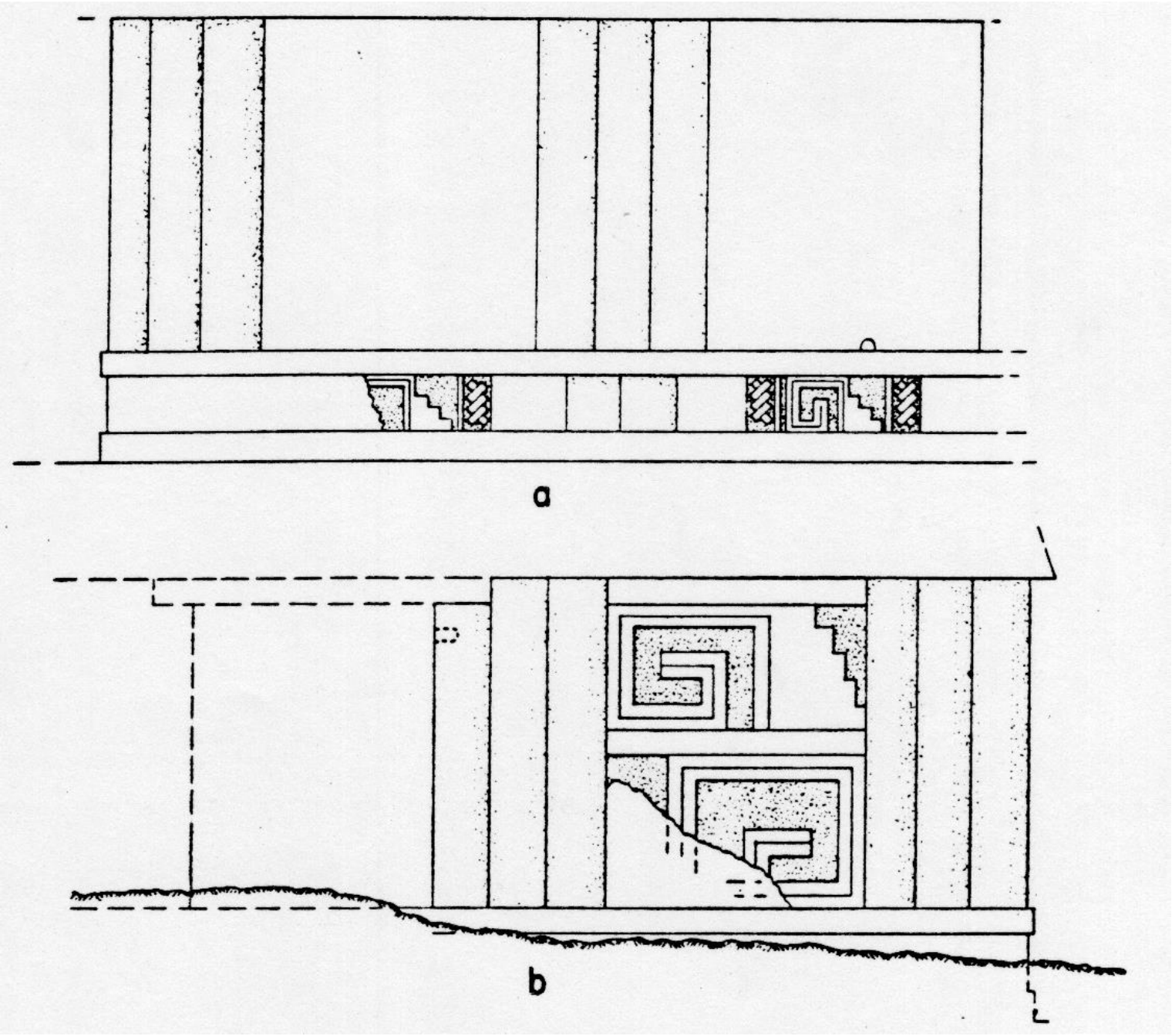

Fig. 15. Stepped frets at Xaxbil, a little-known Maya ruin in the Rio Bec region (Ruppert and Denison 1943). The same facade also appears to have embedded columns. The basal molding includes the mat motif.

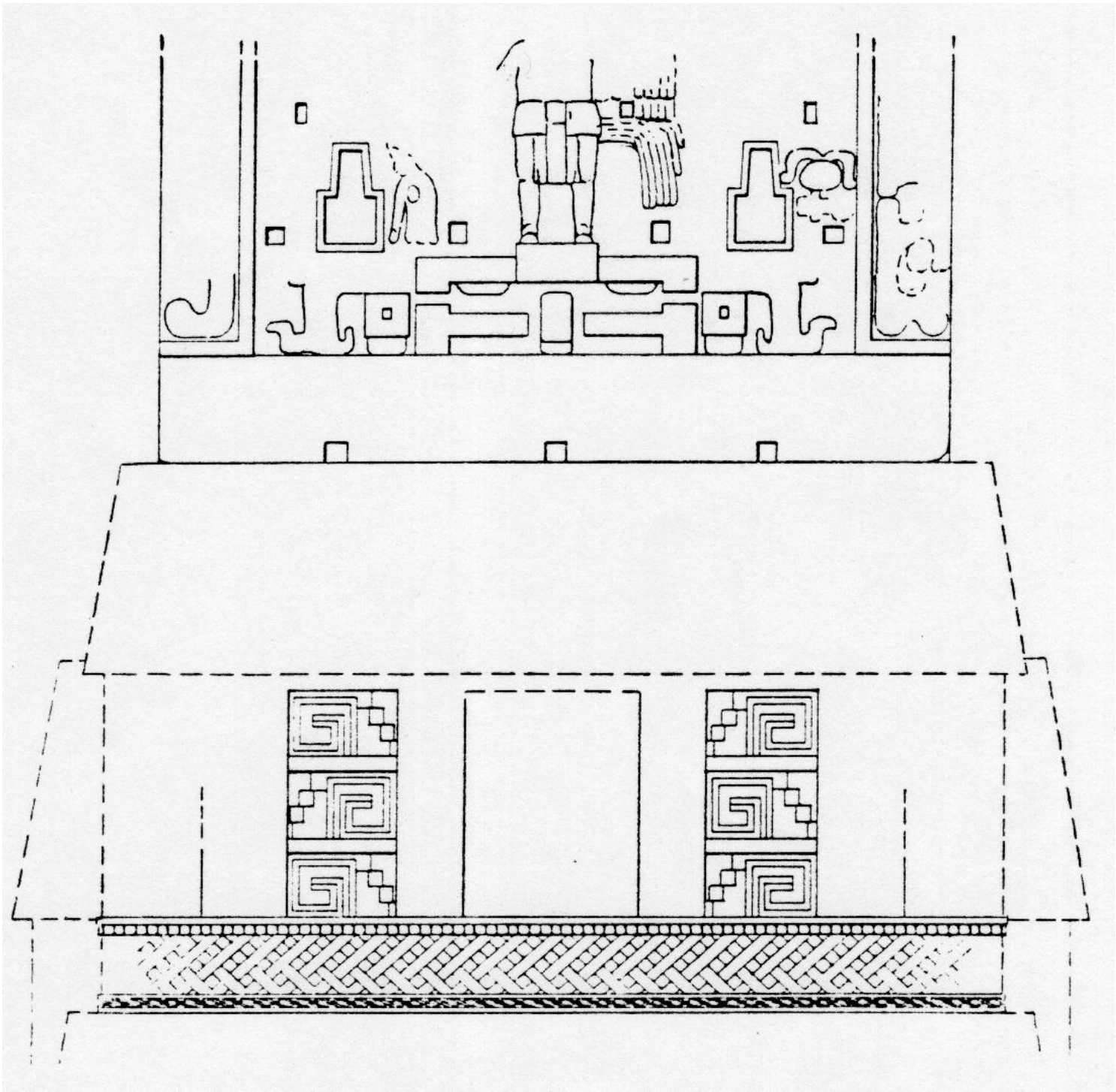

Fig. 16. A monumental display of stepped frets at Okolhuitz, a Maya site in the Rio Bec area which seems not to have been photographed or discussed for the last half century (Ruppert and Denison 1943).

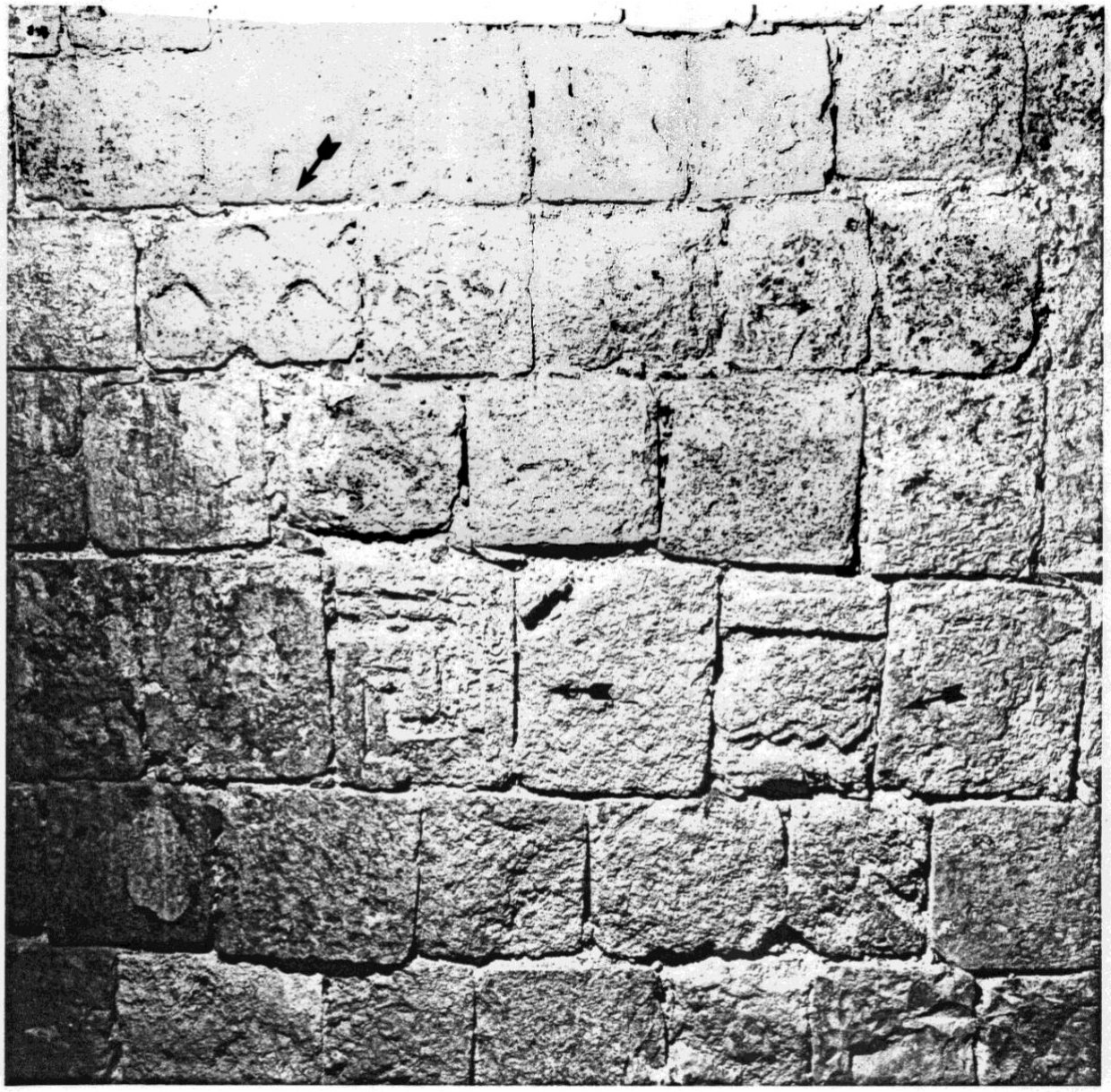

Fig. 17. Reused mosaic stones on the wall of Room 2 or 4 of the East Range, Southeast Quadrangle. Top left is comparable to that on Puuc facades at Uxmal. Center left is a fret, a rather small rendition. Center right is a mat motif with a border, possibly the edge to a larger design. Two other rooms in the Southeast Quadrangle have such reused facade mosaic stones. This is stratigraphic proof that Puuc mosaic was in use at Xtampak and on buildings earlier than those standing now. Since the East Range is not appreciably late, that is, not demonstrably Terminal Classic, could this mean that mosaic facades at Xtampak were earlier than those at Puuc sites to the immediate north? The discovery of an intact early Puuc building with facade mosaic buried under a later building at Xtampak could in a single stroke rewrite the architectural history of the Yucatan peninsula. Although previous investigators at Xtampak have noticed and occasionally commented on the reused mosaic stones no photograph has ever been published because no previous architectural historical team was equipped for interior photography. **451608-16-Neg.11.**

though of course all the mosaic of Mitla is late Post Classic and could never have influenced Classic period Yucatan. This negative factor has not kept the Puuc-Mitla association out of textbooks. No matter how late mosaic facades are at Uxmal there are earlier examples at plenty of other sites, including Chacmultun and even Dzehkabtun and Dzibiltun near Chenes territory (Andrews 1986: Cuadro 10, p.63). Actually, the upper level of EI Tajin (Tajin Chico, Building A and Building C) has the frets so typical of Puuc architecture and it is known that EI Tajin influenced Maya art, though mainly along with Teotihuacan influence in the Early Classic. Since stepped frets exist in the murals of Teotihuacan, it would seem that a Teotihuacan-EI Tajin source is far more likely than the visually more compelling but sequentially impossible Oaxaca examples. Step frets dominate the balustrade decoration on the Pyramid of the Niches at EI Tajin, the largest pyramid-temple at the site. It is an oversimplification to consider EI Tajin as the source for mosaic decorations in Puuc architecture on several grounds, namely that there is more to Puuc facades than step frets and most of EI Tajin decoration is curvilinear, not geometric. Besides, other than the EI Tajin scrolls covering the entire lower section of Quirigua Stela E (Hellmuth 1978: 127) virtually all influence from El Tajin in the Maya area is at Kaminaljuyu (via the Tiquisate region) and in Central Peten, during Tzakol times, and together with Teotihuacan influence. This itemization of EI Tajin potential is more a counter-proposal to the simplification of the popular concept of a Oaxaca connection.

A further bit of evidence against Oaxaca are the closer prototypes for fret designs in Maya architecture already in the Rio Bec area at Rio Bec, Group I, structure V, panel west of doorway (Ruppert and Denison 1943: Fig. 25), Xaxbil (ibid.: Fig. 102), and monumentally at Okolhuitz, str. 1 (ibid.: Fig. 103), an aspect that Kowalski has already noticed (1987). Although no stratigraphic or even stylistic dates are available for these buildings, they are more likely ca. 700-800 than any later date such as Terminal Classic. Timewise these Rio Bec buildings are potential candidates for predecessors of Puuc mosaic facades. Kowalski is the first Mayanist discussion of the origin problem of the Puuc step frets that recognizes the importance of the Rio Bec area (1987: 212). He (along with G. Andrews separately) illustrates the less well-known step frets of Xkichmook and Rancho Perez (ibid.: Figs. 183, 184). Considering how many Rio Bec features are the most likely origins for features in Chenes architecture it would seem more logical geographically as well as temporally to seek a Campeche origin than Oaxaca or even El Tajin. Both of the latter regions may well be the origin back in the Early Classic but it is more likely that the geometric designs were transmitted through Kaminaljuyu and Peten during the Early Classic than that they reached the Puuc directly from Oaxaca or El Tajin in the Late Classic. What is clearly needed to

resolve this question is excavation of Early Classic buildings in central and southern Campeche.

Equally well the mosaic nature of the Puuc stonework may well be a natural evolution based on the hard quality of the stone itself once the appropriate designs were selected. These designs would originally have been rendered in a non-mosaic fashion, since Peten style facade decoration (which is a potential antecedent) does not tend to be mosaic-like. Peten stone is soft and does not give itself to Puuc-like workmanship. The origin of the Greek frets at least, may well be in textiles. Peruvian scholars have long recognized the role of textiles in spreading Chavin and later Huari-Tiahuanaco iconography. The "origin" of Puuc designs may therefore not be in an earlier mosaic at all, but anywhere on a building, spread by textile samplers. Several elite women in Maya art wear huipil-like garments with step frets on the border.

The roof comb or upper zone decoration of Okolhuitz, a remarkable Rio Bec site with Peten-related architecture; has a host of different designs which later turn up in Puuc facades. Even though this amazing roof comb (or upper zone on one side) is featured by Gendrop at the beginning of his book on Puuc architecture, in a double page layout, the frets, indeed the long row of seeming colonnettes, are nowhere else mentioned.

Puuc 8: Boot-Shaped Vault Stones

The catchy term "boot-shaped" vault stone has made this feature one of the best known Puuc traits for scholars and students. The result is that we look for boot-shaped stones in each Puuc vault, and upon not finding them at Xtampak we may (prematurely) conclude that the vault is not 100% Puuc. Yet boot-shaped vault stones are the eccentric exception even in Puuc buildings. Most of the proto-Puuc vaults are stepped; hundreds of other Puuc vaults have traditional pan-Yucatan-Campeche generic-shaped vault stones. Actually, the boot-shaped stones are in more popular at Uxmal or in Chichen Itza buildings--this means in Late Puuc times, which are a special case of Puuc. Since hundreds of vaults at Xtampak are no longer standing there could well be boot-shaped stones among them.

Puuc 9: Curving Vault Profile

Earlier Puuc vaults are stepped. But fully classical Puuc vaults have a characteristic curve, almost a barrel-vault shape. The curve increases as the vault goes higher. Nothing like this is known for Peten, where the rooms tend to be narrower. At Nakum, the back room of Temple A is less than one meter wide--there is certainly no curve in its vault. Xtampak's Southwest Building has a beautiful example of a Puuc curving vault profile.

Puuc (10): Rio Bec: Embedded Columns

Each end of the palace at Xtampak has a set of three embedded columns. The middle one of each set is carved. Embedded columns are a rare trait and it is best to withhold their discussion until additional illustrations can be gathered in a future photography expedition to Yucatan and Campeche. In essence it is necessary to rewrite Pollock's summary of traits of Puuc architecture, illustrating each trait. In this same endeavor it is necessary to coordinate all the recent Puuc studies as well as a quantity of Puuc sites which were either not in Pollock's monograph at all, or where not illustrated by him. It would be well to have an eventual final summary when all of Teobert Maler's photographs are readily available, not to mention several thousand unpublished photographs of George Andrews. For now, it is better to continue a focus on the palaces of Xtampak to see where Puuc features there are found elsewhere, and to note which Puuc traits found elsewhere are missing at Xtampak. It is as important to recognize what is missing as to see what is self-evidently there.

RIO BEC

Although few people have ventured to visit a Rio Bec site in fact the overall Rio Bec style is quite well known to students from frequent inclusion of the curious "towers" in books on Maya

architecture. The ruins of Xpuhil feature a temple compound decorated by three such towers. The reconstruction drawing by Tatiana Proskouriakoff made this specific temple world famous. Since her drawing is so compelling it has been turned into the type site for Rio Bec, illustrating, for example, Michael Coe's popular book The Maya. The site of Rio Bec B has another outstanding set of towers, as does the site of Rio Bec N published for the first time recently by Graz Maya architectural historian Hasso Hohmann. These towers are so unique that they immediately became the focus of the definition of the Rio Bec style. Only in the last decade have scholars warned against picking on a single ostentatious trait with which to define an overall architectural style. We will see that Rio Bec architecture includes other traits.

There is no Rio Bec tower architecture yet known at any Puuc site (other than at Xtampak). Visitors who stay on the tour group route have no opportunity to see or learn about Rio Bec temples. Actually, the Rio Bec territory is not even well known archaeologically. Entire Rio Bec style cities are still buried in the scrub forest unknown to science. Karl Herbert Mayer, a Mayanist of Graz who has often been through the Rio Bec zone says this is the most promising of all sectors of Mexico in which to find additional Maya ruins. One reason is that little water is

available during the dry season; thus there is little population and few roads. There has not been a major expedition looking for ruins here since the Carnegie Institution of Washington in the 1930's. The few sites which are known were found basically by three expeditions, Count Maurice de Perigny in 1908 (an adventurous Frenchman who also discovered Nakum in Peten); a thesis research of Merwin in 1912; and that of the Carnegie. In fact, one ruin discovered by Merwin could not be found by any of the subsequent expeditions until local guide Juan de la Cruz Bricenos led Gillett Griffin there about 1970. The Rio Bec territory is twice the size of that of the better known Chenes yet half as well explored.

An initial problem with Puuc, Chenes, and Rio Bec architecture is the residue of Morley's concept of Old Empire versus New Empire. Morley was convinced that the glory of Maya civilization developed in the Uaxactun-Tikal area of Peten and that no major civilization existed in the Yucatan peninsula until migration from the fall of the (Peten) Old Empire created the New Empire of Yucatan. Though long ago disproven, and although no author would seriously propose such a model today, in fact every archaeologist over 40 years old was trained in this model, or at least inundated by this model's presence in virtually all older textbooks. Morley was convinced that Puuc was 11th-12th century,

even at Kabah (1947:341). Rio Bec was not then even considered as a separate entity; indeed, the site of Rio Bec was labeled as the "largest site in Chenes region," (Index, p. 515).

Southern, and especially central Campeche seem to be lost worlds in the pages of most textbooks. Either the major sites are simply not described or else all kinds of sites are mixed in together with the description of Rio Bec, everything from Coba to Calakmul. Both are more-appropriately removed totally from any heading of Rio Bec and moved back to the Peten section. In other textbooks central Campeche simply hardly appears, it disappears.

The Maya world is presented as those sites which have stratigraphic sequences of ceramics readily available in the standard monographs. It is thus the artifact sequence (specifically ceramics), or a long dynastic sequence on stone monuments that, understandably, dictates whether a site is included. That means that about 140 Puuc sites, a dozen Chenes sites, and twenty Rio Bec sites get lost from view. That is one goal of the F.L.A.A.R. aspect of research revolving around Santa Rosa Xtampak, to bring this entire area back to discussions of the cultural heritage of Mexico. And in this process by no means to focus all attention on Santa Rosa, but rather on principles of diffusion and on the entire evolutionary sequence of Puuc, Chenes, and Rio Bec

architecture. Our long-range interests are not excavation for excavation's sake, but on educational in general. It would seem that principles of diffusion are as crucial to a basic anthropological-archaeological education as is a sherd sequence. It is also possible that considering architecture as an artifact might enliven academic discussions. After all, it is monumental architecture which is the end product of dynastic activity which is chronicled on the stelae. And the revered body of the deceased members of the elite, surrounded by the very burial vessels which allow the ceramic sequence to be determined, are encased in monumental architecture. And it is buildings which were the backdrops for the use of the ceramics and indeed most other artifacts. The sequence of chipped stone artifacts and ceramics is and should remain the basis for scientific knowledge of the Maya but concomitant with these concerns there should be some means of allowing architecture per se to have a contribution to our picture of overall Maya civilization.

Of general textbooks George Kubler's provides the largest selection of Rio Bec towered buildings (1984). It is such books that are in world-civilization series of multi-national publishers that are looked up to by most students and advanced lay readers. The Pelican History of Art association alone assures that such a book will be in virtually every good-sized library. Unfortunately

archaeological field work produces new data faster than series editors are willing to invest in producing updated editions, thus the reader is told that the Chenes serpent facades are earlier at Copan than in the Chenes-Rio Bec area (Kubler 1984: 268). Such a dating is certainly not taken into account by any article or monograph on Chenes architecture. The dates of Rio Bec buildings are the only ones which have been dated by anything even approaching acceptable factors, yet no evolutionary sequence for Rio Bec (Becan and Chicanna) has become as well known as the basic sequence of Uaxactun and Tikal. The differences between an Early Classic and a Late Classic Peten building is easy to recognize once the characteristics of each are pointed out. Rio Bec dates and architectural style have not yet been adequately presented to Mayanists and indeed no easy-to-follow sequence of Copan buildings exists either, though at last the William Fash project is probably able to produce such a list. Thus I would hesitate to consider Copan as the origin of Chenes-Rio Bec facades--though if so this would certainly be a shock to Campeche scholars. No report on Chenes-Rio Bec architecture has come to terms with the latest discoveries at Copan itself.

Potter was the first archaeologist to make a major issue out of warning about defining an entire style on the basis of one or two prominent traits. In this case he followed up the earlier but

weaker cautions of Pollock who was also aware of Rio Bec offering more than just the towers. This caution is because of another style designation problem, namely that three of the largest Chenes buildings, about 100 miles north of the Rio Bec area, also have towers: Hochob (two towers), Dzibilnocac (three), and Xtampak (three). The Chenes towers were clearly evolved from those of Rio Bec. And, Rio Bec towers carried Chenes reptilian faces on their front doorways. Thus Potter suggested a combined style area, the Central Yucatecan style. Although this concept has been in print for over a decade, it in fact never wholly caught on. John Henderson's Maya textbook does have a section entitled Central Yucatan which actually typifies the omission that the Chenes and Rio Bec styles suffer. Puuc gets a justly deserved special chapter but Chenes is shown off via Hochob and Rio Bec gets lost in the rush past the Classic into the "Toltec" Post Classic.

Fortunately, virtually none of the other major Maya textbooks use the concept of Central Yucatan--a blessing for the reader who is probably rather confused since these styles have nothing to do with the state of Yucatan but actually with the state of Campeche. Potter's intent was to give the geographical sense of the Yucatan peninsula but since all the ruins are physically in the middle of Campeche, with the ocean nowhere near, it is

immaterial that greater Yucatan is a peninsula. The term "Central Campeche style" would have been more palatable but was fortunately not used.

Coe's Maya textbook stays with Chenes and Rio Bec as separate entities, albeit together in the same heading. Coba might best be given a separate heading as it does not belong there geographically or culturally. Kubler separates Chenes from Rio Bec even more, giving them each a separate heading. In general, he provides his readers with more architecture; the trend elsewhere is to fill textbooks with the latest excitement in iconography and epigraphy. Today with hindsight, we would add that the largest Chenes site is most likely Santa Rosa Xtampak, contended only by Dzibilnocac; and these sites are by no means after the Initial Series period, since Xtampak has eight stelae. Only certain late Puuc buildings at Uxmal might be that late. George Andrews has much better data for Puuc and Chenes dating. It might be best in upcoming editions of major textbooks to politely drop the academic jargon of Central Yucatan Style, keep Chenes and Rio Bec as the physical and political geographical areas that they are--within Campeche, and be more realistic about the diversity of Chenes and Rio Bec alike.

What we can salvage from Potter's considerate and useful study is his awareness that Rio Bec has more than towers to offer; that

Chenes had more than reptilian facades; and that Rio Bec towers had Chenes facades and Chenes facades were often flanked by Rio Bec towers. But it may be well that such Rio Bec towers on Chenes buildings were not always contemporaneous. Unfortunately, when buildings are excavated for tourism or for the "new non-restoration" in the haste the "archaeologists" have neglected to be archaeologists. They have functioned as bulldozers or at least suction machines. There is no acceptable series of architectural drawings published in a readily accessible source done during actual excavation showing the physical and stratigraphic relationship between the towers and the temple-palaces of Hormiguero. Karl Herbert Mayer reports seeing excavations in progress in the Rio Bec area where not even photographs were taken. I have seen worse at Edzna in the 1970's, where there was not even a student collecting artifacts. And no drawings whatsoever, no attempt to sort the collapse to see what had collapsed. Ramon Carrasco (1984) has initiated publications, though the photographs were ruined by the poor quality bond paper that soaked up the ink and eliminated contrast--thus key details are invisible. Unfortunately, there is not a single line drawing. Benavides also has published enough to raise considerable interest among Mayanists. Publication is the ultimate demonstration of professionalism.

If it was not for the Carnegie Institution of Washington and Paul Gendrop of UNAM the world's knowledge of Rio Bec would be close to zero. Andrews has evidently also worked there, though most of his published reports have covered the Puuc or Puuc-Chenes. Only his last paper, as yet unavailable, covers Rio Bec. Otherwise, no monograph and not even a complete article exists on Rio Bec architecture. Puuc is covered by a 600 page monograph and Chenes has at least Pollock's 1970 review. With such a lack of back-ground data the following comment on Rio Bec is provisional.

Rio Bec 1: Interior Stairways

Rio Bec buildings specialize in interior stairways. Such interior steps are inside most of the towers. The popular tradition is to call the Rio Bec towers "functionless other than decoration." But that was the same statement that J. Eric S. Thompson made about hieroglyphic texts on Maya pottery--mere decoration, therefore no real "meaning." But the Maya tended to have a reason for everything they did, especially something as structurally sophisticated as the temple-towers of Rio Bec. And the reason was multiple: first, the towers are primarily a stage front (or really a stage backing). They evoke full temple pyramids, which tend to be not as common in central Campeche or Yucatan as in southern Campeche-Peten. Second, the towers do indeed have rooms inside,

with hidden stairways leading up to them. I suspect these steps were to allow the priest or assistant to climb up inside the "solid" temple room to call out the words of the god, most likely accompanied by eerie music. In effect the solid towers were possibly oracle-like settings. There is plenty of acceptability for the concept of hidden voices in Maya culture. The two best known are on the island of Cozumel and the 19th century Maya of Chan Santa Cruz (today Felipe Carrillo Puerto, Quintana Roo).

The stairs which lead up inside Rio Bec buildings I have designated as "secretive stairs" or "informal stairs" since they are usually meandering, or, as in Becan Structure IV, literally informal. In the latter building they allow secretive access to the top floor, though not to an actual Rio Bec type of tower. Recently interior stairs were recorded at the Rio Bec site of Payan, a feature that earlier Carnegie Institution of Washington archaeologists had missed. The most unusual Maya passageway yet noted is at the little known Rio Bec area site of Corriental (Ruppert and Denison 1943: 86, Figs.106 and 107).

The importance of such interior stairways in Rio Bec sites is that nothing comparable is common at Puuc sites. Puuc stairways are almost always external, and usually three to five meters wide. Puuc stairways are also often secondary, since multi-story

palaces in the Puuc area tended to be built over long periods of time, with an upper story not included in the original design. When years later it. was necessary to add a second story, most of the lower floor was filled in with stone rubble to provide a solid base for a second floor. Then a stairway was built over the front of the first-floor rooms, usually leaving a vaulted opening against the first-floor doors so that they could still be used (it was the inner rooms of the first floor that would be filled in, not the outer floors).

Interior stairways imply sophisticated engineering, since the vault needs to rise in a stepped manner as the stairway rises. Rio Bec engineers seemed to have been accomplished in this art, both in the informal steps such as Becan and the various towers, and also in more formal inside steps such as in Hormiguero Str. III and Str. VII (Ruppert and Denison 1943: Figs.48 and 53).

But the Main Palace of Xtampak has two interior stairways, formal in the sense that they are all carefully organized with wide landings, neat 90 degree turns, and come out on both the second and third floors with a special open landing topped with a special roof. They are not as public as the main front steps but hardly secretive. The cultural importance of these two interior stairways are that they are essentially mirror images of each

other, as is everything else in the palace. This implies they were both designed by the same architect and both erected simultaneously. And, the entire palace would have had to have been raised the full three levels in a continuous building campaign in order to have these stairways exist. The stairwells are continuous the entire way up. The result is "stratigraphic" evidence that the entire palace was designed, constructed, and fully finished in a single continuous campaign. No other multistory Maya palace of this size that we know of was erected in such a manner, not even any Peten palace. The only three-story Peten palace is Tikal structure 5D-52, in the Central Acropolis. But this building has an exterior stairway, and part of the back inner level is filled in solid. Both features tell us that the upper floors were not added until later.

The only Tikal palaces that have interior stairways (and they are so rare in Peten that only three palaces have them: two at Tikal, one at Uaxactun) are just two stories high, and have only a single range of rooms at the top. Xtampak's Main Palace is three stories.

I had originally interpreted the Xtampak palace as a special adaptation of a Puuc palace, one might say a continuously erected Puuc variant. That is because of the many multi-story Puuc

palaces especially at Kabah, Labna, and Sayil, as well as a ruined example (possibly 4 or 5 stories) at Halal. But none of these was built at once, indeed the Palace of Labna has one wing which has the raised doorway molding which makes it easily a century earlier than the rest of the palace in Andrews' improvement of Pollock's original style-evolution sequence of Puuc architecture. One would imagine that the palaces of Kabah and Sayil likewise were built over generations. It is hard to believe that any of them had a plan that favored bilateral symmetry, or if so, haphazard design was planned. Nonetheless, since no multistory palaces of the Xtampak class are yet known at any other Chenes site, and since Labna, Sayil, and Kabah are just 60 miles north, these Puuc sites seemed a likely origin for the Xtampak palace.

But Gendrop and others had proposed Becan's multi-story buildings as the model for Xtampak. But the Becan models have only informal or secretive stairways, lack the bilateral symmetry which is so striking at Xtampak, and somehow did not evoke a feeling of similarity with that of Xtampak. And no multi-story palace of any kind was yet known for Rio Bec. So I continued with the hypothesis that the Main Palace of Xtampak was a regional adaptation of a Puuc palace. The square pilasters on both ends also reminded me of the square columns on the lower story of the Nun-

nery Quadrangle at Uxmal (which in its own way might also be considered "two stories").

But as I read more about Rio Bec I realized how little was known about the ancient cities of these areas. Other than Becan (which is rather small and compressed in order to fit within the wall-and-dry-moat fortification system) no other Rio Bec site has been totally mapped, or if mapped (which I presume Chicanna has been) the maps are not readily available for comparison. And always in the back of my head was the photographic memory of a stairway that I had seen about 5 years ago at the Rio Bec site of Manos Rojas (also known as "Kilometer 132"). INAH Becan guard Juan de la Cruz Briceños had told me about Manos Rojas at that time.

But there were so many wasps, I had no camera assistant, and the hike was full of brambles--not to mention the tropical heat and humidity--and I must admit I took not a single photograph. Unfortunately no one else seems to have taken many photographs inside Manos Rojas either. The views by Potter show the outstanding quality of preserved plaster (1977: Figs.76-78), comparable to the quality of that in Xtampak's Main Palace about 100 miles north. The photograph by Joyce Kelly (1982) shows the sad remains of what must have once been a fabulously decorated facade (Gendrop 1983: Fig. 76a and b)--but no inside views or even desriptions.

But I remember an interior stairway, by no means as well preserved as that of Santa Rosa, but by vague mind's eye remembered it as being formal, with all turns being 90 degrees. I do not know whether it went only two stories high, and whether there was a matching stairway elsewhere in the building, but I now suspect that this building may be the closest model we have left for Xtampak. Considering how rare interior stairways are it is surprising that the Manos Rojas steps have not earlier been illustrated or even discussed. The steps at Payan were overlooked until Andrews-Gendrop-UNAM students and Hohmann-Vogrin visited the same year, 1985, both led by Juan de la Cruz B.

The fact that such an important palace as that of Manos Rojas has been totally neglected shows what else will be found in the scrub forests of mid-Campeche, the entire zone just north of the end of Peten style, and then an even larger area between Rio Bec and Chenes--a total blank on the archaeological map. There is no archaeological map of Campeche as complete as there is of Yucatan. It is necessary to convey to the Maya aficionados that we do not even know how many Maya cities existed in this part of Mexico. And the few cities that have been found are incompletely mapped. Only Becan has been properly excavated, as proper excavation implies immediate and full publication. Xpuhil, Chicanna, and Rio Bec B were scientifically destroyed in the smoke screen of

"preservation." Andrews and Gendrop have put in print how astonished they were to see these sites ruined by the very "archaeologists" who were supposed to "save" the sites.

In the Chenes situation the tower stairways were often arranged so they could be climbed and on top were temples with actual rooms. But the southern origin of Rio Bec remains clear, since Chenes variation Rio Bec towers may have blind (solid) doors on one side, functional doors on the other side of the same tower.

Rio Bec-(Chenes) 2: "Statue Tenons" on Upper Zone

About every meter, all the way across the upper zone, are projecting stones. These protruding stones are in pairs, one in the medial molding, one directly above just under the cornice molding. There is usually such a pair directly at the corner, sticking out diagonally, though the corners are not always preserved. The Main Palace of Xtampak has an identical set of tenoned stones. Thus these stones seem to be associated with buildings erected during the period(s) when reptilian facades and towers were in vogue.

Other arrangements of tenons are common on the building facades of Yaxchilan. It is worth noting that calendar experts have

detected a Yucatec form of calendar being introduced at Yaxchilan shortly before its collapse. Whether the tenons predate the Yucatec influence has not yet been checked. It is more likely that such tenons are pan-Maya and go back in time. What is specifically Rio Bec and Chenes is the pattern and the sheer quantity. One of the most closely packed sets is on the better-preserved tower at Holmul, in Chenes land. Andrews has remarked that such facade tenons do not occur at Puuc sites (1985: 27).

On the upper zone of Labna's Mirador building comparable tenons still hold remains of stucco statues. Thus Andrews' observation holds only for upper zone tenon sets, since tenons per se are pan-peninsular. It is the location and spacing on the building that indicates whether they are "Chenes-Rio Bec" or "Puuc." On roof combs they tend to be Puuc; in repeated sets on the upper zone they tend to be Chenes-Rio Bec. On this basis Andrews (I believe correctly) sees this feature at Ichpich as Chenes (though we must always take care that the overall trait was not earlier in the Rio Bec area). Ichpich is an especially interesting specimen (Gendrop 1983: Fig.144). On core area Puuc structures there is usually no space for such tenons as the upper zone is filled with mosaic decoration.

On the basis of the Labna and other examples where statue parts still remain the tenons in Campeche are judged to have held com-

parable statues. So many statues along the facades would have totally altered their appearance, though from remains at Yaxchilan, we know that the facades there were indeed festooned with statues. Copan's buildings must have been equally overpopulated with statues. The actual appearance of Maya temples and palaces in the 8th century must have been garish. Seibal had an especially over-embellished temple facade in the middle of Group A.

Rio Bec 3: Models of Native Houses

The models of Maya huts in the Nunnery Quadrangle of Uxmal are so well known to millions of visitors that huts are widely considered a basic feature of Puuc architecture. Huts in the upper zoon may also be found at Labna (Portal Arch), at Chacmultun, and certainly also elsewhere. But Structure II at Chicanna has a giant hut as decoration, with giant hut as decoration, with the roof in the upper zone and its doorway as a door of the main building itself. Huts are also found on the false stairway of Hormiguero's towers. In the well area, at Hochob, a long slender hut flanks the main monster facade. These Rio Bec prototypes have not generally been brought up when the examples at Uxmal, Labna, and Chacmultun are discussed.

To a lesser degree in Rio Bec architecture the entire facade is divided up into house-like units. This tripartite division

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develops further in Chenes and Chenes-Puuc architecture where each unit develops even a house-like "roof." This is discussed in the chapter on Chenes traits.

Considering how deeply entrenched is the vision of huts at Uxmal these model houses are thought of as such pure Puuc that it is difficult to recognize that they occur almost certainly earlier in the Rio Bec and Chenes area, and that there is no antecedent in the Puuc area itself. The conclusion is that the model huts were borrowed along with other traits from Rio Bec architecture that had been introduced into the Chenes area.

Rio Bec-(Chenes) 4: Tripartite Facade Divisions into House-like units

A five-minute stroll through two plazas brings the visitor at Xtampak to a spacious quadrangle dominated by an almost perfectly preserved building, the north side of the "Cuartel." Such names are entirely the fantasy of early explorers. The north side of this quadrangle is the best-preserved palace building at the site, equal to the preservation at Labna, Sayil, Kabah, or Uxmal. Only the lack of a road has protected this site from being packed with tourists.

To architectural historians such as Pollock or Gendrop this palace exhibits a special trait which they label as diagnostic for Chenes. No monster facades are necessarily associated with this trait, as it features a tripartite division of the facade. The entire "building" is a single unit and indeed the triple division is so subtle in certain lighting conditions that the facade looks unitary from end to end. But in fact, the facade is divided into three "houses." Each "house" unit is complete with (simulated, front) corners. That the overall design intends to mirror a native house is demonstrated by the tripartite facade division of Str. II at Chicanna, Rio Bec territory, though without towers on this particular structure. This Chicanna building has actual native huts clearly presented in the upper zone, complete with thatched roofs--rendered in stone. Such stone models of native huts are best known from Uxmal's Nunnery and Chacmultun but are in fact present on the Chenes facade of Hochob and on the false Rio Bec stairway of Hormiguero Str. II.

Palaces with three doors are the basic feature throughout the entire Maya land which put a premium on a central axis with the center door being wider than the flanking doors. Although Peten palaces may be 5, 7, or especially 9 doorways, 3-doorwayed palaces are quite common throughout Peten. But in Hochob all three of the main structures are each three-doorwayed.

A tripartite facade dominates the nearby Puuc site of Xkichmook. Xkichmook shares other features with the Cuartel of Xtampak, namely the division of a longer palace into units creating pseudo-houses each with a single doorway. Although these are normally triple units at Xtampak one is of four units at Xkichmook. Thus the feature that stands out is the division into house units each with a single doorway. The Southeast Quadrangle of Xtampak does not seem to have the triple division, but then this may be a Puuc section of the site, with the Cuartel being a Chenes sector.

Proskouriakoff has reconstructed the palace underneath the three Rio Bec towers of Xpuhil as of three house-like units. Rio Bec B, though, does not have this division or the house arrangement of the overall facade. Hochob's main Chenes facade building is the ultimate expression of the triple-unit arrangement. It is tempting, though, to see the tripartite facade division as another standard Rio Bec trait which comes to the Chenes well region along with monster facades and towers.

The recently discovered Tigre Triste has a three-part facade division. Since no detail photographs are available it is difficult to know if the flanking units had a corner molding behind

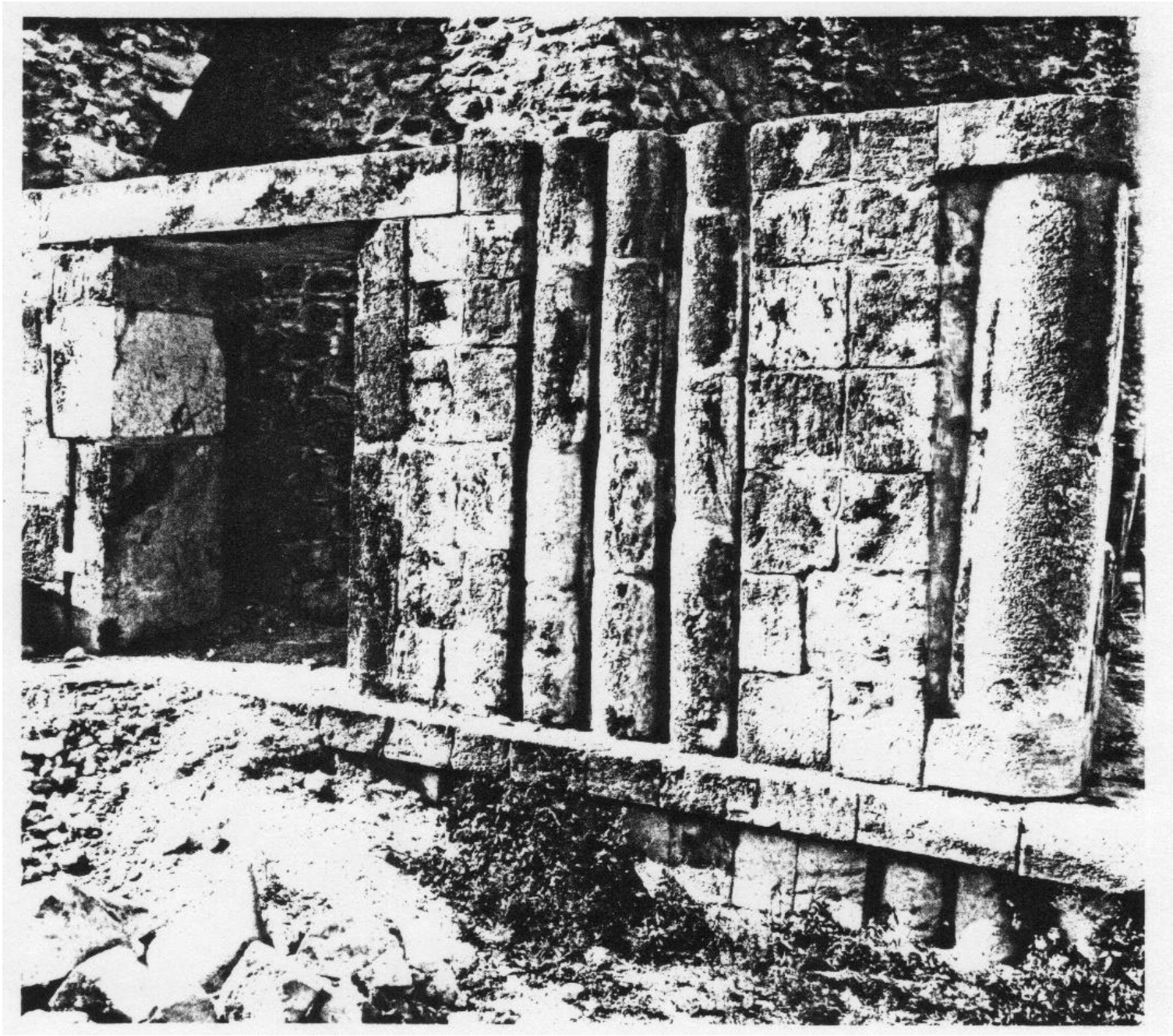


Fig. 18. Embedded columns as well as larger columns embedded in the corner are found on both wings of the Cuartel at Santa Rosa Xtampak and also here at Uxmal, on the Puuc structure later partially covered by the Pyramid of the Magician. The facade in this picture could be anywhere at Xtampak. It is here presumed later at Uxmal but this should be challenged by field data.

Fig. 19. Although the Chenes-Puuc temples are long known for the Chenes monster facade on the back of the Pyramid of the Magician at Uxmal, the Chenes-Puuc relationship of the facade of the lower story has not often been mentioned, in part because Chenes is defined almost exclusively on the basis of the eye-catching monster facades. Lesser details are not spectacular enough to remain in memory. **451608-6-Neg.4.**

the molding of the projecting central unit. I might tentatively suggest that the three-unit arrangement of Rio Bec was elaborated in Chenes and Chenes-Puuc into three (or more) more fully "complete" house presentations, though Culucbalom Str.1 (in the Rio Bec region) could be considered the ultimate in triple-unit facades--though in a totally different effect (Ruppert and Denison 1943: Fig. 112).

Rio Bec 5: Embedded Column Sets

Building C of Rio Bec and Structure 1 of the little known Rio Bec area site of Xaxbil (Gendrop 1983: Figs.12, a and b) have sets of three semi-columns fashioned into the wall. Both ends of the Main Palace of Xtampak have a comparable feature, though here the middle of the set of three columns is sculpted.

Rio Bec 6: Rounded Corners formed of Embedded Columns

Dzehkabtun, Str. 1, South Group and Dzibilnocac, Str. A1 (Andrews 1985: Figs.71 and 72) have building corners rounded by means of embedded columns. Thinner corner columns are on Yakal Chuc, a Puuc site with Chenes upper zone tenons (Andrews 1985: 27). Xtampak's Cuartel has inset single columns at each corner of each "house unit." This trait is present at other sites and warrants further study of relative dating and path of evolution.

Rio Bec 7: Groups of Short Fat Colonnettes in Basal Molding

Rio Bec B has sets of three fat colonnettes packed next to one another on the high basal molding. The temples on the flanking towers of Xtampak's Main Palace have wide colonnettes of the same size.

Rio Bec 8: Inset Panels on the Facade

Several Rio Bec buildings have inset panels with checkerboard designs (Rio Bec B), with cross-like forms (Becan Structure IV). Xtampak's main palace has a whole series of plain inset panels which at first were confused with pseudo- or blank doors. I suspect more likely they are Chenes area versions of Rio Bec inset panels. An inset panel is also found on at Culucbalom Str. 1, Rio Bec Group V, Str. IV (Stamps 1970: 92), Pechal Str. 6 (Gendrop 1983: Fig.75, d) and Kohunlich Str. VI (Andrews 1987: 24). At Pecha I the panel could indeed be considered a pseudo door. Nothing comparable is that well known in the Central Puuc area. Although Kohunlich is best known as a Peten-Belize style site because of the typical central lowland Maya stucco facade faces, in fact at one time Kohunlich was either altogether a Rio Bec site or considerably influenced by Rio Bec, including pure Rio

Bec false towers. There is a Rio Bec site not that far away, at Nicolas Bravo.

The deep panels on the facade of the Reviewing stand at Copan have been considered as niches for statues. Is it possible that they are that, but in the sense of extra-deep examples of what decorates the back of the third story of Xtampak's Main Palace?

Rio Bec 9: Sunken Panel over Doorway

The Chenes area sites of Dzibiltun (Pollock 1970: Fig.26) and Santa Rosa Xtampak (ibid.: 68; Stamps 1970: Fig.18) have rectangular inset panels over two doorways. The two rooms, 20 and 23, at Santa Rosa which have this feature also include two parallel vault springs (Hellmuth photographs). Pollock observes that sunken panels within vaults over doorways appear in the Rio Bec area (Ruppert and Denison 1943: 35-36 and P1. 10b [Rio Bec, Group V, Str. IV], 60 (Becan, Str. VIII, Room 7), 89, Fig. 115. and Pl. 43a (Culucbalom, Str. 1). Potter repeats this list adding a reference to what he terms a "variable vault spring level" as a "scattered characteristic throughout central Yucatan. It occurs at Str. VIII, Becan; Str. I, Xpuhil, Group II, Str. IV, Rio Bec, Group V; Str. I, Culucbalom." Considering that all of these sites are in the center of the State of Campeche it does not help the average

Fig. 20. The recessed panels of the Main Palace, third floor, stand out best for photography in the afternoon sun. Also visible in this photograph is the row of tenoned stones which stick out at the medial molding. Each has a corresponding top tenoned stone above, but these have mostly fallen or are hidden by vegetation. The back of the palace is remarkably well preserved since it had no doorways whose failing lintels are what bring down entire facades. On the far left foreground is the entry/exit to the North Interior stairway at the second level. The lower center of the photograph shows the inside of a long room with secondary divider wall across the middle. You can see the vault continuing behind the divider wall. Santa Rosa Xtampak. **451608-29-Neg.13.**

Fig. 21. Although the six inset zones over doorways in the Chenes palace of Santa Rosa Xtampak would suggest this feature as being local Chenes, in fact a comparable inset panel occurs in the Rio Bec area, but is either not as fully preserved or has not yet been adequately photographed or published other than a mention. Here the front doorway of Room 6, looking west, Main Palace. The wooden lintel is original and unrestored. **451608-13-Neg.21.**

reader to label this as central Yucatan, even though Campeche is geographically in the Yucatan peninsula. Culturally Rio Bec sites are Campeche oriented, indeed if anything look more to Peten or Quintana Roo than to anything related to Yucatan. Not one is illustrated by Potter.

Ruppert adds that Lizardi Ramos (1940: 17) shows a comparable feature at the little-known site of Higuera, east of Bacalar.

The published line drawing of the Xtampak supra-vault inset panel is difficult to understand and requires mentally trying to rearrange the published drawing in three-dimensions. It would have been more helpful to the reader to render the drawing in three-dimensions right from the beginning, especially for a trait as rare as this.

Rio Bec 10: Vertical Panel of Monster Faces on Lower Zone of Wall

Tigre Triste (Gendrop et al. 1985), has vertical panels of monster faces on the exterior walls. Puuc buildings tend to have their monster faces on the upper zone, especially at the corners. The Cuartel of Xtampak has vertical panels all right, but of what looks like an insect, not a reptile. This Rio Bec trait has not been as well-known as it deserves as most attention has gone to the monsters that form entire facades.

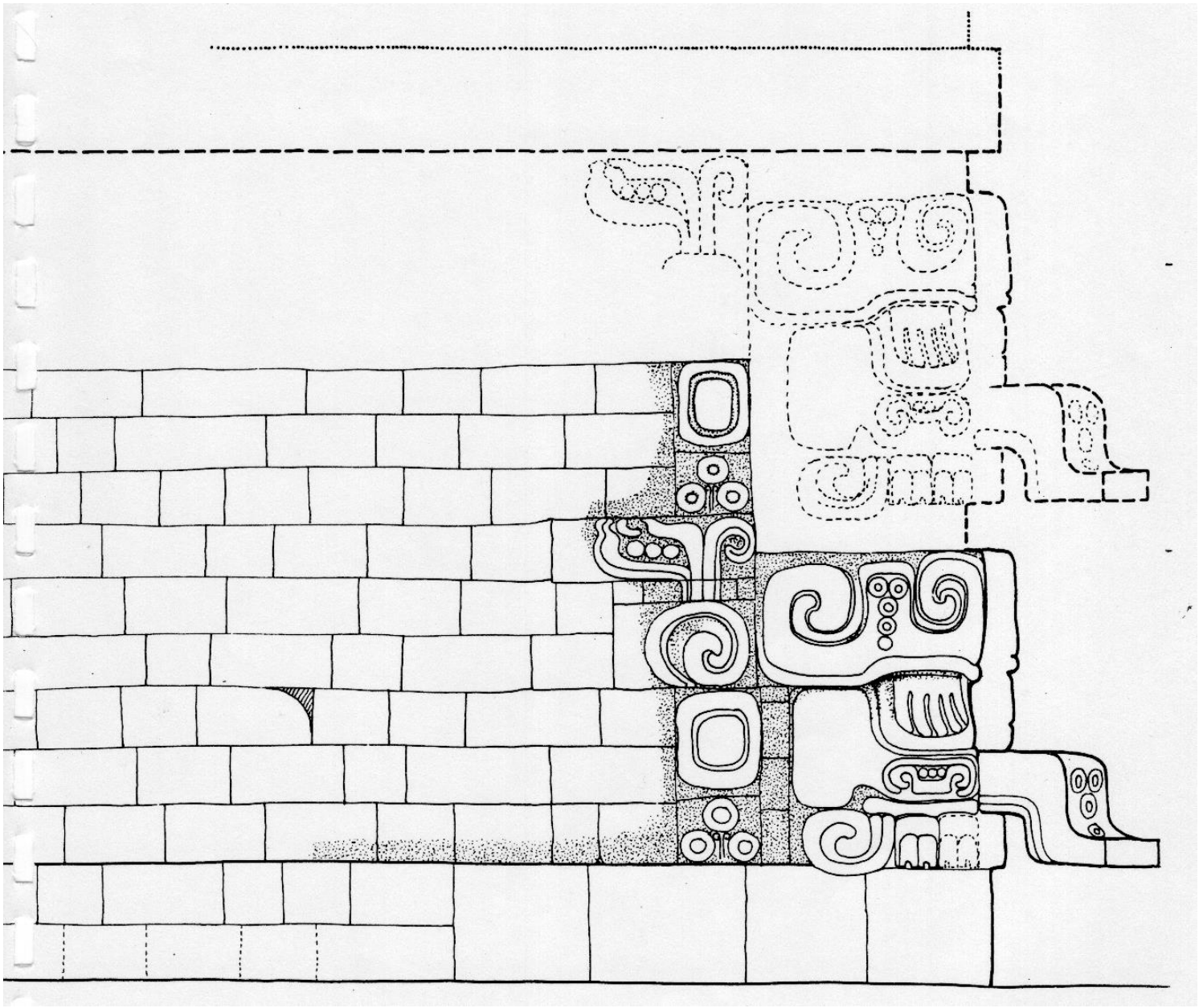


Fig. 22. Long-snouted monsters are generally considered "Puuc," yet when arranged in stacks on the corners this is a feature of Chenes monster facade structures in a Rio Bec context, especially at Hormiguero and Hochob. Thus when stacked monster faces occur at Copan are they a Puuc, a Chenes, or a Rio Bec influence? Hohmann and Vogrin 1982.

Rio Bec 11: Rooms Up to Four Deep

Puuc and Chenes buildings tend to be just one or two rooms deep. Rio Bec buildings also tend to follow this pan-Maya norm, yet buildings up to four rooms deep are known from Rio Bec sites (Payan, Ruppert and Denison 1943: Fig. 95; Peor es Nada, ibid.: Fig. 118a).

Rio Bec 12: Towers

The towers of Rio Bec, Xpuhil, and Hormiguero are well enough known in the literature as to hardly require any further comment. I can only remind Mayanists that Mexican archaeologists (Carrasco 1984) have ascertained that the towers at least at some Chenes sites and evidently also on occasion in the Rio Bec area were secondary, that is, added after the main temple had been finished. Outside of the Middle American Research Institute for Becan not any of the excavations of a single tower has been adequately reported, indeed there is an international concern that the field work was never even adequately photographed or drawn from the beginning. Such breach of scientific ethics has caused as much loss of information as has the destruction by grave robbers.

It is known to Chenes-Rio Bec specialists, but warrants repeating for a wider audience of this' report, that the towers of the Chenes area are quite different than those of the Rio Bec area. So far not one of the Chenes area towers has a secretive stairway within. The Xpuhil and Payan towers definitely have such stairways in the Rio Bec area; Becan Str. IV has informal secretive steps though no towers. Certainly many of the towers elsewhere in Rio Bec also have hidden interior stairways.

But the Xtampak (Chenes) towers have a high room inside the lower section--no stairway there at all.

And the front stairs to the Hochob and Dzibilnocac towers are functional, as are the temples themselves. The Xtampak towers also appear to have normal, accessible temple rooms as well (in addition to the room in the base).

As Rio Bec is increasingly recognized as the source for features in architecture of the rest of the peninsula it also needs to be considered what features were not accepted or not diffused, namely the towers are not known outside Chenes and Rio Bec. There are dragon facades at Copan but no towers. No towers exist at any Puuc site either, though it has been suggested that the Chenes

facade now absorbed by the Adivino at Uxmal may once have been an adaptation of a single tower. It has also been proposed that Tabasqueño is an example of a single tower. Single dragon-facade temples, though, do not automatically have to be single towers. There were plenty of buildings in the Rio Bec area, at Becan, Chicanna, and Hormiguero which display monumental reptile facades but are by no means necessarily single-tower versions of "Rio Bec temples." Whereas most towers may have displayed reptile facades, by no means are all dragon facades related to towers. One dragon facade of Xtampak is directly on ground level.

This discussion of towers has been saved until the last deliberately in order to allow more attention on the many other Rio Bec traits. Unfortunately, the other Rio Bec architectural features are not as flashy, and therefore will not be so easy to remember. Overall knowledge of Maya civilization has increased to such an avalanche of data that no Mayanist can absorb it all. That means that an awareness of advances in understanding of architecture ends up competing with the spectacular ability to read Mayan hieroglyphic writing, not to mention the. discoveries of meaning in Maya art--iconography.

Rio Bec 13: No Spring at Vault Beginning

Chenes vaults have a spring along both long sides of the room; actually the end has no vault at all--just a continuation of the vertical wall. Puuc rooms tend to have a spring on all four sides, though the end soffits (the facing of the vault) do not lean as much as the actual vault soffits on the side. Many Rio Bec rooms have no overlapping spring at all. Unfortunately, fewer Rio Bec room profiles are available--most published profiles are the result of Pollock's decades of research. Although there is a lengthy article on Chenes architecture (Pollock 1970) and a monumental monograph on Puuc architecture (Pollock) no comparable monograph exists on Rio Bec architecture, though Ruppert and Denison's expedition report serves that purpose in the meantime. Considering the probability that it is through the Rio Bec region that architectural influence was diffused from Peten into Yucatan, and with Rio Bec architecture being the most likely source for much that is found in Chenes architecture, it would seem that Rio Bec buildings deserve a fresh study, starting with total phot9graphic coverage. Andrews has gathered much of the needed data in over a decade of field trips, but this information on Rio Bec has not been as well published as his data on Puuc and Chenes-Puuc.

The lack of a spring on Rio Bec walls also sets this architecture apart from Peten buildings which have a spring wherever there is

a vault. Chenes construction practices, with the side spring and neater masonry, are one of the few features of Chenes buildings that cannot be attributed to Rio Bec influence. On the contrary, the Chenes vault spring demonstrates that at least something in the well area can still be labeled as indigenous Chenes.

CHENES

CHENES ARCHITECTURE

Santa Rosa Xtampak is immediately north of towns of Campeche's Chenes region. Two dragon facades are still extant at Xtampak, on the central tower of the Main Palace and on the Dragon Facade Building across the plaza. The two flanking towers of the Main Acropolis most likely also pad monster facades but they are totally collapsed now. If eventual excavation is dedicated to cataloging fallen architecture then such missing facades can be restored at least on paper. These facades are universally considered as diagnostic for Chenes architecture. But increasingly scholars have pointed out that monster facades could equally well be considered as Rio Bec, and that other features in the Chenes region typical this area of wells.

By coincidence of history dragon facades were first publicized for Hochob, Tabasqueño, and Dzibilnocac--typical Chenes sites. Stephens and Catherwood spent most of their years in the Puuc area so it was not until Teobert Maler's explorations of the 1890's that Chenes sites were first photographed. His outstanding photography combined with the drawings published by Seler in 1916 guaranteed a permanent place in Maya history for the Chenes region. Since the monster facades of Rio Bee were then not as well known, the "region of the wells," Chenes, got locked in perpetual association with the dragon facades. It is unlikely that many people would seriously consider that the monster facades originated anywhere else but in the Hopelchen-Bolenchen area. Kubler's statement that "Chenes" masks may be earlier at Copan (1984: 232, 267) has not changed the published history of Maya architectural development (no stratigraphic evidence is yet at hand to document this novel concept).

The point which needs to be made is that if the dragon facades had been found first at Chicanna and Hormiguero (in the Rio Bee area that is) then everyone today would have no trouble accepting that these facades were developed in the Rio Bee and then were simply borrowed by the neighboring Maya to the north, those of the Chenes region. Potter's serious attempt to break through the

Chenes-Rio Bec gridlock in the average Mayanist's conception might have more success if the historical background were made absolutely clear. Dragon masks are thought of as "Chenes" not because they are indigenous, not because the inhabitants of the wells region developed them--but simply because Maler found and Seler published them first from this region.

And the same for Rio Bec. The false tower features were first really noticed at Rio Bec and Xpuhil. Proskouriakoff's beautiful drawings and Merwin's (?) model of Rio Bec itself made the false towers the perpetual international symbol of Rio Bec architecture. It took decades to recognize that comparable (though by no means identical) towers were present at virtually all major Chenes sites. But worse, the association of the tower-facades with Rio Bec had the accidental effect of focusing so much attention to the towers that all the other features of Rio Bec architecture were overlooked.

It will require considerable and unequivocal stratigraphic evidence to cause Mayanists to revise their feelings about what is “Chenes" and what is "Rio Bec," so this section on Chenes is deliberately left in the traditional framework. In the interests of finishing the historical background it is worth seeking the origin of the use of the word Chenes to describe this region, as

that word is not even in the index of Spinden. I would therefore imagine it must derive from Carnegie Institution of Washington archaeologists. Proskouriakoff is already using the terms "Rio Bec" and "Rio Bec-Chenes" by 1946. Brainerd's revision of Morley's The Ancient Maya was quite specific in using these terms and considering Rio Bec-Chenes as sharing much in common (1956: 75). In a way it may have been Pollock's separation of Chenes alone, away from a Chenes-Rio Bec combination for his 1970 article on Chenes architecture that firmly cemented Chenes as almost an independent style, though Pollock was well aware of relationships between Chenes and Rio Bec. One way out of the dilemma is to keep Chenes and Rio Bec as geographical terms and to publish more and better line drawings so that the similarities and differences of Rio Bec and Chenes can be self-evident. The reason why Chenes ought to be kept separate from Rio Bec is that so many of the features (in addition to the monster facades) in the well region are potentially evolved from Rio Bec. In effect it could be considered that there is only one style, namely Rio Bec, consisting of heartland Rio Bec and diffused or evolved Rio Bec in the wells area. It might help to remove the word Chenes· altogether. What remains as Chenes are traits such as vault springs, masonry patterns, and other features not common to the south. This is not my model, only a comment that can be equally well disproven as documented when further research reaches this

point. We are still at the stage of formulating questions--not yet answering them.

Proponents of a unified Central Yucatan Style have not yet answered (or even asked) why towers did not diffuse to Copan along with dragon facades. It is understandable why Rio Bec sham temples were not imported at Tikal but there are no more pyramids at Copan than at Xtampak or Dzibilnocac. Yet only the monster facades were taken up at Copan, and at Tikal. Since Rio Bec is closer to Peten, and thereby to Copan, it is curious that no Rio Bec traits have yet been recognized at Copan (unless the recessed areas of the Reviewing Stand were somehow extreme developments from Rio Bec-Chenes inset facade panels). It is also worth pointing out that all references to the dragon facades at Copan call them "Chenes," forgetting that the origin could well have been Rio Bec, even without towers. This boils down to whether the facade masks of the well area can be distinguished from those of the dry river area. Thus a new question needs to be answered, are the monster facades at Copan really from the Chenes region, or are they possibly Rio Bec. This entire section is based on the probability that the dragon masks are later at Copan than in Campeche. Kubler is one of the few who suggests the Copan examples are the earliest known. Only the Fash project will answer that question one way or another.

CHENES AT TIKAL

The Palace of the Grooves at Tikal is so named from the repetitive vertical fluting in the walls. This is the only such Maya palace known with such wall decoration; this is neither a Puuc, Chenes, Rio Bec--nor Peten trait. But at the entrance to a tunnel, off to one side of the plain normal Peten-like entrance, is a monster face whose mouth is the entrance to the tunnel. At the courtyard exit of the same tunnel is also the faded remains of a comparable mask. Peten stone is so soft that the details are eroded. There is no hope to uncover as much detail as in the considerably harder and mosaic-like stone of mid-Campeche. But five hundred miles to the southeast is veritably an entire site full of Chenes facades, complete even with corner "Chac" masks. In that sense the Copan buildings are to one degree "more Chenes'" than any building at Xtampak.

The Palace of the Grooves was excavated and thoroughly recorded by experienced Guatemalan archaeologists Carlos Rudy Larios, Miguel Orrego C., and associates. Every single part of the palace was carefully drawn, in the field. Unfortunately, though, no good reconstruction drawing of the Tikal monster doorways is available from the Tikal staff itself. A sketch by Gendrop is all that

exists readily in print; considering how eroded the facade is at this point, Gendrop's artist should not be blamed entirely for the crudity and incompleteness of the drawing.

Kubler makes an interesting suggestion (1984: 232, 267) that Holmul Building A (Group II, east side, Merwin and Vaillant 1932: Fig. 11, Pls. 4, 5) is an antecedent or parallel in the Peten. The mouth is too poorly preserved but does not seem to have included a doorway, in fact the mask decorates a giant platform; the building itself is on the top level. And, not enough remains to ascertain whether the mask was a serpent or not.

Stucco masks for Peten buildings are standard features from the Preclassic on. Whereas it is most likely that the mouth-doorway mask evolved somehow from one or other of the Peten-Belize masks, the Holmul facade is an unclassifiable example and not on the direct line of evolution. Peten facade faces include felines (EI Mirador), a variety of unnamed and unrecognized deities (recently discovered by Guatemalan archaeologists at Uaxactun), Cauac Monster (Tikal North Acropolis), a Sun God variant (Kohunlich), a Principal Bird Deity (Tikal North Acropolis, previously misidentified as Chac, recently corrected to the bird species, Hellmuth 1987: Figs. 518, 526, 527), and a host of other monsters. Few are in the same reptilian family as the Rio Bec and Chenes

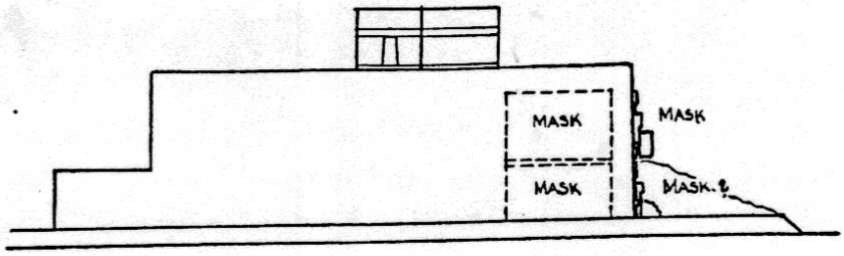


FIG. 9. Building A, Group II: section

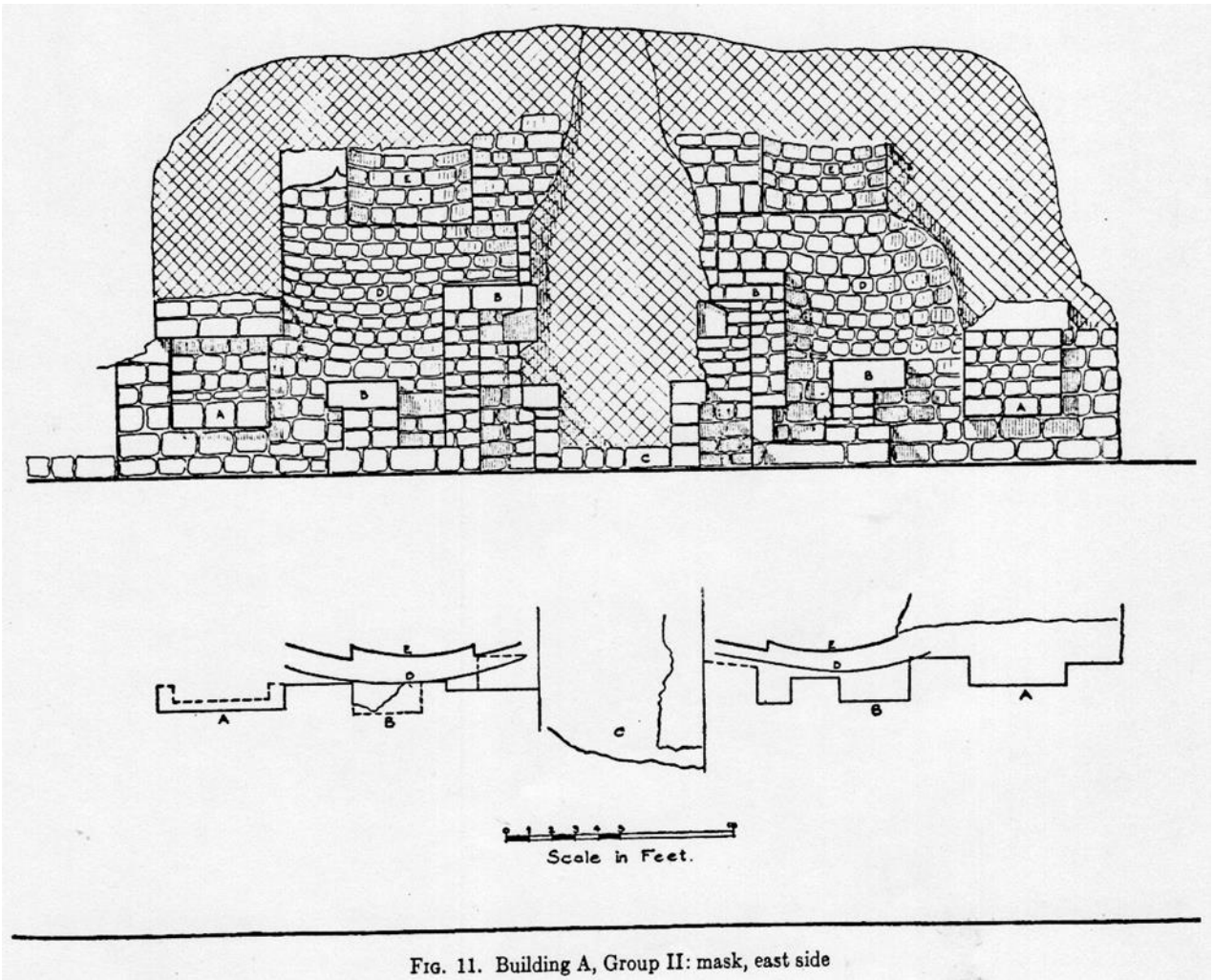


FIG. 11. Building A, Group II: mask, east side

Fig. 23. Holmul, Building A, Group II: facade masks have a long history in Maya architecture before the Rococo elaborations of the Rio Bec and Chenes regions. Merwin and Vaillant, 1932, The Ruins of Holmul, Peabody Museum, Harvard University, Fig. 9 and Fig. 11.

facade creatures. And only at Tikal, and possibly a smaller mask at Caracol through whose mouth one could crawl into a tunnel, is the monster mouth an entranceway.

Chenes at Copan

The Chenes features of Copan have long been known. Trik (1939); Robicsek (1972: Pl.188, 189) and more recently Hohmann and Vogrin. The latter have published facade illustrations of all structures excavated at Copan up to 1977 (1982: Str.11a, Abb.154; Str.11b, Abb.152; Str.16, Abb.161, Str.22, Abb. 315, 319). Copan Temple 22 is the best known but Str. 11 and possibly Str.16 also had Chenes entrance masks. What is more, the Copan facades include the extension of the lower jaw out in front of the main face. These features were not known at Hochob or Hormiguero until excavation of the 1980's (Gendrop 1985).

Kubler has proposed that Copan Temple 22 is the earliest of the dragon doorway facades (1984: 232, 268). Since this statement has been made in the Penguin History of Art series book on pre-Columbian architecture, this statement is cited over and over again, most recently by Francis Murphy (1988: 76). Neither Andrews (for Campeche viewpoint), Potter (for Campeche viewpoint), Ball (the latest facts based on sherd stratigraphy for Rio Bec (Becan)

area), Fash and Schele (for Copan viewpoint), or Hohmann (who has worked both at Copan and in Rio Bec area) have commented on the Kubler dating. This is important enough so that Campeche specialists and Copan specialists need to clarify the relative dating so that the citation can be accepted, modified, or politely replaced.

The Copan ballcourt is reconstructed with its medial molding raised over the doorway. Andrews has documented that identical doorway moldings at Kabah, Labna, and other Puuc sites are one of the earlier manifestations of monumental architecture still standing in the Puuc zone, before Chac masks, before mosaic panels (1985; 1986). A slightly different arrangement of a raised molding can be later, and Chenes-related, such as at Xtampak's Cuartel adjacent to the Palace of the Governors at Uxmal, or the east wing of the Nunnery, Chichen Itza. The question remains of whether this raised molding at Copan is a restoration or original--the ballcourt excavations were never fully published.

Whether the door-sized niches on the Reviewing stand at Copan are deeper varieties of the Xtampak recessed panels is difficult to ascertain. The Reviewing Stand is directly below a building with Chenes-related monster doorways.

Whether the bat statue over the doorway of Hormiguero Str. II has any relationship with the bat as patron of Copan has not been tested. The bat is not well known since it does not appear in any of the drawings by Gendrop--Hormiguero is not represented by a line drawing in his 1983 monograph.

Chenes 1: Entrances as Openings to Hell

Mexican architectural historians have compared the Chenes facade faces with the Olmec monster faces of Chalcatzingo and concluded that the Chenes faces were likewise entrances to a cave. The metaphor of a cave entrance may indeed be present, though the Olmec cave entrance has a very specific quatrefoil shape, and usually with a plant at each corner. The creature whose mask is behind the Olmec mask is not normally presented in a fully physical form. It will take more than a vivid imagination to document that the Chenes-Rio Bec facades are derived from the Olmec mouth entrances.

The reptile which creates the Chenes facade is more closely related to a half-snake half-crocodile creature. No Chenes or Rio Bec doorway monster is in a quatrefoil shape. Comparable reptilian creatures in other contexts often have the head of a god or ruler encased in their open mouth. I have argued elsewhere

that these Maya monsters are not normally pictured as biting, chewing, swallowing, or attacking the personage in their jaws (Hellmuth 1987) (though on Chalcatzingo Relief 5 the monster is clearly attacking a victim and devouring him (Gay 1971: Fig. 25).

Despite several articles on Chenes-Rio Bec monster-mouth facades the creature itself has never been properly identified. Most early reports presumed the creature was Itzamna. Itzamna is incorrect on two grounds: first, Itzamna is not a reptile but an old man; Thompson's reptilian error is now well known, and reviewed in a later section. Second, the Itzamna of Thompson was in any event never properly cataloged or identified. Every imaginable kind of reptile was thrown in together. The facades are not Itzamna but are indeed reptilian. But there are so many thousand reptilian representations in Maya art that so far, no scholar has attempted to catalog them adequately. At least in the last two decades the Cauac (Witz) monsters have been separated out. Until we understand who the facade monster is it seems premature to state that it is the same as the Olmec Chalcatzingo portal-mouths. Certainly it is part of the same pan-Mesoamerican monster-mouth-cave concept, as Schavelzon pointed out, but the Olmec mouth-entrances tend to include feline associations. Chenes-Rio Bee facades have a nose--indeed a prominent one--and along with so many teeth the facade creature evidences

crocodilian components. The zoological and iconographic description of Chenes-Rio Bec facades has still to be written, though Gendrop's many attempts are a good start. Whoever produces a monograph length study of reptiles in Maya art and architecture would be rendering scholarship a considerable service--as long as the iconography is visually acute.

Chenes 2: Entrances as a Capsule of Metamorphosis/Transportation

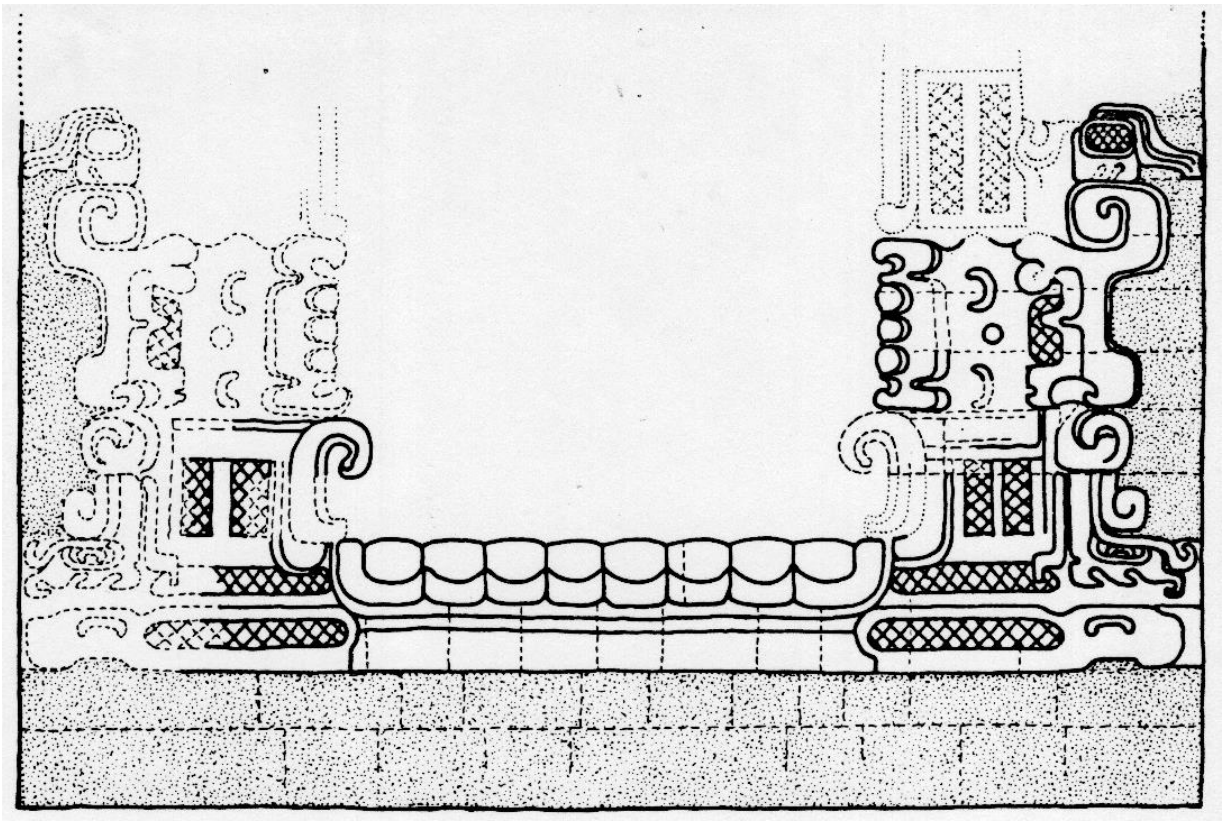
My hypothesis, detailed in a recent book Monsters and Men in Maya Art, is that the personages in the jaws are being transported, transmuted through mythical space or going from one stage of life after death to another. I encourage other iconographers, ethnographers, or historians of religion to revise, indeed to rewrite, this hypothesis but in the meantime it is a presentable concept. Whereas I had previously always considered that the monster facade was to enable a priest or ruler to walk into the belly of the beast so to speak, I now suspect that the facades were as much for stage settings, as monumental backdrops, as for activities to transpire inside the creature. The documentation for the concept of the "entrance-ways" as stage settings is in the following section.

Chenes 3: Entrances as Ornate Throne Settings

Copan Temple 11's dragon facade doorway has a double cross-hachure band along the bottom. Such bands are actually related to black-white-black thrones; with the enclosing jaws they are similar to the base of the sarcophagus cover of Palenque. Cross-hachure in Maya art may represent snake or fish scales but generally designates the color black. If so these are black-white-black thrones. Whether that relates them to the black-white-black bone thrones of the Peten Tepeu period Dance after Death needs to be studied (Hellmuth 1978: 213). If so then the black-white-black bands are visual or phonetic puns on long bones with somewhat flower-like ends. The bone aspect of the thrones is evident in a Museo Popol Vuh vase (op cit.). Double cross-hachure band thrones are best known from the zoomorphic altars of Copan. Initially Kubler and Clancy (*) and most recently Hohmann (and Vogrin 1982: Abb. 40) have demonstrated satisfactorily that "altars" could also serve as seats or thrones. The Olmec murals of Oxtotitlan rock shelter in Guerrero (Grove 1970: frontis-piece) prove that conclusively, since the throne on which that Olmec bird-personage sits is essentially the same as any of the giant La Venta "altars." Nonetheless it is needless (as well as hopeless) to attempt to change the name of the hundreds of Mesoamerican altars to "pedestals." Pedestal is the worst possible word choice, since that also implies a setting for a

Fig. 26. Palenque, Temple of the Sun, sanctuary tablet (after Maudslay, IV, pl. 88)

Fig. 24. Double bands of cross-hachure as a throne on a Tepeu 3 vessel in the Pearlman Collection (Coe 1982). And at Palenque, Temple of the Sun, Sanctuary Tablet (after Maudslay IV, pl. 88 from Kubler).



STR11 SF SPA

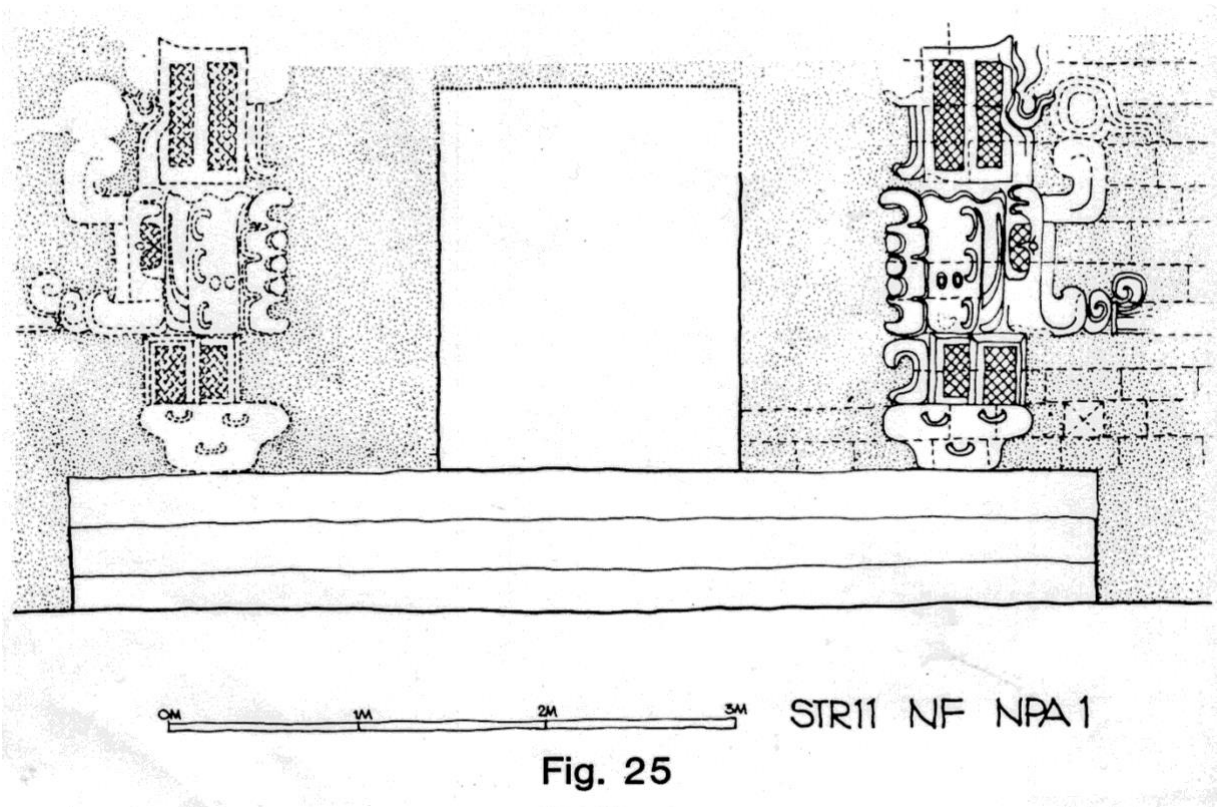


Fig. 25

Fig. 25. Double bands of cross-hachure as Chenes facades at Copan, Structure 11 (Hohmann and Vogrin 1982).

statue. Plain "seat" is adequate, but so is "altar." Two Piedras Negras stelae and three polychrome Maya vases picture human victims stretched out on a typical Peten altar--in fact the three vases even have a stela pictured behind. As long as the Maya used these monoliths for human sacrifice than the English word altar is appropriate.

The double cross-hachure of the Copan Temple 11 facade suggests that the Maya intended someone to sit, enthroned, in the doorway, in an analogous manner to lords and gods seated in the jaws of monsters on stelae, pottery, etc. This model needs to be tested. The image derives directly from age-old Maya concepts. This new hypothesis does not supersede that of Schavelzon (*). The zoomorphic portals could still equally well be cave entrances-after all the Olmec ruler at Chalcatzingo is sitting in his monster cave entrance. But the Maya dragon facade of A.D. 800 should not so hastily be considered a mirror of a 1000 B.C. or whatever date Chalcatzingo cave entrance. The Olmec cave and the Chenes-Rio Bec facade share features, but the Maya series adds so many cultural associations that it needs to be analyzed from a Maya point 'of view. And that is the concept of reptilian monsters as holders, as transporters, as an agency of metamorphosis.

The question remains as to regional differences between the Copan facade with the double-hachure and the Chenes-Rio Bec which seem

to lack that, though the quality of excavation of the lower portion of the Chenes-Rio Bec facades has not been entirely exemplary. Nonetheless it would seem that the extended lower jaw of the Chicanna monster facades could represent a place to set the enthroned ruler or a deity impersonator, who would appear as seated in the jaws of the monster just as on stelae. The facade as a dramatic background for an enthroned ruler presented as transported in the maul has not been considered in previous analyses of these facades. The iconography of architecture can be improved in this manner based on results from iconography of stelae and pottery.

Iconography is most effective when a maximum number of individual examples can be gathered together to demonstrate a pattern. In such research it helps to have as many unpublished items as possible, since they usually show something that was not previously noticed in all the standard works. Thus a preliminary list of double hachure-bands is as follows:

Copan, Stela 1, east face, at the bottom, on Witz Monster
Copan, Zoomorphic Altar U, Copan museum
Palenque, sanctuary tablet, Temple of the Sun
Xupa panel (Mayer 1981)
Tepeu 3 black vase (Hellmuth 1978: 175; Coe 1982: Pearlman

No. 62 and back cover)

another similar Tepeu 3 vase, in this case dark brown (Hellmuth 1978: 174)

Tepeu 2, polychrome vase, Peten, Museo Popol Vuh (Hellmuth 1978: 213)

plus quite a few others that can be noticed in the literature.

But seldom was it pointed out that such a double band with flowering ends was specifically a throne top. Future iconography will undoubtedly add and subtract other meanings, but at least now we know the double-band hachure is related to the top of a throne. Thus Copan Altar U can be demonstrated to be a throne. I do not have Clancy's report to know whether she uses the same cross-hachure band as part of her evidence. I worked this pattern out from its occurrence on the Museo Popol Vuh vessel over a decade ago.

A further possible Copan-Campeche similarity is the stairway of Copan Structure 20 which is arranged in a comparable manner to that of Chenes building at the Rio Bec area site of Chicanna, Structure XX. This observation is to point out that other similarities may turn up between Copan and Campeche other than solely monster facade doorways.

Chenes 4: Doorways with Raised Medial Molding

The well-preserved facade of the middle unit of the Cuartel at Xtampak has a raised molding. In a 1987 article Andrews refers the reader to his 1985 article on such raised moldings. Andrews dates raised moldings on traditional Puuc buildings as. between A.D. 650-770. He considers the Xtampak Cuartel example as well as the rare instance at Uxmal, Building 1 West of the Governor's Palace as dating around A.D. 800 (1985: 73). The later 1987 report on Xtampak adds no specific further information on this trait at Xtampak.

The best-known example of a raised molding where it is definitely a late trait and no longer Early Puuc, is on the East Wing of the Nunnery at Chichen Itza. Here the molding is raised to facilitate placement of teeth in an abbreviated Chichen Itza Puuc version of a Chenes monster facade. The teeth are present but not the entire rest of the expected face. Instead, the facade is turned into a display of Puuc decoration, probably rather late Puuc at that.

Regular (full-fledged) Chenes-Rio Bec masks do not have an actual molding across the central door area since the facial parts occupy that area. The Hormiguero mask is one of the few that includes what could be traced out as a raised medial molding (doubling as the upper lip) going across the door area.

a

b

Fig. 26. Doorways with raised medial molding in the Cuartel, Santa Rosa Xtampak are similar to that on the East wing of the Nunnery at Chichen Itza. **451608-23-Neg.31, 451608-24-Neg.18** (with a bit of the central stairway mass visible at the left).

Andrews proposes the raised molding as a Chenes adaptation of an earlier Puuc trait, certainly reasonable considering that Chenes buildings include plenty of other Puuc traits. Yet when Puuc features are present on the facade that is usually echoed by Puuc vaults, Puuc jamb masonry, Puuc features elsewhere on the same structure. Thus I suggest an additional possibility to consider, that of the raised facade as a faint abbreviation of a monster frame--the Chichen Itza example certainly documents this model. And the Chenes use of the raised molding could equally well be a double ploy--an echo of the earlier Puuc trait combined with the visual play on the monster mouth frame. It would be hard to conceive of any of the early Puuc examples representing even an abbreviation of a mouth.

Andrews uses the term "broken molding" since the horizontal line of the overall molding is indeed broken. But the molding itself is continuous, thus the concept of being raised over the doorway is closer to the design. I would have call it "stepped" over the doorway, but that could falsely imply more than one step.

Chenes 5: A Pattern of Palace-2 Story Temple-Palace

Three sides of Xtampak's Southeast Quadrangle and at least two sides of the Cuartel Quadrangle have an architectural arrangement

of a small two-story building in the middle of a low range structure. In effect there is a small "temple pyramid" straddling a low palace range. Nowhere at Xtampak is this layout well enough preserved prior to excavation to ascertain what the original looked like, but I suspect that Xkichmook Complex 1 was comparable. Otherwise, this specific quadrangle plan is hard to find at Puuc sites, though it may be that the maps there are done in a different style making recognition difficult. Since most of these maps are sketches rather than surveyed with an instrument, and as the Xtampak examples have their details hidden by superficial collapse, more of these complexes may turn up later. Kabah Str. 1A4 and Sayil 1B1 may be in this class. The clearest example is visible in Andrews' remapping of Dzehkabtun, a Puuc-Chenes frontier site 8 km S-SW of Hopelchen. His rendering of the North Quadrangle with Principal Palace and surrounding edifices shows two wings have stairways over the center of an otherwise long, low range of rooms.

Actually, the layout of Dzehkabtun's North Quadrangle appears to be essentially the same concept as the Southeast Quadrangle of Xtampak. Both have a potential portal arch on the "north" side; both have the larger "pyramid" on the adjacent right (east); both have a temple-pyramid straddling a low palace range on the remaining two sides. The southern range is especially similar in

both quadrangles--double rooms on each side of the straddling pyramid. The differences are in the number of rooms. The similarities far outweigh the distinctions, and differences are expected. It is worth pointing out that both quadrangles are closed-cornered at two corners. It seems that some specific activity, cult, or residential feature of Campeche Maya life was satisfied by this specific ground plan. It is important to map adjacent sites to see if comparable arrangements are noted else-where, especially at Dzibilnocac, which is large enough to have such a complex. Smaller sites might not be expected to have needed one. So far Puuc influence has not been noted at Hochob.

Although I have listed the "palace-two-story temple-palace" arrangement under Chenes (since I first noticed it at Xtampak) there is actually no reason other than academic tradition to consider Xtampak as a Chenes site. Xtampak may well have been a Puuc site, or at least had Puuc compounds. The reason for listing the palace-two story temple-palace arrangement as Puuc is the portal arch in the north range. Andrews thoughtfully provides a photograph of the Dzehkabtun arch (1985: Fig. 62). For the Xtampak counterpart there is no information on this aspect other than the gap in the range at this point. A portal arch would certainly be expected. The second Puuc feature would be the under-stair vault, suggested by Andrews' plan. This feature is described under the appropriate section within the Puuc chapter.

Such an arrangement essentially combines a pyramid-temple with a palace (the side wings). A combination of "palace" with "pyramid temple" is precisely what the Rio Bec towered structures present. Such a combination of temple and palace is rare in Peten.

Chenes 6: Vertical Moldings at the Corner

The play of the vertical aspect of the corners of the upper zone of buildings at Hochob is certainly the same general concept as that on the ends of the Main Palace and Cuartel. Detailed close-up photographs of this portion of Rio Bec buildings are not widely available, so for the time being the vertical moldings are listed here in the Chenes section. Such moldings emphasize the house-like aspect of the three-unit Chenes facade arrangement.

Chenes(?) 7: Painted Capstones

The capstones of Dzibilnocac and Xtampak would place this kind of capstone as Chenes. The capstone painting of the elite burials of Caracol, Belize is perhaps in the painted capstone tradition but is in an entirely different style, in a different context, and displays a different message. Karl Herbert Mayer points out that capstones are present in Puuc and Rio Bec sites as well. I

include painted capstones under Chenes in the hope that a Campeche specialist will suggest an alternative origin designation.

Chenes 8: Towers

In addition to the Rio Bec related towers, there is another totally different form of Chenes tower, the freestanding ones. These have no doors or windows whatsoever. A Rio Bec origin cannot be shut out, since the northern sector of Rio Bec is unexplored archaeologically.

The round tower at Puerto Rico (Rio Bec area) is unique. other than several small holes through the tower it appears to be solid. It certainly has no windows or doors. Whether it has a secret passageway from way beneath is not known. Anthony Aveni has sought to ascertain an astronomical reason for its existence, based on the orientation of the holes (1975: 183).

Chenes 9: Moldings

Basal and medial moldings are crucial for distinguishing among the various architectural styles of Campeche. But their analysis requires abundant illustrations and even their discussion tries

the patience of the reader. If an actual continuance of the Xtampak Project takes place, such drawings will be produced, and the necessary comparisons undertaken. In the meantime, there are plenty of other architectural traits which can be discussed that are more meaningful to those who are seeking an insight into ancient Maya architecture.

Chenes Traits which are Lacking at Xtampak

Common at both Chenes area Hochob, Dzibilnocac, Tabasqueño as well as Rio Bec area Chicanna and Hormiguero are stacks of long-snouted god faces on the corners. Such a Chenes trait is found even at Copan Temple 22, as well as in Puuc architecture, along the back stairway to the Temple of the Magician, or at Xkichmook, among others. Part of one of the main buildings at Manos Rojas in the Rio Bec area had stacks of masks also (Gendrop 1983: Fig. 76a and b; Kelly 1982: 341). None are yet known for any building at Xtampak yet stacked corner masks are a dominating feature at Tabasqueño and Dzibilnocac.

Rio Bec Traits which are Lacking at Xtampak

No informal stairways are known for Xtampak, nor are they expected, since the towers of Xtampak have functional exterior

stairways and the palace itself formal interior stairways. There was no secret manner of reaching the flanking towers. That suggests that the function of Chenes towers was decidedly different than the pseudo-towers of Rio Bec.

Other than the two short passageways in the Southeast Quadrangle there is nothing at Xtampak comparable to the passageway of Becan, Corrential, or Peor es Nada.

It will be the job of further research to increase this list as certainly there are additional Rio Bec traits which are lacking at Xtampak.

Puuc Traits which are Lacking at Xtamoak

Second stories which are secondary are not yet known at Xtampak, yet are standard at Puuc sites. Since under-stairway half-vaults are suspected at Xtampak (Southeast Quadrangle) it may be only a matter of time before secondary second stories are also located. No early or proto-Puuc features are yet known for Xtampak but are unlikely to still be standing. If they ever existed, they are likely buried under later construction. Otherwise, it is mainly exterior Puuc decoration--moldings, mosaic upper zones, and monster faces--which are (so far) not known at Xtampak. Otherwise

Xtampak has a fairly good sample of Puuc features. But for a full appraisal of Puuc presence at Xtampak it will be necessary to know what is missing.as well as what is present.

What is missing is either because that feature is earlier or later than Puuc period(s) at Xtampak, or because the Xtampak architects or patrons were selectively accepting and rejecting Puuc features to suit their different (their Chenes) preferences). So far though, buildings at Xtampak tend to be "mostly Puuc," or "mostly Chenes" rather than actual mixtures. All of these subtilties must be worked out.

Xtampak: Closed-Corner Courtyards

Normal Maya courtyards are open at the corners. Several Xtampak courtyards are closed. It remains to be established whether this is a Puuc trait (since the quadrangles involved feature Puuc architecture) or a Chenes trait--or from Rio Bee.

HERETICAL MODEL

The dragon facades of Hochob have captured the imagination of writers and readers alike. Hochob's monster facades have thereby come to represent the epitome of Chenes architecture. If Tabasqueño's tower were not so high off the ground (thus making it difficult to photograph from front on) it would have equally well come to represent Chenes architecture. It is only the accident of discovery that Rio Bec's towers caught the eye of early researchers. Neither Rio Bec A, Rio Bec B, nor Xpuhil (the first Rio Bec buildings that became well known) had Chenes facades comparable to Hochob or Tabasqueño. Even the Chenes facades of the Xpuhil towers did not compare in baroque beauty with the towers of Dzibilnocac in the Chenes area. Still behind all conceptions of central Campeche architecture lurks the image of dragon facades = Chenes, tower-temples = Rio Bec. The proposal for a "Central Yucatan Style" combining Chenes and Rio Bec somehow still has dragon masks as essentially at home in the region of the wells and towers at home in the dry river area.

What about the possibility that the monster facades are truly related to the towers, and that truly the towers should not be separated from the monster facades. Why not carry this to the ultimate end model—that the monster facades and towers together developed in the Rio Bec area; that the monster facades are secondary, are superimposed on Chenes architecture the same way we

now recognize that the towers are. Under this model Potter was actually correct (though incomplete) -- Chenes style is indeed more than the famous Hochob mask facade--actually pure Chenes style is everything at Hochob except the masks and towers. Under this proposal there is a Chenes style architecture before the arrival of the monster facades and before the arrival of the towers (they need not necessarily arrive at the same time, after all it is only the monster-mouth-as-doorway that spreads to Copan--there are no Rio Bec towers there).

Colleagues should distinguish carefully between devil's advocate and history, between devil's advocate and what I personally believe. I have no personal preference whatsoever. I advocate no model whatsoever. It is perfectly possible that proto-Chenes masks will be found in the Chenes region. What I am merely suggesting is that all the models presented so far are based on the picturesque accident of history that Hochob has a fascinating monster mask. But excavations by Ramon Carrasco and Sylvianne Boucher have demonstrated that the mask there is secondary. And in my season's report on F.L.A.A.R. research at Xtampak I have suggested that the largest "Chenes" mask of Xtampak's Main Palace may prove to be secondary as well. In effect we may need to define an architecture of the region of the wells without the monster facades. I suspect that if this definition succeeds it

will demonstrate the error and omission of the Central Yucatan Style model, though ironically it is this still born model that gave the hint that led to a model of "pure Chenes," a dragon-facade-less Chenes.

An additional heretical idea also needs to be investigated. Normally archaeologists produce models, and then defend them to their death, in spite of all evidence against them. These models are cited, quoted, deified--often even when there was no evidence for them in the beginning. Thompson's totally unacceptable model for Itzamna is the best case. Thus I propose the following concept not as a fact of history, not even a hypothesis, and certainly not yet a model--it is quite simply a query, or a dilemma. If Andrews is correct that Classic Puuc architecture derives from Chenes-Puuc, then Classic Puuc style did not exist in the Puuc heartland at an earlier date. If there was no Classic Puuc in existence, than Puuc features at Xtampak cannot be derived from something that does not exist. The Puuc features at Xtampak would then have to be indigenous, that is, "Puuc" features are also native to Xtampak--they are not automatically a result of influence from the north. Under this possibility Xtampak itself was Puuc. An alternative is that the Puuc buildings at Xtampak are later implants from the later time when Classic Puuc architecture did exist in the Puuc hills.

The concept that Xtampak was at one time Puuc offers two variant possibilities: that it was Puuc because Puuc style originated in the Chenes-Puuc interaction area; or it was Puuc because at one time the northern well area did not have Chenes architecture yet developed, or after Chenes architecture ceased to develop. Under this modified view, all of northern well area was in fact predominantly Puuc. In effect, if combined with the further possibility that "Chenes" reptile facades are diffused from Rio Bec, than a Chenes geographical style practically disappears. Some of the buildings at Xtampak are evolved from Rio Bec and Rio Bec-Chenes origins, others are in situ or evolved Puuc buildings. Under the strict application of this hypothesis there is hardly any Chenes architecture as such, only Puuc and derived-Rio Bec-Chenes. When the horror at such a heretical concept subsides (and I must admit I still have a dubious feeling every time I see Potter's model cited), perhaps some solid facts of Maya history will fall out.

The moral of this is that perhaps the entire Puuc-Chenes-Rio Bec question needs to be re-thought from zero. Or better, perhaps it is best to stop calculating how many styles can dance on the head of a pin and undertake stratigraphic excavation, serious, multi-disciplinary architectural analysis, and coordinated preservation

of key buildings--yet not removing or destroying the very evidence that we need in the name of "salvation." Up until now the excavation that has been unleashed on Chenes and Rio Bec ruins has been somewhat like the Inquisition's role in "saving" the souls of wayward Catholics, or the American way of "saving" Vietnamese by burning their villages to the ground, lit by Zippo lighters.

TO BE DONE

Ichpich, Xkichmook, and Pixoy (as Puuc-Chenes type-sites) should have at least their monumental central zones mapped. Xtampak and Dzibilnocac need to be totally re-mapped but at least the current sketches allow preliminary analysis. It would be a good investment to map Dzibiltun and Tabasqueno to have both a western Puuc ¬Chenes and a supposedly pure Chenes site mapped. Hochob is too small to show the patterns that we need to demonstrate intra-area influence.

Manos Rojas, Culucbalam, Channa, and especially Okolhuitz need to be remapped and every feature of the remaining architecture adequately photographed especially in close-up details, and especially inside with flash. Pechal and Peor es Nada need to be better studied to get information on the northernmost ruins which can be considered to be in the Rio Bec geographical zone.

An inventory needs to be established of all the Rio Bee features which were incorporated into Chenes architecture and into Puuc architecture. Pollock stuck with single geographical areas (Chenes, then Puuc). He did not work in the Rio Bee area and thus does not bring home how often prototypes for Puuc features (especially the Greek fret motif) can be found widespread throughout the Rio Bec region. Gendrop was on his way to make major contributions but somehow never pulled everything together in a way that it could be understood by a non-Campeche Mayanist. Somehow the layout of his book obscures his important message; indeed, his hope for an English edition was turned down by all U.S. publishers, a mistake that has kept his contributions from reaching an essential audience. He was on the right track but his message got derailed before it became incorporated in the mainstream of Maya studies.

Puuc, Chenes, and Rio Bec needs to be explained in a manner that the general Mayanist can appreciate. These Yucatec and Campeche styles have simply not yet caught the serious consideration of Mayanists, possibly because stratigraphic control (in the Uaxactun, Tikal, or even Holmul sense) are totally lacking. Even the Becan ceramic sequence has not made that much impact on the general Maya picture. Especially in an era when the glitz of

iconography and epigraphy capture the attention it is all the more essential to remind Mesoamericanists that 150 Puuc sites, almost a thousand square kilometers worth of Chenes territory, and a Rio Bec area whose overall territory is equal to that from Tikal through Calakmul need to be incorporated into Maya civilization, that we profess to study.

The no man’s land between Péchal and Hochob needs to be crisscrossed to find out why the map is essentially totally blank for 50 km in every direction. This is one of the largest blank areas in the peninsula--directly between Chenes and Rio Bec. It is hard to imagine this area as without major Maya ruins.

ELIMINATING AT LEAST ONE RIO BEC-CHENES ERROR: ITZAMNA

J. Eric S. Thompson is in many ways the "father" of modern Maya studies. There is hardly a book on the Maya written today that does not cite one of his earlier works. Queen Elizabeth knighted Thompson for his achievements shortly before his death in the 1970's. In recent years, though, new data has become available that was not available to Thompson, necessitating revision of most of his pet theories. Of the various aspects of the writings of Thompson that are wholly unacceptable is his zealous preaching of Itzamnaism, his personal concept that the Maya worshiped an

iguana-like deity as a sole main god. There is not a single iconographer who accepts this theory today, indeed recently I have documented that the concept of Itzamna as a monotheistic focus for the Maya was not even acceptable with the information available in Thompson's day either (Hellmuth 1987). Suffice it to say that any article or book today which identifies any deity as "Itzamna" is exhibiting a public disclosure of not being familiar with advances in iconography of the last decade.

First, Floyd Lounsbury, an accomplished linguistic of Mayan languages at Yale University, has for over a decade recognized that the hieroglyph for God D of the codices can be read phonetically as Itzamna; I would imagine this follows upon phonetic advances of the Russian scholar Yuri Knorosov. In the 1970's I was independently able to demonstrate that God D of the codices was present in the Late Classic period also, as an aged male who shared basically the same body as God N and God L. Although I did not publish this discovery at the time, my comments at lectures and symposia were cited widely and the identification became common knowledge quickly (Coe__*; Robicsek and Hales__*). Only a decade after the original discovery did I stop research long enough to place this God D identification in print (Hellmuth 1987).
By combining the separate Knorosov, Lounsbury phonetic reading (which was limited to the codices, as at that time the appearance

of this character in the Classic Period was not widely recognized, in fact he was confused with God N) with knowing what he looks like on Classic pottery (he does not occur on stone stelae) it is now possible to state that not a single character which Thompson claimed was Itzamna is the same as that of the Itzamna hieroglyph of Knorosov-Lounsbury. And, none of the Itzamnas named by the several hundred authors who followed Thompson's identification are correct either.

To be succinct, none of the monsters on Chenes or Rio Bec facades are Itzamna. Actually none are masks either--these are the actual face. A mask is a covering over something else. On Maya buildings it is the monster itself who is pictured. He is abbreviated, but as a head, not a mask. Masks do indeed occur in Maya art, at Seibal and elsewhere, but not in Chenes or Rio Bec architecture. Nonetheless the word mask is so entrenched in the literature that it is convenient to use.

LONG-NOSED GOD

Whereas all Chacs may be long-nosed gods, not all long-nosed gods are Chac. After Itzamna, Chac is the most misidentified God in the Maya ·pantheon. Many of the so-called Chacs at Copan may be Cauac Monsters (now recognized to be Witz Monsters, a Stone

Hill). It might well be worthwhile to dedicate a Ph.D. level analysis of the Chac "masks" of Puuc, Chenes, and Rio Bec architecture. They may well turn out to be identified as a Yucatec variation of Chac, since Chac Xib Chac has recently been identified by epigraphers Linda Schele and others; he is a variant of GI, with a Shell Diadem Headdress instead of a Quadripartite Badge Headdress (Hellmuth 1987: Figs. 75-99; 85-98). But, in 99% of the cases, these monsters do not have a long nose. The nose, the facial feature through which they actually breath, is usually a scroll or snail-like shape directly between the eyes, up against the forehead. You can usually find the actual nose by looking for the base of the twin nose-beads.

That means that the elephant-like trunk which protrudes is not the nose. The monster does not breath through this protruding trunk. The protrusion is likewise not always (actually seldom) the upper lip. Thus the name "long-lipped" god is as anatomically and iconographically incorrect as is "long-nosed god." What protrudes has no word in English other than "snout," I since I am not entirely convinced that the Maya were attempting to portray a tapir. In preclassic predecessors it seems almost as though a bone were attached to the snout; in other instances it is actually a stylized bird beak. Thus the so-called "Chac" of Tikal's North Acropolis is in fact a Principal Bird Deity. It has

a bird beak, not a long-nose, not a long-lip, and not really a long-snout in this case. All this has been at last explained, in dozens of pictures to make it clear, in Monsters and Men in Mava Art. But since the misnomer Itzamna occurs time and time again in discussions of Chenes-Rio Bec monster facades, and as the misnomer "Long-nosed god" is the standard designation for the "mask" on so many hundreds of Puuc buildings, it is best now to bring modern iconography to architectural history.

THE DANGERS FACING THE MAIN PALACE

Many of the answers to crucial questions relative to Campeche can best be answered when several of the key palaces at Santa Rosa Xtampak are excavated. Yet excavation elsewhere in the Chenes-Rio Bec areas has not produced the advances in information that are anywhere near comparable to that produced at Tikal or Copan. The reason is that Tikal and Copan's ancient structures are fully recorded during the process of excavation before they are consolidated. And especially for Copan the data is fully photographed and equally fully published. Thus before we analyze Puuc, Chenes, and Rio Bec traits we have to face the fact that these very features are being destroyed precisely during the process of excavation that is currently in vogue in these areas.

German archaeologist Hanns Prem has brought up in a mexicon article (1987) that the Main Palace of Xtampak is in the process of collapsing. A close scrutiny of other Chenes and Rio Bec buildings that were also once similarly cracked and tottering shows them now neatly repaired, beautifully cleaned. You can see them at Xpuhil, Chicanna, Becan, Rio Bec, and Hochob. But architectural historian George Andrews has pointed out what he observed, that entire facades were removed, without being recorded, just because they were collapsed. Virtually all archaeologists who have seen the before (excavation) and the after (excavation) at these sites are equally appalled. Thus it would be well to list that one of the other dangers facing Xtampak is current archaeological practices. The Main Palace could equally well be perpetually ruined unless the restoration is adequately and professionally handled, and that includes being photographed and drawn.

An overall goal of my professional involvement in Santa Rosa Xtampak is to point out the uniqueness of the Main Palace in order that these features are not destroyed in the process of their supposed preservation. This uniqueness deserves the utmost care when the palace is subjected to conservation--since too many other Maya buildings have been ruined in the very process of their supposed conservation. Allied with this serious concern is

the need to devote an extraordinarily careful preliminary photographic scrutiny of the currently standing remains--before. these remains are removed or hidden with fresh cement. Other than the well documented M.A.R.I (Middle American Research Institute) or equally well documented N.W.A.F. (New World Archaeological Foundation) projects, in too many other peninsular excavation projects of the last 20 years, the fallen parts of the Maya buildings have been simply removed, and dumped. In certain cases there is no evidence of any photographs of a serious professional nature having been taken before, during, or after the excavation (Karl Herbert Mayer, personal communication). It would be hard to find a recent excavation in the peninsular Maya area where a trained architect had the opportunity to do drawings in situ. Two exceptions stand out, Abel Morales' work at Kitam, near Xpuhil, and at Calakmul and Ruben Maldonado C. in the ballcourt at Uxmal. Otherwise, only in Honduras and Guatemala has the standard of architectural drawings been professional, especially at Copan, Tikal, and recent Guatemalan work at Uaxactun. In more than half the cases in Rio Bec and Chenes areas the excavation was so hasty, and fresh cement so quickly applied, that no complete series of drawings of the architecture was even initiated--and virtually nowhere was the collapsed building facades measured--or even photographed. In many cases this cannot be blamed on the archaeologist--there was often no archaeologist even present. In

the worse instances gangs of workers, unsupervised, dug out entire buildings on their own.

Thus F.L.A.A.R. sent two photographers (myself and Eldon Leiter) to photograph as much as was humanly possible during the only five days (April, 1989, that I could free myself from a schedule tied down by teaching appointments both in Florida and Austria. with these data I returned to Graz and prepared a proposal for the complete recording of the Main Palace in an internationally competent manner--before it would be touched. This proposal will be published later this year so that archaeologists both in Mesoamerica, as well as archaeologists in Italy and elsewhere in Europe--who have a hallowed tradition of scrutiny of every fallen facade stone--so that they can offer constructive criticism to this proposal. The anticipation is to establish--from experience already gained in archaeological projects elsewhere--a potential international standard against which future work can be measured. The Main Palace of Santa Rosa Xtampak is now the most thoroughly photographed single building in the peninsula outside of the famous buildings on the tourist circuit.

Mexican UNAM architectural historians have contributed through pointing out how the traditional methods of their own countrymen have exemplified the worse possible desecration against UNESCO

standards on over-restoration (a polite word for falsification)--yet few have pointed out the reality of excavations--no salvage of artifacts, inadequate or non-existent photography, no architectural drawings, and virtually no subsequent publication.

On the positive side, Antonio Benavides has the best record at least, of frequent publication, especially in international journals. But only Andrews, and only in a single sentence, has pointed out the true degree of loss--not at the hands of looters or grave diggers--but of "archaeologists" themselves, in removing collapsed facades before they were studied. The excuse that studying fallen remains is too expensive or too time-consuming hides the facts. Is it the lack of interest, lack of patience, or lack of experience, lack of foresight, or evidently the lack of realization of how crucial it would be to implement what is else-where taught in the most elementary of introductory archaeology, or historical architectural courses? How is it possible that any excuses whatsoever are tolerated when national patrimony is being shoveled into wheelbarrows and dumped into a garbage heap? It is ironic that field schools are not allowed in Mexico, since it is precisely in such basic courses that these practices are taught. Most first year students would be flunked for removing entire buildings merely because they were fallen, or because it was too much effort to draw the collapse. Perhaps it should be imple-

mented a policy that no monumental architecture should be disturbed--even under the pretense of preservation--until an accomplished architect or draftsperson is present, and that such an individual should be present (and at work drawing) during the entire process. A policy should further be implemented to set standards of archaeological photography, especially wide angle closeups, and better lighting. It would seem also essential to establish an UNESCO standard on handling fallen facades.

Due to the politics of archaeology in Latin America it is unlikely that these specific proposals will be implemented, but sooner or later local archaeologists will speak out against the destruction of their own national patrimony which is resulting from misguided attempts to preserve monumental architecture without adequate architectural backup. The polite silence of Mayanists--both Mexican and international—who fear their permits will be taken away or denied from the beginning if they point out the destruction of ancient Maya architecture has resulted in the perpetuation of unprofessional field work and the coverup of the grossest examples of destructive excavation.

The trend of the last five years of not allowing excessive restoration has been laudatory, but has backfired through the coincidental sanctification of promoting the equally destructive

habit of removing collapsed facades in the rush to get at the solid walls in order to tuckpoint (consolidate) them. Removal of fallen facades without photographing, measuring, and studying the collapse pattern in the Xtampak case will result in the irreversible destruction of the sole information source for the data with which to solve the dilemma of evolution and diffusion of the great architectural styles of ancient Campeche.

A second goal of my involvement with Xtampak is to move Chenes and Rio Bec architecture to the level of acceptance hithertofore accorded solely to Peten, Copan, Palenque, or Puuc architecture. Leading textbooks treat Chenes and Rio Bec as regional curiosities, monster facades and false-temple towers. Rio Bec design had far more influence throughout a considerable larger territory over a longer time than any of the more popular styles other than that of the overall Peten. The first successful attempt to present Chenes-Rio Bec architecture to an audience other than the dozen specialists who work in this area is a 1988 photography album by Francis Murphy, featuring the most beautiful color photographs which have yet appeared on Maya architecture.

EPILOGUE: THE END OF THIS REPORT

This report is a continuation, could be considered as a larger appendix, to my Photography and Analysis of Standing Architecture at Santa Rosa Xtampak. Both together represent the report to INAH on five days of photography in April 1989. Although Xtampak is obviously the focus, the commentary herein is mainly on architecture outside Santa Rosa. The actual features of the three palaces involved are provided in Photography and Analysis report. Neither of the present stages of report is yet fully illustrated. Missing photographs plus line drawings will be added for a revised edition.

This Santa Rosa Xtampak photography intruded in the middle of my preparation of two additional volumes of my on-going Mesoamerican ballgame series. The Santa Rosa stint in April also took time away from an architectural glossary which I prepared for my students in Graz and Winter Park, Florida. And I had just discovered a further role of hunting in Maya ceremonialism, in fact had seven illustrators doing the line drawings for a monograph on this subject, and was arranging to present this at M. Coe's and M. Miller's Yale University seminar in autumn 1989. I had also stumbled upon a Maya representation of their principle of an eternal regenerationable cosmos, veritably a guiding principle of-the elite belief system of the Classic central lowland Maya, and I was just getting ready to sit down and write up this new find.

But the fragile condition of the Main Palace at Xtampak called for immediate attention, so I jumped in. The expenses have taken a toll on the pocketbooks of the benefactors as well as F.L.A.A.R.'s finances, since the costs have been far more than just the 10-man crew of Folan but I consider the amount of information resulting--and the personal and professional experience--well worthwhile.

But continuing to finance Xtampak can only be sustained if the information output keeps up with expenses. Cost-effective is the key word, and Folan has set an enviable record for cost-effectiveness at Calakmul. Whether or not there is a "second season" at Santa Rosa is not the end of the world, since what counts is that someone capable undertakes the preservation of Xtampak. Folan and F.L.A.A.R.'s immediate attention to the collapsing of the Main Palace at least served to create enough stir that it is safe to say that the March-June research expenses at Xtampak have at least resulted in the salvation of the tottering palace. One might say that Xtampak will never be the same after the immediateness of our response to the unconscionable allowance of such a major building to fall into ruin. In the meantime, if the powers that be deem that another crew will have to handle the next stage, then F.L.A.A.R. funds can go into preparing the illustrations for these present Xtampak reports, as that is even

more important than field work. Field work is no contribution to science unless it is published. We will be especially proud to present the "third part" of these reports, namely the F.L.A.A.R. proposal for totally recording the Main Palace with the latest scientific technology before the building gets subjected to the conservation process. This will be issued after all the season reports are all in press.

I sincerely thank the generous and considerate individuals in the USA who make it possible for F.L.A.A.R. to be in a position to instantly respond to the salvage situation at an endangered Maya site. I also thank all those in Campeche who facilitated the work both of Folan and crew, and the F.L.A.A.R. team. In return for this trust, we were able to initiate a professional photographic coverage of the Main Palace. Another two months would be needed to complete such coverage, but at least we demonstrated in the five days available our method and the professionalism of our equipment. The two preliminary reports, entering distribution in provisional form in less than 2 months after field work, is another indication of F.L.A.A.R.'s dedication to setting standards in field work. We have also sought to demonstrate how much data can be obtained without need of digging. No tombs, no stripping of buildings, no search for goodies, just pure research and continuous data gathering.

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Captions for Illustrations

Front cover. Santa Rosa Xtampak, Main Palace, north end, second story pilaster with vertical flute and basal molding with corner band, a detail that needs to be added to elevation and perspective renderings of the palace.

Fig. 1. The challenge facing the archaeologist in Campeche is to develop a terminology and classification that can distinguish between Chenes, Puuc-Chenes, Puuc, and Chenes-Puuc. This photograph shows a room in the Main Palace, a Chenes-Rio Bec edifice, where the masonry is considered "local Xtanipak." The vault beam just under the capstone may be the last such vault pole in the entire site still in place. Santa Rosa Xtampak.

Fig. 2. Here the room has a Puuc spring on the end wall, the room is wide, and the wall and soffit stones have more even edges and corners than in most Chenes rooms--yet the masonry here is not "as Puuc" as that of the Southwest Building. Southeast Quadrangle, East Range, Room 2, looking north. **451608-15-Neg.34.**

Fig. 3. The spring is on all four walls--definitely Puuc; the first course of the soffit is nicely cut; the right vault is

rounded and overall the stones are more closely fit (because they are better hewn) than in a pure Chenes rooms. Southwest Building, upper level, Room 7. **451608-11-Neg.28.**

Fig. 4. Here is the standard for pure Puuc (at Xtampak at least)--yet we must also recognize that this would have changed over time. The finely squared vault stones are especially diagnostic of Puuc workmanship, as are the stone lintels and door jambs of monolithic size--the entire width of the door formed by a single stone (though almost always two or three stones high). Southwest Building, Room 3, looking east. **451608-12-Neg.13.**

Fig. 5. The largest corbel-related vault yet known for any Puuc site. The corbel vaults in this building divide the structure visually into three units (though not noticeable in this close up view). Notice that the corner stones are of a specialized size and shape (corner in right foreground is restored but with proper sized stones). Uxmal, Palace of the Governors. **451608-6-Neg.16.**

Fig. 6. The other corbel vault on the Palace of the Governors, Uxmal. The vault stones are "boot shaped." The wall masonry is typical of the best Puuc workmanship, so far found at Xtampak only in the Southwest Building, Rooms 2 and 3.

Fig. 7. The portal arch of the Nunnery Quadrangle and those of the Palace of the Governors are so well known that the other monumental corbel portal vaults of Uxmal tend to be forgotten.

This one on the Northern Long Building is just two meters behind the Nunnery. East end, looking west. Two periods of masonry can be seen, the rough horizontal stones to the left and the smooth squared stones of classical Puuc workmanship. Boot shaped vault stones are also visible. **451608-5-Neg.5.**

Fig. 8. What appears to be a portal vault similar to those of the Puuc heartland, but this far away at Cedral, Cozumel Island (Holmes 1895: Fig. 19). Although one room of the overall ruins is still standing evidently this specific arch is not.

Fig. 9. Uxmal, Yucatan, Mexico, Nunnery Quadrangle, showing the typical Puuc arrangement of a plain lower zone with ornately decorated upper zone. Early Puuc buildings, though, do not have such fancy mosaic decoration covering such extensive areas. The origin and developmental sequence of Puuc facade mosaic is not yet known. The rectangular pattern of frets is common throughout Puuc facades of Yucatan.

Fig. 10. Uxmal, Great Pyramid, an unusual instance of elaborate mosaic decoration also on the entire lower zone. The corners have stacks of long-snouted deity faces, usually a trait of Chenes and Chenes-Rio Bec facades. The repeated fret is typical of Puuc facades.

Fig. 11. El Tajin, "Tajin Chico," showing that repeated frets in facade architecture also. had a home in Veracruz earlier than that

known (so far) for Campeche or Yucatan. The relationship of EI Tajin and Oaxaca is not adequately known. Elsewhere in the Maya area EI Tajin motifs were "introduced by Teotihuacan or at least together with the advent of massive Teotihuacan influence”. Teotihuacan murals are known for Xelha, Quintana Roo, so perhaps there was Teotihuacan-EI Tajin influence in Campeche and Yucatan. The cache of Teotihuacan-related pottery at Becan is typical of what will eventually be found elsewhere in Campeche. Considering that there is considerably more EI Tajin influence in the Maya area than there is Oaxaca influence, it would seem more likely that Veracruz should be analyzed as a potential source for later Puuc decoration.

Fig. 12. Mitla, Oaxaca, Mexico. The facade mosaic of fitted stone is so well known here that Oaxaca has often been proposed as an origin for Puuc mosaic. But since Mitla itself is several hundred years later than Uxmal, the origin would need to be in pre-Mitla architecture of Oaxaca--which also has mosaic of stone on building facades.

Fig. 13. Tonina, Chiapas, Mexico, terraced facing of a temple or palace complex excavated by INAH after the French excavations ended; largely unpublished to date. Late Classic, ca. A.D. 650-¬850. Photograph shows fret-like designs which could have served as steps for Hollywood type dance spectacles. Graffiti at other sites picture such lavish ceremonies including people standing on architecture. But this fret-like motif is illustrated in the pre-

sent report to show that it is premature in our present state of ignorance about the full range of decoration of Maya buildings to pinpoint the origin of Puuc mosaic. This Tonina structure was not known at all until five years ago, is still not known until today because it is effectively not previously published, and thus could in no way affect anyone's model for the origin of the fret motif. There must be a thousand comparable examples of Maya architecture which depart from the "normal." The full richness and diversity of Maya architectural decoration has not yet been adequately cataloged, though the photographic archive of the Carnegie Institution of Washington was a beginning, followed by the several thousand architectural photographs of Andrews, and architectural photography of F.L.A.A.R. for the last two decades.

Fig. 14. Stepped frets at Rio Bec (Ruppert and Denison 1943: Fig. 25). Perhaps Rio Bec is a more likely source for Puuc mosaic decoration--though where did Rio Bec architects derive these motifs?

Fig. 15. Stepped frets at Xaxbil, a little-known Maya ruin in the Rio Bec region (Ruppert and Denison 1943). The same facade also appears to have embedded columns. The basal molding includes the mat motif.

Fig. 16. A monumental display of stepped frets at Okolhuitz, a Maya site in the Rio Bec area which seems not to have been

photographed or discussed for the last half century (Ruppert and Denison 1943).

Fig. 17. Reused mosaic stones on the wall of Room 2 or 4 of the East Range, Southeast Quadrangle. Top left is comparable to that on Puuc facades at Uxmal. Center left is a fret, a rather small rendition. Center right is a mat motif with a border, possibly the edge to a larger design. Two other rooms in the Southeast Quadrangle have such reused facade mosaic stones. This is stratigraphic proof that Puuc mosaic was in use at Xtampak and on buildings earlier than those standing now. Since the East Range is not appreciably late, that is, not demonstrably Terminal Classic, could this mean that mosaic facades at Xtampak were earlier than those at Puuc sites to the immediate north? The discovery of an intact early Puuc building with facade mosaic buried under a later building at Xtampak could in a single stroke rewrite the architectural history of the Yucatan peninsula. Although previous investigators at Xtampak have noticed and occasionally commented on the reused mosaic stones no photograph has ever been published because no previous architectural historical team was equipped for interior photography. **451608-16-Neg.11.**

Fig. 18. Embedded columns as well as larger columns embedded in the corner are found on both wings of the Cuartel at Santa Rosa Xtampak and also here at Uxmal, on the Puuc structure later partially covered by the Pyramid of the Magician. The facade in this

picture could be anywhere at Xtampak. It is here presumed later at Uxmal but this should be challenged by field data.

Fig. 19. Although the Chenes-Puuc temples are long known for the Chenes monster facade on the back of the Pyramid of the Magician at Uxmal, the Chenes-Puuc relationship of the facade of the lower story has not often been mentioned, in part because Chenes is defined almost exclusively on the basis of the eye-catching monster facades. Lesser details are not spectacular enough to remain in memory. **451608-6-Neg.4.**

Fig. 20. The recessed panels of the Main Palace, third floor, stand out best for photography in the afternoon sun. Also visible in this photograph is the row of tenoned stones which stick out at the medial molding. Each has a corresponding top tenoned stone above, but these have mostly fallen or are hidden by vegetation. The back of the palace is remarkably well preserved since it had no doorways whose failing lintels are what bring down entire facades. On the far left foreground is the entry/exit to the North Interior stairway at the second level. The lower center of the photograph shows the inside of a long room with secondary divider wall across the middle. You can see the vault continuing behind the divider wall. Santa Rosa Xtampak. **451608-29-Neg.13.**

Fig. 21. Although the six inset zones over doorways in the Chenes palace of Santa Rosa Xtampak would suggest this feature as being local Chenes, in fact a comparable inset panel occurs in the Rio

Bec area, but is either not as fully preserved or has not yet been adequately photographed or published other than a mention. Here the front doorway of Room 6, looking west, Main Palace. The wooden lintel is original and unrestored. **451608-13-Neg.21.**

Fig. 22. Long-snouted monsters are generally considered "Puuc," yet when arranged in stacks on the corners this is a feature of Chenes monster facade structures in a Rio Bec context, especially at Hormiguero and Hochob. Thus when stacked monster faces occur at Copan are they a Puuc, a Chenes, or a Rio Bec influence? Hohmann and Vogrin 1982.

Fig. 23. Holmul, Building A, Group II: facade masks have a long history in Maya architecture before the Rococo elaborations of the Rio Bec and Chenes regions. Merwin and Vaillant, 1932, The Ruins of Holmul, Peabody Museum, Harvard University, Fig. 9 and Fig. 11.

Fig. 24. Double bands of cross-hachure as a throne on a Tepeu 3 vessel in the Pearlman Collection (Coe 1982) and at Palenque, Temple of the Sun, Sanctuary Tablet (after Maudslay IV, pl. 88 from Kubler).

Fig. 25. Double bands of cross-hachure as Chenes facades at Copan, Structure 11 (Hohmann and Vogrin 1982).

Fig. 26. Doorways with raised medial molding in the Cuartel, Santa Rosa Xtampak are similar to that on the East wing of the Nunnery at Chichen Itza. **451608-23-Neg.31, 451608-24-Neg.18** (with a bit of the central stairway mass visible at the left).