

Uxmal, Kabah, Sayil, and Labná <http://academic.reed.edu/uxmal/>

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Architecture, Restoration, and Imaging of the Maya Cities of UXMAL, KABAH, SAYIL, AND LABNÁ The Puuc Region, Yucatán, México

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Annotated Bibliography Uxmal.

This section includes publications on Uxmal. Because these often deal extensively with other Puuc Region sites, some of these publications are listed also in the sections on Kabah, Sayil, or Labná. Most publication on larger topics, such as the Puuc Region, Yucatán, or Maya architecture, are listed only under those categories.

Several hundred photographs of Uxmal are reproduced on this web site.
<http://academic.reed.edu/uxmal/uxmalmap.html>

A

Acosta, Jorge R.

Nuevos ensayos de restauración en Uxmal, Yuc. Dirección de Monumentos Prehispanicos, Informes 9. Instituto Nacional de Antropología e Historia, México, D.F., 1958.

The author first discusses how to tell original material from later restoration and reconstruction, pointing out that it is generally impossible to distinguish restoration except where masonry is recent and therefore lighter rock and where relatively fresh concrete is present. He then provides a detailed account of his procedure at Uxmal for reconstructing the lintels and areas above doorways, many of which had already or were near collapse. His method, clearly illustrated with excellent detailed photographs and a superb seven step diagram, involved removing the original wood lintels and masonry above, adding a new reinforced concrete lintel masked with shaped stones, and replacing the original wooden lintel, which no longer needed to provide support.

He discusses the approach he took at Uxmal, including the rebuilding of collapsing interior walls, recessing slightly new cement between stones to distinguish it from original cement. He found that the space between stones in the original walls was between one and three centimeters. This is a most impressive and somewhat exceptional publication in that the author evaluates alternative approaches and describes why the final approaches were chosen at Uxmal.

ARTstor

Available on the web through ARTstor subscription at:

<http://www.artstor.org/index.shtml>

(accessed 2007 Dec. 8)

This is one of the two most extensive, publically available collections of early photographs of Uxmal, Kabah, Sayil, and Labná, either in print or on the web. The other equally large collection, also on the web, is hosted by the Peabody Museum of Archeology and Ethnography, Harvard University (which see). The photographs on the ARTstor website are from the Carnegie Institution of Washington Maya Excavations, and are also housed at the Peabody.

Some of the same photographs appear on both web sites. The photographs include distant views, views of individual buildings, including lesser known structures, interiors, many details of collapsing sections and individual pieces of fallen architectural sculpture, reliefs, etc. Both sets of photographs show some structures as discovered, some uncovered, and some at various early stages of restoration.

The main differences are that the ARTstor images can be opened larger and at higher resolution, allowing viewers to examine the images in greater detail, a significant advantage for photographs of these elaborate and much restored Maya sites. Also, as of December 2007, the catalogue information posted with the ARTstor images is much more extensive than that on the Peabody site. However, ARTstor images are only available at subscribing institutions in the United States, whereas the Peabody images can be viewed by anyone with Internet connection anywhere in the world.

The Carnegie Institution of America photographs were taken between 1913 and 1957 during the Maya expeditions sponsored by the CIW.

On the ARTstor web site, there are 462 images of Uxmal, 330 of Kabah, 235 of Sayil, and 193 of Labná. The images can be opened full screen-size and larger. Most are magnificent, grey-scale photographs, highly professional and superbly lit for maximum detail and legibility.

Baradere, De St Priest

"Notice sur Les Monuments Antiques d'Uxmal, dans la Province de Yucatan". *Antiquités Mexicaines Relation des Trois Expéditions du Capitaine Dupain, ordonnées en 1805, 1806, et 1807, pour la Recherche des Antiquités du Pays, notamment Celles de Mitla et de Palenque; accompagnée des Dessins de Castañeda. . . et des notes explicatives, et autres documents, par Mm.*

Baradere, de St Priest, et plusieurs voyageurs qui ont parcouru l'Amérique. Tome I, Première Partie, "Notes et Documents Divers". Paris: Bureau des Antiquités Mexicaines, 1834.

Barrera Rubio, Alfredo

"Arqueología de Asentamiento en Uxmal: Nuevos Datos y Síntesis". Paper presented at the 21st Mesa Redonda de la Sociedad Mexicana de Antropología, Oct. 1989. Mérida, 1989.

Barrera Rubio, Alfredo

"El Asentamiento prehispánico en el Área de Uxmal, Yucatán". Paper presented at the First Maler Symposium on the Archaeology of Northwest Yucatan, Bonn, 1990.

Barrera Rubio, Alfredo

"La gran plataforma del Palacio del Gobernador de Uxmal". *Cuadernos de Arquitectura Mesoamericana*, Vol. 12 (1991): 41-56.

Photographs of the Great Platform and of the Governor's House Platform are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/Uxmal-GrPlatform.htm>

Barrera Rubio, Alfredo

Guía oficial: Uxmal. Salvat Editores de México, for the Instituto Nacional de Antropología e Historia, Mexico City, 1987 (published also in English as *Uxmal: Official Guide*, 1990).

Published as one of the INAH official guidebooks, this 128-page handbook presented, at the time, the most comprehensive, scholarly, brief introduction to Uxmal. Exceptional for a guidebook, this authoritative introduction includes a description of early publications on Uxmal and **an account of archaeological explorations and restoration at Uxmal from the 1930s through 1970s**, essential for viewers to understand what they are looking at. In addition to descriptions for each structure, the book introduces domestic architecture outside the ceremonial center and the history of the site and its study. The 71 small, color illustrations are especially useful for showing the condition of many Uxmal structures before recent restorations. (The photo on page 112 is reversed left-right and misidentified as the northeast corner, whereas it is the northwest corner.)

Barrera Rubio, Alfredo

"Introducción a la Arqueología de Asentamiento de Uxmal, Yucatán (una propuesta teórica-metodológica)". Thesis presented to the Facultad de Ciencias Antropológicas, Universidad Autónoma de Yucatán. Mérida, Yucatán. 1989.

Barrera Rubio, Alfredo

"Patrón de asentamiento en el área de Uxmal, Yucatán". *XVI Reunion de Mesa Redonda de la Sociedad Mexicana de Antropología*, held at Saltillo, Coahuila, 9-14 Sept. 1979. Vol.2: 389-398. Saltillo, 1980 (published also in *Memoria del Congreso Interno 1979*, ed. Peter J. Schmidt and C. Benavides: 71-82; México, D.F.: Centro Regional del Sureste, INAH, 1981).

A report on the then current INAH investigation of **the settlement pattern of the Uxmal area**. Previous studies are mentioned, including the sampling of thirty-three houses south of Uxmal, reported by Ledyard Smith and Karl Rupert in 1957. However, these studies, like others, were done in isolation of connections with the ecology, hydraulic systems, and social structure. The project here described rediscovered the boundary wall, mentioned by Catherwood, the west and south portions of which are best preserved. The author notes thirteen satellite communities, most in the northern section which was mapped. In these, the investigators found that habitation groups favored family forms, with water tanks situated near the center of groups. Locations were conditioned by the topography. Of special importance, through communication with local inhabitants, the report names, locates and describes four types of soil in the area: Pusluum, Kakab, Kankab, and Akalché, each with its agricultural characteristics. The claim is made that this **variety of soils allowed the ancient Maya to diversity their crops and timing and thus extend their agricultural production**. Ceramics retrieved in thirteen excavations call into question previous chronologies for the Uxmal area.

Barrera Rubio, Alfredo

"Settlement Patterns in the Uxmal Area, Yucatán, México". Paper presented at the 43rd Annual Meeting of the Society for American Archaeology, in Tucson, April 1978.

Barrera Rubio, Alfredo

Uxmal: Official Guide. Salvat Editores de México, for the Instituto Nacional de Antropología e Historia, Mexico City, 1990 (translated from *Guía oficial: Uxmal*, 1987).

Published as one of the INAH official guidebooks, this 128-page handbook presents the most comprehensive, scholarly, brief introduction to Uxmal. Exceptional for a guidebook, this authoritative introduction includes a description of early publications on Uxmal and an account of archaeological explorations and restoration at Uxmal from the 1930s through 1970s, essential for viewers to understand what they are looking at. In addition to descriptions for each structure, the book introduces domestic architecture outside the ceremonial center and the history of the site and its study. The 71 small, color illustrations are especially useful for showing the condition of many Uxmal structures before recent restorations. (The photo on page 112 is reversed left-right and misidentified as the northeast corner, whereas it is the northwest corner.)

Barrera Rubio, Alfredo

"Uxmal: pasado y presente de un sitio maya". *Cuadernos de Arquitectura Mesoamericana*. Vol.19 (Vol. 20) (1992): 77-89.

Barrera Rubio, Alfredo, and José Huchím Herrera

Architectural Restoration at Uxmal, 1986-1987; Restauración Arquitectónica en Uxmal, 1986-1987. Published with parallel Spanish and English texts; the English translated from Spanish by Carlos A. Uribe. University of Pittsburgh Latin American Archaeology Reports No.1. Pittsburgh, PA: University of Pittsburgh, Department of Anthropology, 1990.

Apart from the detailed information on specific structures, this publication provides **the most systematic account of the methods used by the Yucatan regional center of the INAH** in the clearing, excavation, study, and restoration of archaeological sites. As such, this book is essential reading for anyone wishing to understand current approaches to restoration and the complexities of the archaeological remains at which they are looking. **A detailed report is provided of the 1986-1987 work** on the complex northern portions of the Great Platform and of the staircases from the ballcourt plaza up to the terrace south of the Nunnery Quadrangle and from that terrace up to the platform on which the southern building of the Quadrangle stands. Also described is the ecological preservation of the ballcourt plaza and adjacent areas. The introduction states that “the report describes the historical background and previous archaeological work in the architectural complexes in question. Then the various methodological techniques are discussed and new architectural and map data are disclosed. Also included is a description of the archaeological materials discovered (ceramics, artifacts, sculpture, and so on), as well as cultural and chronological inferences.”

There are 84 moderate size, gray scale photographs of restoration work in progress, **the type of photo recording rarely available to the public**. These are professionally taken but so soft in reproduction that much important detail is lost. There are invaluable new ground plans and cross sections and archaeological drawings of miscellaneous sculpture found. The bibliography of twenty-five items includes items not listed elsewhere.

Barrera Rubio, Alfredo, and José Huchím Herrera

“Exploraciones recientes en Uxmal (1996-1987)”. *Memorias del Segundo Coloquio Internacional de Mayistas*. Vol. I, ed. Alain Breton: 265-286. UNAM. México, D.F.: Centro de Estudios Mayas, 1989.

Barrera Rubio, Alfredo, and José Huchím Herrera

“La Gran Plataforma del Palacio del Gobernador de Uxmal”. *Cuadernos de arquitectura mesoamericana*. México, D.F.: División de estudios de postgrado, Facultad de Arquitectura.

Photographs of the Great Platform and of the Governor's Palace Platform are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/Uxmal-GrPlatform.htm>

Barrera Rubio, Alfredo, and Jeff Kowalski

“Una estructura circular en Uxmal, Yucatán”. Paper presented at the Second International Congress of Mayanists, Mérida, Yucatán, August 20-24, 1994.

Photographs of the Round Structure at Uxmal are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-round.htm>

Barrera Rubio, Alfredo, Tomás Gallareta Negrón, Carlos Pérez Alvarez, Lourdes Toscano Hernández, and José G. Huchím Herrera

“Restauración e investigación arqueológica en Uxmal (1986-1987)”. *Mexicon*, Vol.10, No.2 (1988): 37-40 (published also in *Mayab*, Vol. 4 (1988): 22-27).

Barrera Vázquez, Alfredo, et. al

“Restauración e investigación arqueológica en Uxmal (1987-1987)”. *Mayab*, Vol. 4 (1988): 22-27.

Blom, Frans Ferdinand

Illustrated London News. August 23, 1930: 338-339 + photos on p. 340.

12 high quality gray-scale photographs of Uxmal with captions and brief text. The text notes “Photographs and descriptions supplied by Mr. Frans Blom, leader of the Tulane Expedition to Uxmal, Yucatan”.

Blom, Frans Ferdinand

“The ‘Negative Batter’ at Uxmal”. *Middle American Research Series*. Pub. No.4. “Middle American Papers”: 557-565. New Orleans: Department of Middle American Research, Tulane University, 1932.

In preparation for the 1933 Chicago World’s Fair, detailed on-site research at Uxmal was conducted in 1930 by J. Herndon Thomson for architecture, Robert H. Merrill for surveying, Enrique Alferez for casting, Dan Leyrer for photography, with assistants, directed by archaeologist Frans Blom. Noticing that the west façade of the East Building of the Nunnery was leaning forward, they used a plumbline to check the facades of all four buildings of the Nunnery (for which they produced more than 100 cross-sections showing negative batter). They also used a plumbline at the Governor’s Palace, House of the Turtles, the two upper temples of the Pyramid of the Magician, and several other structures at Uxmal, finding that they also had negative batter to both the upper and lower walls. Blom reports that they also conducted about 40 tests at Kabah, Sayil, Labna, and Xlabpak-Dzalbay, where they also found the walls with negative batter. **They concluded that the negative batter must have been a conscious choice and propose that this was done in order that “the edges of the undercut places throw a heavy and solid shadow, thus making a contrast between the outer and the deeper planes”** (p.565). Blom even suggests that “the small projection on the lower edges of their scale-like eyelids . . . throws a sharp shadow into the eye-pit, and the spectator . . . gets the impression that the monster is staring at him. The shadow of the projection creates the impression that one is seeing the black pupil of the eye” (p. 565). Noting that he had observed the conscious use of shadow to throw relief at Comalcalco, built some 500 years before Uxmal, Blom concludes that “the skillful use of light and shadow was nothing new to the Uxmal architects, and . . . the ‘negative batter’ simply was a natural evolution” (p. 565). The author reproduces two informative diagrams of vertical cross sections of the East Building of the Nunnery, including drawn lines representing the plumb lines. Unfortunately, neither of the two otherwise instructive photographs show plumbines in place.

Blom, Frans Ferdinand

“A Short Summary of Recent Explorations in the Ruins of Uxmal, Yucatán”.

Proceedings, 24th International Congress of Americanists (Verhandlungen des XXIV Internationalen Amerikanisten Kongresses Hamburg): 55-59. Hamburg, 1934.

Blom, Frans Ferdinand, photography by Dan Leyrer

"Uxmal: the Great Capital of the Xiu Dynasty of the Maya". *Art and Archaeology*, Vol. 30, No. 6 (Dec. 1930): 198-209. Washington, D.C.: Archaeological Society of Washington.

This is a general description of the discovery experiences of the 1930 Tulane University expedition, carrying out research, photography, and making casts of the Nunnery Quadrangle for the 1933 Chicago World's Fair. Understandably, the article includes a number of fictitious stories and chronological miscalculations, but it is **a most important account, with photographs, of the physical condition of the major buildings of Uxmal previous to their restoration**. There is a ground plan of the Nunnery - Pyramid of the Magician area, drawn by the expedition staff. There are 19 photographs, showing the central ceremonial area thoroughly cleared, revealing specific areas of collapse and survival. Blum reports that they found stela 20 in front of the North Building of the Nunnery, in 20 pieces, which they reassembled with cement binding. He notes "the faint outlines of a frescoe painting" surviving on the inside walls of the entry arch of the Nunnery (p.202), and "brilliant remains of polychrome" in nooks and corners of various buildings (p.207). In a show of enthusiasm (which I believe supported by the evidence now 75 years later) Blum writes: "No building on this continent of the Americas surpasses the Governor's Palace at Uxmal in magnificence and beauty" (p.199). Although their main purpose was to document a few major buildings, the expeditionary group conducted an introductory survey of the area. In an **early recognition of the density of habitation in the area**, they reported that there were "twenty-three groups of hitherto unexplored buildings" and that "we went to the buildings in the distance, two to five miles away, located on hilltops, and found that they too, belonged to the culture of Uxmal" (p.208).

A commemorative volume of photographs, maps, and drawings from this exposition, put together by Blom, and other photographs, drawings, and models resulting from this expedition, are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/drawings/Drawings-Leyrer-Blom.htm>

Blom, Frans Ferdinand

"Uxmal Expedition". *Tulane News Bulletin*, Vol. 10, No. 7 (1930): 111-114.

Bolaños, Q., J. Javier

"Civilización Maya: Uxmal, Chichén Itzá". *Anuario de estudios centroamericanos*, Vol. 2 (1975): 403-406.

Bosch, D. C.

"Die Mayastadt Uxmal, Mexiko". *Internationale Lichtrundschau*, Vol. 29, No. 3 (1979): 87-91.

Brasseur de Bourbourg, Charles-Etienne.

"Informe acerca de las ruinas de Mayapan y Uxmal". *Yikal maya than*, Vol. 8 (1952): selected pages 91-220.

Brasseur de Bourbourg, Charles-Etienne.

"Informe acerca de las ruinas de Mayapan y Uxmal; introducción y notes de Yoly Palomo C.". *Boletin de la Escuela de Ciencias Antropológicas de la Universidad de Yucatán*, Vol. 11, No. 65 (1984): 3-41.

Brasseur de Bourbourg, Charles-Étienne

"Rapport sur les ruines de Mayapan et d'Uxmal au Yucatan (Mexique)". *Archives de la Commission Scientifique du Mexique*. Vol. 1: 234-288. Paris: Imprimerie Impériale, 1865.

The drawings and double-page map of the ruins of Uxmal that illustrate this article are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/drawings/Drawings-Bourbourg.htm>

This is one of the important mid-19th century publications for the study of Uxmal, including the only detailed account of the Uxmal aquadas and the largest, most detailed map of the ruins and surrounding area. Following a 15-page description of Mayapan, and an account of his trip to the hacienda at Uxmal, the author presents a 35-page report on his study of Uxmal. **Most unique is his double-page map of the ruins of Uxmal, including topography**, extending to the north temples and beyond to the hacienda of Uxmal. Most importantly, this map **includes specific shapes for 6 aquadas north and west of the main ruins, each numbered and named**. 3 bridges just north of the Nunnery are also indicated on the map and 1, titled "Natural and artificial bridge at Uxmal", is illustrated (fig. 6). The drawing in this section are initialed "HB" and attributed by the author to a "M. Bourgeois".

Brasseur de Bourbourg comments that, because he lacks the means to make architectural drawings like Catherwood or to take photograph like Charnay, he will apply himself to determining the original layout of Uxmal, which they had not. **His most original contribution is his description of the hydraulic system at Uxmal**. He writes that the aguadas are vast artificial basins cemented with rock and lime, the work of men, though resembling ordinary pools of the natural world. Small streams spread out from these aguadas, circulating around in deep ravines.

He then provides a remarkably detailed description of how the basins in the bottom of the aguadas were created (fig. 5 is an approximate copy of the illustration of these basins in Stephens and Catherwood). Brasseur de Bourbourg's description is based on an account from "one of the principal inhabitants of the village of Noyaxché", who had discovered one of the aguadas and wanted to clear it to provide water for the local people. He reasoned that the unhealthy environment around the aguadas was the result of the decomposition of vegetable matter that had accumulated over several centuries, because the aguadas had been abandoned by the inhabitants and neglected by the landowners, who had not had them cleared. Brasseur de Bourbourg reports in detail the clearing of several aguadas, and the number, size, shape and composition of the artificial cisterns formed in the bottom of the aguadas. His

informant also reported that (in translation): “All the length of the sides of the aguadas one discovered on the far side more than 400 *casimbas*, a sort of hole pierced in the rock, into which water filtered and which were, in the same way as the cisterns, destined to give something to drink in case the aguadas were dry” (pp. 259-260).

These aguadas have been thoroughly studied for the first time by José Huchim Herrera in his thesis, *Introducción al Estudio del Sistema de Aguadas de Uxmal, Yucatán*. Tesis Profesional que para optar al título de Licenciado en Ciencias Antropológicas en la Especialidad de Arqueología. Facultas de Ciencias Antropologicas, Universidad Autónoma de Yucatán. Merida, 1991.

Brasseur de Bourbourg also describes the bridges indicated north of the Nunnery on his map, one illustrated in fig. 6. He writes that the calcium rocks now spanning the ravines has existed before the rivers were formed, as part of the hydraulic system, and that the inhabitants dug out the openings under the natural rock, thus turning them into bridges, about 6 meters long and 3 meters wide.

The author then describes the area of the Pyramid of the Magician illustrated in fig. 7, about which he writes that when the area was cleared of rocks, the column (in translation), “covered as they were in a soft layer of plaster, seemed that they had been cast just the day before, proof that the rooms that are hidden behind rest intact and have not been profaned by any hand since they had been walled in in this way” (pp. 274-275).

In his book, *The House of the Governor*, Jeff Kowalski provides a description of Brasseur de Bourbourg’s observations regarding the Governor’s Palace. “He postulated that the stone rings inside of the doorways of the House of the Governor were used to support wooden poles, from which hung fabric or mat-weave curtains. He also believed that the holes in the walls beneath the eaves served as ventilator, suggesting that the building was a habitation. . . . Brasseur was the first investigator to mention the fact that the large platform of the House of the Governor partly covers the remains of small vaulted apartments on the west side (Structures 1 and 2). He also mentions the presence of a stairway ascending to the House of the Turtles from the courtyard of these buildings (Kowalski, 1987: 20-21).

Bricker, Harvey M., and Victoria R. Bricker

“Astronomical References in the Throne Inscription of the Palace of the Governor at Uxmal”. *Cambridge Archaeological Journal*, Vol. 6, No. 2 (1996): 191-229.

Bricker, Harvey M., and Victoria R. Bricker

“La inscripcion del trono del palacio del gobernador en Uxmal”. *Memoria de la Mesa Redonda de Palenque; arquitectura e ideologia de los antiguos mayas*, ed. Silvia Trejo: 213-230. Mexico, D.F.: Instituto Nacional de Antropologia y Historia, 2000.

Brine, Lindesay

Travel Amongst American Indians, Their Ancient Earthworks and Temples; including a journey in Guatemala, Mexico and Yucatan, and a visit to the Ruins of Patinamit, Utatlan,

Palenque and Uxmal. London: Sampson Low, Marston & Co., 1894 (republished by Oracle Pub., Ltd., Royston, Hertfordshire, 1996).

The 10 images of Uxmal and map of the author's travels in this volume are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/drawings/Drawings-Brine.htm>

As indicated by the title, this book deals with an area even broader than Pre-Columbian Mesoamerica. In fact, the first 8 1/2 of the 20 chapters are devoted to the United States. As usual, the text chronicles the author's travels and the lives and customs of the Indians, in addition to the landscape and ruins.

There is one chapter on Uxmal, nothing on other Puuc cities. For the most part, the Uxmal chapter consists of typical, straightforward description. However, several specific observations about construction and state of preservation are worth noting. Among these, Brine writes that "the well preserved state of portions of the buildings is, at the present time, nearly four centuries after the arrival of the Spaniards, especially noticeable. I observed that **the wooden lintel over the door of my room in the Casa del Gobernador was in perfect condition**. The edges or corners were still sharp and unworn. It was also evident that, although the great weight of the masonry above must have exerted a heavy pressure upon the centre of the lintel, there were **no signs of the slightest deflection**. . . . Many of the stone carvings on the exterior were also apparently uninjured by their exposure to the weather" (p. 347).

The author also wonders about the tools used in carving, though it is surprising to see that he discounts the usefulness of obsidian for carving freshly quarried limestone. "There is, throughout, a wealth of sculpture which is astonishing when it is remembered that the sculptors, as far as we know, had no proper implements to work with. Stone chisels and obsidian scrapers appear to be inadequate for the purpose. . . . The walls of the Nunnery and the Casa del Gobernador are covered with designs deeply cut and perfectly joined. Thus it is proved that the sculptors had not only much capacity as workmen, but they **must have been able to chisel hard limestone with ease and facility of execution**" (pp. 351-352). In this chapter there are 9 gray-scale illustrations of photographs and one small sketch.

C

Carrasco Vargas, Ramón

"Formación sociopolítica en el Puuc: El Sacbé Uxmal-Nohpat-Kabah". A paper presented at the 3rd Mesa Redonda de la Sociedad Española de Estudios Mayas, Guiona, 1991. Published in *Memorias de la III Mesa Redonda de la SEEM*. Girona, 1991-92. Also published in: *Perspectivas antropológicas en el mundo Maya*, ed. M. Josefa Inlesias Ponce de Leona and Francesco Ligorred Perramón: 199-212. Madrid: Universidad Complutense de Madrid, Facultad de Geografía e Historia (Publicaciones de la Sociedad Española de Estudios Mayas, 2), 1993.

The author observes that the Uxmal-Nohpat-Kabah sacbé has been used to claim the position of Uxmal as regional capital. Instead he argues that the evidence from an exploration of the sacbé in 1990 demonstrates that **all three cities were part of a regional organization, based on a political agreement that allowed their autonomous populations to interact equally and to retain their own integrity**. Carrasco Vargas calls attention to the overlooked importance of Chetulix as the end of the sacbé, which never arrived at Uxmal. Based on the remaining evidence, he makes the extraordinary claim that Nohpat may have been as important as Uxmal. He describes the monumental area of Nohpat as surpassing in some ways the monuments of Uxmal. In tracing the sacbé from Kabah to Nohpat to Chetulix, the author **provides the most detailed description of various aspects of this often mentioned roadway**.

Carrasco, Vargas Ramón

"The Rings from the Ball Court at Uxmal". *Seventh Palenque Round Table*, 1989. Merle Greene Robertson, general editor; Virginia M. Fields, volume editor: 49-52. San Francisco: Pre-Columbian Art Research Institute, 1994.

The two rings from the ballcourt at Uxmal are of special importance since there are very few objects at Uxmal on which calendric data is still visible. Based partly on a new examination of the fragments of these two rings, housed in the Regional Museum, Mérida, the author confirms the date previously proposed for the eastern ring, corresponding to 13 January 905 A.D. on the Gregorian calendar, the calendar now in use throughout most of the world. Carrasco proposes a slightly revised date for the western ring, almost five years later than the eastern. The author also calls attention to the appearance of the name of the Governor of Uxmal, Lord Chac, on all four sides of the two rings, and proposes slightly new meanings for the inscriptions.

Charnay, Claude Joseph Désiré

Cités et ruines américaines: Mitla, Palenqué, Izamal, Chichen-Itza, Uxmal, recueillies et photographiées par Désiré Charnay, avec un texte par M Viollet-le-Duc. Paris: Gide Éditeur, A Morel et Ce, 1862-1863 (first Spanish edition, *Ciudades y ruinas americanas*, 1866; a French edition was published by the Bibliothèque Nationale de France, Paris, in 1982; a more recent Spanish edition was published in 1994 by Consejo Nacional para la Cultura y las Artes, México, D.F.).

All of Charnay's photographs of Uxmal in the [lavish vol. 1 of this publication and the illustration to Viollet-le-Duc's article in vol. 2 are reproduced on this web site](#).

There are no photographs of Kabah, Sayil, or Labná in this publication.

<http://academic.reed.edu/uxmal/galleries/thumbnails/drawings/Drawings-Charnay.htm>

This 2-volume publication was made up of 1 large, lavish volume of 49 plates (47 original photographic prints and 2 photo-lithographs), published 1862 (a few of Charnay's photographs published in 1862 had been published 2 years earlier) **and 1 much smaller volume of text**, published 1863.

Charnay's photographs were the first ever made of Maya ruins, overcoming not only the difficulties of a challenging, foreign environment, but also the demanding logistics

of mid-19th century photography. He used a large camera, large glass plates which had to be prepared just before each exposure and developed on site, printed later on albumen-silver paper. Moreover, he worked systematically, documenting not only details but also the grandeur of the cities he recorded. The photographs in *Cités et ruines américaines* were taken during two seasons of fieldwork in 1859 and 1860.

The much smaller text volume contained an account by Charnay of his travels: “Le Mexique: 1858-1861: Souvenirs et Impressions de Voyage”, In his preface, Charnay points out the immensity of his subject, the inadequacy of previous publications, and the necessary shortcomings of his own. On the contentious subject of foreign origins of Maya architecture, he notes similarities to the art and architecture of other cultures, but states that any conclusions are now hypothetical. Nevertheless, he introduces Viollet-le-Duc as (in translation) “a synthetic talent that can reconstruct the past on the ruins if the present” (p. vi). The text volume includes also a revealing essay by Viollet-le-Duc (pp. 3-80), based on photographs, drawings, and notes provided by Charnay. Viollet-le-Duc’s essay, “Antiquités Américaines”, is separately listed and annotated in this web bibliography.

Charnay’s 19 chapters include one on the Yucatan and one on Uxmal, including 19 short pages on the ruins of Uxmal (pp. 362-380). This includes details of his set-up for photography at Uxmal, roles of his Maya assistants, and practical difficulties in dealing with sleeping, along with brief, straightforward descriptions of the ruins.

Charnay, Claude Joseph Désiré

Ciudades y ruinas americanas. Translated from the French, *Cités et ruines américaines*, by Rocio Alonzo. Prologue Lorenzo Ochoa, 1993. México, D.F.: Consejo Nacional Para la Cultura y las Artes, 1994.

In his prologue, Ochoa calls attention to the lack of recognition that Charnay’s publications received in many 20th century academic studies of the ancient Maya, because Charnay’s writing was not sufficiently scientific. However, Ochoa points out that Charnay’s accounts are valuable descriptions of the life of the Maya people and their environments during the 19th century. In his chapter on Uxmal, in addition to his description of the ruins, Charnay provides details of the various types of assistance his local employees provided: 40 of them clearing the site for photography, 2 others running errands for water, others protecting Charnay’s photographic work station from falling debris, etc.

Cirerol Sansores, Manuel

“Informe de los trabajos desarrollados en Uxmal, hasta el 30 de abril de 1937,” in *Estado de Yucatán, Uxmal*, Tomo 1: 1913-1937. Archivo Técnico del Departamento de Monumentos Prehispánicos INAH, vol. 158. México, D.F.: INAH, 1937.

Cirerol Sansores, Manuel

Ushmal. Mérida, Editorial Zamma, 1952.

Cook De Leonard, Carmen

Cuentos Prehispánicos. El Enano de Uxmal. Mexico: Editorial del Valle de México, 1980.

Cural Mena, María de Jesús

"Informe de actividades realizadas en el campo durante la temporada de trabajo del 8 de Diciembre de 1986 al 27 de febrero de 1987, en el sitio arqueológico de Uxmal, Yucatán. Mecanoescrito en los archivos de la sección de Arqueología del Centro Regional de Yucatán del INAH. Mérida, 1987.

D

Desmond, Lawrence G.

"The Application of Close-Range Photogrammetry to Archaeology: Chichén Itzá and Uxmal, Yucatán, México, 1989". *Seventh Palenque Round Table, 1989*. Virginia M. Fields, volume editor: 43-48. Merle Greene Robertson, general editor. San Francisco: Pre-Columbian Art Research Institute, 1994.

On the web at:

<http://maya.csuhayward.edu/archaeoplanet/LgdPage/Adivino94Paper.htm>

(accessed 2008 Jan. 13)

Report on "a close-range photogrammetric field study that was carried out in March 1989 at" La Iglesia at Chichén Itzá and the Adivino Pyramid (Pyramid of the Magician) at Uxmal. **The purpose of the study** was not to learn anything new about these structures (no new information regarding the Pyramid of the Magician resulted), but rather **"to test the ability of archaeologists, only minimally trained in close-range photogrammetry, to successfully document"** archaeological structures. The study produced "accurate documentation" thus leading the author to "encourage archaeologists to apply it to projects where precise measurements and drawings are required." Although the technique of close-range photogrammetry for archaeology and historic preservation is well establish internationally, this study **provides a highly instructive, step-by step account of the photographic technique and its post-fieldwork analysis** for these two structures at Chichén Itzá and Uxmal.

Desmond, Lawrence G.

"Augustus Le Plongeon and Alice Dixon Le Plongeon: Early Photographic Documentation at Uxmal, Yucatan, Mexico". *Mesoamerica: The Journal of Middle America*, Vol. 2, No. 1: 27-31. Merida, Yucatan, Mexico, 1989.

On the web at:

<http://maya.csuhayward.edu/archaeoplanet/LgdPage/LepUxmal.htm>

(accessed 2008 Jan. 13)

Desmond, Lawrence G.

The Nineteenth Century Photographs of Alice Dixon Le Plongeon and Augustus Le Plongeon: A Catalogue of Collections from: American Museum of Natural History, Donald Dixon Album, Getty Research Institute, Peabody Museum at Harvard university,

Philosophical Research Society. CD-ROMs available from the author at the address below. Published by the author, 2005.

A catalogue of the photographic work and mural tracings by Alice Dixon Le Plongeon and Augustus Le Plongeon, housed in the five collections named in the title. The catalogue lists 1,034 negatives, prints, tracings, and lantern slides (Desmond estimates that a total of more than 2,200 are known in public and private collections). In the catalogue, these are organized within the five separate collections, then by the institution's or collector's ID number. For each item, subject, description, medium, stereo or not, type, size, are given, along with cross-references to any of the five collections that house the same or similar items. The catalogue does not include images, but the author writes: "Should a researcher need to work with the duplicated Dixon/Le Plongeon images, the Center for Maya Research at 1459 Dillingham Road, Barnardsville, North Carolina, 28709 should be contacted. A complete collection of duplicated photographs, fully catalogued, is archived at the center." (p.iv)

Preceding the catalogue, Desmond provides an historical overview of the Le Plongeon material and its acquisition by various individuals and institutions. He then presents a description of the Le Plongeon's photographic background, work, and technique. He notes that, although others had made drawing, prints, and photographic images of Maya architecture, the Le Plongeon were the first to make a thorough, systematic record. The Le Plongeon spend several months photographing at Uxmal in 1873, 1876 and 1881; in addition to their major photographic campaigns at Chichen Itza and work elsewhere. The digital format has the advantage of allowing search by keyword.

Desmond, Lawrence G.

"Photogrammetric Recording of the Adivino Pyramid, Uxmal, Yucatan, Mexico: Field Evaluation 1990," in Lorena Mirambell S., ed., *Consejo de Arqueologia Boletín*, Institute Nacional de Antropología e Historia, 1991. Pp.75-78.

On the web at:

<http://maya.csuhayward.edu/archaeoplanet/LgdPage/Adivino91papEg.htm>

(accessed 2007 March 1)

This is the same as the Spanish version listed below as: "Registro Fotogrametrico de La Piramide del Adivino, Uxmal, Yucatan, Mexico: Evaluation de Campo, 1990"

On the web at:

<http://maya.csuhayward.edu/archaeoplanet/LgdPage/Adivino91PapSp.htm>

(accessed 2007 May 21)

Beginning in 1991, Desmond published several reports (listed here) of his stereo-photogrammetric recording of the Pyramid of the Magician, Uxmal. These describe the techniques of recording used, the training of archaeologists in this technique, and the results achieved. The most extensive and informative is his 2003 article, "Recording Architecture at the Archaeological Site of Uxmal, Mexico: A Historical and Contemporary View", listed and annotated below. Desmond's articles on the web are illustrated with instructive photographs and diagrams.

Desmond, Lawrence G.

“Registro Fotogrametrico de La Piramide del Adivino, Uxmal, Yucatan, Mexico: Evaluation de Campo, 1990”. *Consejo de Arqueologia Boletin*, ed. Lorena Mirambell S. Instituto Nacional de Antropologia e Historia, 1991: 75-78.

On the web at:

<http://maya.csuhayward.edu/archaeoplanet/LgdPage/Adivino91PapSp.htm>

(accessed 2007 March 1)

This is the same as the English version listed above as “Photogrammetric Recording of the Adivino Pyramid, Uxmal, Yucatan, Mexico: Field Evaluations 1990.”

Also on the web at:

<http://maya.csuhayward.edu/archaeoplanet/LgdPage/Adivino91papEg.htm>

(accessed 2007 May 21)

Desmond, Lawrence G., and Paul G. Bryan.

“Photogrammetric Survey of the Advino Pyramid at the Maya Archaeological Site of Uxmal, Yucatan, Mexico”. *Proceeding, Seventh International Conference on Virtual Systems and Multimedia*, 25-27 October, Berkeley, California; ed. Hal Thwaited and Lon Addison: 57-64. Los Alamitos, California: IEEE Computer Society. 2001.

On the web at:

<http://maya.csuhayward.edu/archaeoplanet/LgdPage/AdiVsmm01.htm>

(accessed 2007 March 1)

This article reports on the 1999 recording of the Pyramid of the Magician, using close-range stereo photogrammetry, following new cracks resulting from the 1988 hurricane, observed in 1997. This article also adds to previous, related articles a brief historical introduction, providing important context. There are also a few new illustrations.

Desmond, Lawrence G., and Paul G. Bryan

“Recording architecture at the archaeological site of Uxmal, Mexico: A historical and contemporary view”. *The Photogrammetric Record*, Vol. 18, No. 102 (June 2003): 105-130.

On the web at:

<http://maya.csuhayward.edu/archaeoplanet/LgdPage/UxDochHist.html>

(accessed 2007 May 21)

This is the most extensive, up-to-date, and informative of Desmond’s various reports on the stereo-photogrammetry projects of the Pyramid of the Magician, Uxmal. In addition to the much longer text, there are 26 illustrations, including 11 related to Augustus Le Plongeon and 8 of the project at Uxmal.

Following a brief survey of the illustrators and photographers of the Pyramid of the Magician through the 1860s, with helpful information about the equipment and photographic techniques, Desmond present an extensive chronological account of the lives and photographic accomplishments of Augustus Le Plongeon and Alice Dixon Le Plongeon, and their legacy. There are then brief references to several 20th century photographers and archaeologists who documented Uxmal. He then presents the most detailed chronological account of his various articles description the stereo-photogrammetry project of the Pyramid of the Magician. This includes reasons for the project, description of the process and techniques used, and results achieved. This is

an essential, first-hand account, by the scholar most continuously involved in the overall project. He relates the recent stereo-photogrammetry project to the stereo photography of the Le Plongeon.

Desmond, Lawrence Gustave, and Phyllis Mauch Messenger, foreword by Jame Livah King

A Dream of Maya: Augustus and Alice Le Plongeon in Nineteenth-Century Yucatán. Albuquerque: University of New Mexico Press, 1988.

Also on the web, but without the illustrations, at:

<http://maya.csuhayward.edu/archaeoplanet/LgdPage/Dream/Start.htm>

(accessed 2006 Dec. 15)

Based partly on Desmond's 1983 doctoral dissertation for the University of Colorado, Boulder, **this is the only thorough study of the careers and research of Augustus Le Plongeon and his wife Alice, who in particular receives here her first scholarly recognition.** There are separate, lengthy bibliography listing for Alice (23 items) and Augustus (26 items), including newspaper articles and some letters. Chapter 9, "Life in the Governor's Palace," describes their main stay to Uxmal, June and July 1881. The authors describe how, in the process of attempting to find evidence for their already discredited theories regarding Maya history, **the Le Plongeon produced the best inventory to date for the buildings and sculpture at Uxmal, extensive glass-plate photography and molds of relief and high-relief sculpture** to record small iconographic details not visible in their photographs. The molds included eighty-three molds of the Governor's Palace frieze and forty-three molds of the sculptured reliefs on the Pyramid of the Magician.

The Le Plongeon's photographs are especially noteworthy. The authors note that, using stereo photographs, which help to capture the 3-dimensionality of the sculpture, Augustus recorded the entire front (eastern) frieze of the Governor's Palace in sixteen sections, taken from top of a long ladder, supported by saplings, in order to capture the frieze straight on. He also took distant and close-up photographs of the Pyramid of the Magician and, from its top, an almost 180 degree panorama including the Governor's Palace and Nunnery Quadrangle. Eighteen small grey-scale illustrations of their photographs at Uxmal are included. In a caption to the photograph of the Nunnery East Building on page 78, the authors mistakenly write that "in this straight-on treatment of the East Building of the Nunnery Quadrangle, Augustus controlled his line of sight to keep the Adivino Pyramid from looking in the background"; whereas this photograph is an early example of image manipulation, replacing the Advino Pyramid with sky.

Alice especially spoke out against the ongoing removal of the limestone blocks and finely finished stone facing of Uxmal buildings, sometimes with crowbars, by the landowners and administrators for construction of their farmhouses and haciendas.

Desmond, Lawrence G., Roberto Centeno L., Paul G. Bryan, Michael Clowes, and James Callaghan.

"Stereo-photogrammetric documentation of the Advino Pyramid at Uxmal, Yucatan". *The PARI Journal*, a quarterly publication of the Pre-Columbian Art Research Institute, Vol. 2, No. 1 (Winter 2001): 19-22.

On the web at:

<http://maya.csuhayward.edu/archaeoplanet/LgdPage/Adivino99SumRpt.htm>

(accessed 2007 March 1)

This 2001 article includes an overall report on the instability noted in the Pyramid of the Magician, as a result of the 1988 hurricane, and on the photogrammetric recording project, with a few new photographs.

Dulanto Gutiérrez, Enrique

"Uxmal: metropoli Maya de Yucatan". *Artes de México*, Vol. 21, No. 176 (1974): 82-98.

Dunning, Nicholas P.

"Breve Informe sobre una Sonda del Suelo en un Terraplen de la Aguada Chenchán, Uxmal". Report on file at the Centro Regional de Yucatán, Instituto Nacional de Antropología e Historia, Mérida, 1987.

E

Erosa Peniche, José A.

Guide Book to the Ruins of Uxmal. Trans. Julio Granados. Merida: Yikal Maya Than, 1948 (originally published in Spanish as *Guía para visitar las ruinas de Uxmal*, 2nd ed. 1947).

A now-standard type of guide book of approximately 50 pages with 18 small, weak photos, plus a fold-out map and long fold-out drawing of the middle section of the Governor's Palace. The unique value of the book derives from the fact that, at the time of writing, the author was head Archaeologist of the Instituto Nacional de Antropología e Historia, in charge of all archaeological work and restoration in Mexico. **Given the early date of publication, the most valuable aspect is the occasional information about the history and restoration of the buildings.** For example, about the North Building of the Nunnery, the author writes: "on the east and west fronts there is scarcely but a vestige of a once existing magnificent façade. Most of it has fallen down and is very clear to us - as judged from the crumbled sections of this building - that there existed a much older and primitive façade upon which the present one was built" (p. 31). About the Pyramid of the Magician he writes: "As a result of intensive archaeological research programs started in 1938 by the Mexican Government and carried on for several years in the House of the Magician, there was uncovered an interior stairway running almost parallel to the main one on the east side. It was found it leads to an inner temple, a sort of substructure much older than the outside building on top of it.

This substructure is composed of three chambers, of which the middle one has already been cleared from débris” (p. 18).

In his 2 page forward, Sylvanus G. Morley writes: “my valued friend Don “Pepe” [the author, José Erosa Peniche] under whose discerning eye (practically a sixth sense) and whose skillful hand the marvels of highly delicate architectural restoration at Uxmal have been so successfully carried out.”

Erosa Peniche, José A.

“Informe de as exploraciones y restauración en Uxmal, Yuc., durante el mes de junio de 1943”. Estado de Yucatán, Uxmal, Vol. 3: 1942-1947. *Archivo Técnico del Departamento de Monumentos Prehispánicos-INAH*, Vol. 160. México, D.F., 1943.

Erosa Peniche, José A.

“Informe de as exploraciones y restauraciones arqueológicas en Uxmal, Yuc. Estado de Yucatán, Uxmal”, Vol. 4: 1948-1952. *Archivo Técnico del Departamento de Monumentos Prehispánicos-INAH*, Vol. 161. México, D.F., 1948.

Erosa Peniche, José A.

“Informes sobre las exploraciones y restauraciones en la Zona Arqueológica de Uxmal”. *Informes inéditos en el Archivo Técnico de la Dirección de Monumentos Prehispánicos*. México, D.F., INAH, 1940-1948.

Erosa Peniche, José A.

“Zona Arqueológica de Uxmal: Cuadrángulo de Monjas, Edificio Poniente.” Unpublished report in the Archives of the Instituto Nacional de Antropología e Historia de México, T160, No.4.

Images of the Nunnery Quadrangle West Building are reproduced on this web site.
<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-NunneryWest.htm>

Eúan Canul, Gabriel A.

“Informe de actividades: Proyecto de conservación y restauración arquitectónica en Uxmal, Yuc., del 24 de nov. de 1986 al 24 de feb. de 1987. Mecanoescrito en el archivo de la sección de Arqueología del Centro Regional de yucatán INAH, Mérida. 1948.

F

Foncerrada de Molina, Marta

La escultura arquitectónica de Uxmal. Estudios y fuentes del arte en México, XX. Preface by Alberto Ruz Lhuillier. México, D.F.: Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México (UNAM). México, D.F.: Imprenta Universitaria, 1965.

This was a groundbreaking publication not only for our understanding of Uxmal but of the entire Puuc region and its relationship to Maya culture overall. Foncerrada de Molina states that Uxmal has previously been misunderstood as a late-phase of the classic period of Central Maya areas. Instead, she proposes that Uxmal is a regional variant that developed during the same time period. She arrives at this conclusion through a stylistic analysis of the architectural sculpture of Uxmal, together with its religious and symbolic meanings. She writes that Uxmal has received relatively little attention from historians of pre-Hispanic art, especially from an aesthetic point of view.

Chapter 1 provides a valuable review of previous studies of Uxmal, calling attention to many significant contributions by previous scholars but noting the almost total disregard of specialized studies of Uxmal. Instead, in 1965, hers was a rare in-depth study. Chapter 2 relates the architecture of Uxmal to the styles of the Yucatán, calling attention to the uniqueness of the Puuc style. Moreover, she emphasizes the autonomy of Puuc culture in relation to Toltec culture, with which it has frequently been associated, seeing the Puuc style as part of the overall Maya culture. Chapter 3 situates the Puuc style chronologically. Chapter 4 discusses early Maya and Spanish sources. Chapter 5 brilliantly describes, in detail, the harmonious union of symbolic-religious meaning and decorative forms in Uxmal's architecture. Chapter 6, though only 10 pages, would constitute a significant publication on its own, a study of the stylistic evolution of Uxmal through an analysis of the sequence of construction of the Pyramid of the Magician (Adivino). Chapter 7 examines the quadrangles at Uxmal, concluding that the stylistic evidence at Uxmal indicates that the Puuc cities developed without large lapses of time between buildings, such as in the central Maya areas. To demonstrate her analyses of architectural sculpture, there are 26 pages of drawings and 34 of photographs, most high quality. These help to demonstrate how the creators of Uxmal created plastic symbols that largely take over from natural forms.

In her Conclusion, Foncerrada de Molina presents a dynamic view of the development of Puuc culture, as a vigorous expression of its Maya creators, involving the active interaction of complex forms. The creators of Uxmal absorbed influences from many areas, transforming them in original ways.

Foncerrada de Molina, Marta

Uxmal, la ciudad del dios de la lluvia. Presencia de México No. 5. México, D.F.: Fondo de Cultura Exonómica, 1968.

A small paperback, but this is not your typical guidebook. Instead of simply A small paperback, but this is **not your typical guidebook**. Instead of simply taking the reader on a stroll around the site, the author provides **a perceptive synthesis of the architectural characteristics of Uxmal and of the Puuc region**. She first summarizes the history and historiography of the Puuc region, then characterizes the city of Uxmal and of the Puuc style. In summary, she writes (in translation):

“One of the most distinctive characteristics of the architecture in Uxmal is the organization of the buildings surrounding the patios forming quadrangles.

. In the city there exist two types of architectonic structures:

(1) Pyramidal bases on which temples were constructed

(2) Buildings of the Paralelupipda form [6-faced polyhedron with parallel faces], rather low, with a system of proportions regimented by the horizontal line. This type of architectonic volume is that which principally distinguished the Puuc styled from others developed by Maya art" (p. 19).

Foncerrada de Molina is one of the few scholars who has been willing to see in the architecture of a Maya city overall characteristics of its society. She writes (in translation):

"The almost total absence of the human figure in the Puuc art is evidently a testament of a unique religious-esthetic vision that was radically different The religious mentality of the towns of the Puuc region was, undoubtedly, less elaborate, more attached to the natural phenomenon deified by those that received their material well-being from nature, and for that reason it was not to include the priestly figure as a guarantee of the benevolence of gods toward the humans who venerate them" (p.25).

This is followed by informative descriptions of a few of the principal buildings. There are 31 diagrams and photographs, a few showing buildings before more recent restorations.

Foncerrada Moreno, Marta

Estudio Sobre la Ornamentacion de los Monumentos Uxmal. Tesis para optar al grado de Maestra en Historia de las Artes Plásticas, Escuela de Historia del Arte, Universidad Iberoamericana Incorporada a la U.N.A.M. Septiembre, 1963.

This excellent thesis provided the basis for the author's (Marta Foncerrada de Molina) groundbreaking 1965 publication *La escultura arquitectónica de Uxmal*, separately listed and annotated in this web bibliography.

G

Gibb, Diana, et. al

"Cities of the Maya: Palenque, Copán, Uxmal, and Chichen Itza". *Geographical Magazine*, Vol. 8 (1938-1939): 97-104. 187-202, and 237-252.

Gonzales Fernandez, Baltazar

"Depósitos Subterráneos en Uxmal, Yucatán". *Memorial del Congreso Interno 1979*: 203-210. Centro Regional del Sureste. Mexico, D.F.: Instituto Nacional de Antropología e Historia, 1981.

This study was conducted as part of the “Proyecto Uxmal” of the Centro Regional del Sureste of the INAH, directed by Norberto González Crespo, director of the Centro Regional del Sureste. Field chief of the project is archaeologist Alfredo Barrera Rubio. The article describes the “drawings” modeled with stucco (no color was found) on the interior walls of the chultunes examined. 115 chultunes were found, 75 around the tourist area. The chultunes examined were those in the best condition, which were in the south part of the site. There is a description of 4 chultunes with outline drawings to scale of the stucco “drawings” they contained.

At the beginning of the article there is a general description of the project including a rare description of the Uxmal defensive wall, found during the mapping (in translation): “The wall is a stone construction in the form of an irregular ellipse, which measures 900 meters in length by 600 in its widest part and has an approximate height of 2.3 meters in its highest and most conserved part, which is located toward the south” (p. 203). The article states that there will be a forthcoming publication describing this wall.

Graham, Ian

Corpus of Maya Hieroglyphic Inscriptions: Uxmal. Vol. 4, Part 2. Cambridge, Massachusetts: Peabody Museum of Anthropology and Ethnology, Harvard University, 1992.

This is the main Uxmal volume in the corpus project directed by Ian Graham and the Peabody Museum, attempting to publish all objects and paintings that include Maya hieroglyphic inscriptions. The corpus does not attempt readings of the inscriptions or interpretations of the imagery. There is an 8 page introduction to Uxmal, including an important chronological review of “principal investigations at the site,” various clarifying “notes on the ruins” and a description of previous mappings of Uxmal and the one included in this volume. The body of the volume consists of large grey-scale photographs and factual descriptions, some with line drawings, of 16 stelae, 1 altar, 1 hieroglyphic step, 2 ballcourt rings, and 4 cemetery platforms. Includes a superb, highly informative 1929 aerial photograph (4:75). In every way the material is recorded and presented with the highest scholarly standards. A careful description of the project, including the bases for various decisions regarding scope, research methods, and organization are provided in volume 1 (1975).

Graham, Ian

Corpus of Maya Hieroglyphic Inscriptions: Uxmal, Xcalumkin. Vol. 4, Part 3. Cambridge, Massachusetts: Peabody Museum of Anthropology and Ethnology, Harvard University, 1992.

This volume (15x12 inches) is part of the corpus project directed by Ian Graham and the Peabody Museum, attempting to publish all objects and paintings that include hieroglyphic inscriptions. The corpus does not attempt readings of the inscriptions or interpretations of the imagery. This volume is mainly devoted to Xcalumkin. For Uxmal, it includes grey scale photographs, line drawings, and factual descriptions of 4 capstones, 1 mural painting, and 1 fragmented onyx vase. In every way the material is recorded and presented with the highest scholarly standards.

Greene Robertson, Merle

"The Iconography of Isolated Art Styles that are Group Supported and Individual Supported Occurring at Chichen Itza and Uxmal". Paper presented at the First Maler Symposium on the Archaeology of Northwest Yucatan, August 1990. Bonn, 1994.

H

Hartung, Horst and Antony F. Aveni

"El Palacio del Gobernador en Uxmal: Su trazo, orientación y referencia astronómica". Escuela de Ciencias Antropologicas de la Universidad de Yucatan, *Boletín*, No.52: 3-11. Mérida: Universidad de Yucatan, 1982.
(ref: Graham 1992, p. 4:81)

Photographs of the Governor's Palace, Uxmal, are reproduced on this web site.
<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-govpalace.htm>

Hayworth, Bryan C.

Time and Maya Architecture: A Study of Temporal Concepts in Architecture at Uxmal. M.A. thesis, Department of Architecture, University of Miami. Oxford, Ohio: University of Miami, 1990.

Hinderliter, Edward T.

The 1930 World's Fair Expedition to Uxmal, Yucatan, Mexico. M.A. thesis, Department of Anthropology, Temple University, Philadelphia, 1972.

Holmes, William Henry

Archaeological Studies among the Ancient Cities of Mexico, Publication 8, Anthropological Series, Vol.1 of 2, No.1. Part I, *Monuments of Yucatan*. Chicago: Field Columbian Museum, 1895.

Holmes' images of Uxmal and closely related comparative images are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/drawings/Drawings-Holmes.htm>

Based partly on visits in 1884 and in 1894-95, this booklet publishes Holmes' description of the "Ruins of Eastern Yucatan" and "Ruins of Middle Northern Yucatan" including Uxmal. The Introduction consists of a pioneering and still valuable description of Maya construction and physical remains including: function of buildings; architect and his plan; instruments of precision; orientation and assemblage; building materials; transportation; stone cutting and sculpture; masonry, stucco work and painting; substructures; stairways; superstructures; wall surfaces; ceilings, roofs, etc.; doorways and other wall openings; columns and pillars; the arch; ornament; and hieroglyphs. As part of this description, Holmes provides his own diagrams of terraces

and pyramids; ground plans of Maya temples; examples of Maya buildings; cord holders and dumb sheaves; transverse section of an ordinary Yucatec building; interior doorways; exterior doorways; minor wall openings; and examples of Maya arches. These have been regularly reproduced in 20th century publications on the Maya.

His relatively brief descriptions of the major buildings at Uxmal include his own diagrams of cross-sections of Temples IV and V of the Pyramid of the Magician and of the Governor's Palace, and a "sketch-map" of Uxmal. **Most valuable**, Holmes provides a 67.3 cm. (26 1/2 inch) foldout drawing of a panorama of the major structures of Uxmal as if seen from slightly above and behind the North Building of the Nunnery Quadrangle. Based on his own sketches on site, this drawing still provides **an exceptionally useful panorama of the Uxmal landscape and 1895 condition of the major buildings**. There are three photographs taken by his expedition of the central frieze of the Governor's Palace, the Dovecote, and plaster cast of an inscribed column.

Holmes, William Henry

"La casa del adivino, Uxmal, Yucatán". *Art and Archaeology*, Vol. 6, No. 1 (1917): 17.

Huchim Herrera, José

"Informe de actividades realizadas en el proyecto de conservación arquitectónica en la Gran Plataforma del Gobernador en Uxmal, Yucatán. Temporada 1986-1987." *Mecanoecrito en el archivo de la sección de Arqueología del Centro Regional de Yucatán, INAH*. Mérida, 1987.

Photographs of the Great Platform, Uxmal, showing restoration over the years, are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-grplatform.htm>

Huchim Herrera, José Guadalupe

Introducción al Estudio del Sistema de Aguadas de Uxmal, Yucatán. Tesis Profesional que para optar al título de Licenciado en Ciencias Antropológicas en la Especialidad de Arqueología. Facultad de Ciencias Antropológicas, Universidad Autónoma de Yucatán. Mérida, 1991.

Scholars have long recognized that large quantities of water must have been necessary to sustain the population of Uxmal and to construct the city's major architectural complexes. However, as the author notes, the entire pre-Hispanic water systems in the Yucatan had been little studied. Sometimes, in descriptions of Uxmal, the aquadas have even been completely overlooked. Huchim provides **an impressive, in-depth study, based on library and archive research and on-site fieldwork and excavation**. The 163-page thesis consists of an introduction, 5 chapters, conclusions, a bibliography, 29 photographs and diagrams, 4 tables, and a large foldout map of Uxmal locating the aquadas, canals, and their terrain features.

Chapter 1 describes the physical geography of the Yucatan, its geology, climate, vegetation, soils, and hydrology, noting the differences from region to region. As throughout the thesis, previous publications are reviewed as a basis for new research and interpretation.

Chapter 2 reviews the various hydraulic systems used by the Maya, distinguishing between natural and artificial systems and calling attention to the many diverse approaches taken. In the Yucatan, Huchim distinguishes 5 zones, based on differences in terrain and depth of the aquifers. Uxmal is located in a zone with low hills and middle-deep aquifers, described in some detail.

Chapter 3 then reviews the historical facts and background information for the aguadas of Uxmal. Beginning with the Books of Chilam Balam, the author provides a thorough review of all early references to aguadas and water systems in the Uxmal area, drawing from them a surprising amount of specific information about their past history and how they were understood at the time. Especially notable is a map of Uxmal after Brasseur de Bourbourg, published in 1867, which includes indications of several aguadas and canals, and, a remarkable description of the complexity of the water system, quoted in chapter 5. The contributions of 20th century studies and publications is also reviewed.

Chapter 4 describes the results of fieldwork in the area of the aguadas at Uxmal. This included not only mapping of the location of the aguadas and their surface characteristics and levels, but most notably the stratigraphic excavation of 2 wells in the bed of the largest aguada, *Ch'en Chan Akal*. 12 aguadas are described in detail and Huchim states that these 12 represent 70% of the aguadas in the Uxmal area. The stratigraphic layers of each of the 2 well are described and diagrammed in detail. The techniques used for resistivity soundings and their results are described. Ceramic materials collected are listed in tables with approximate dating.

Chapter 5 provides a detailed description, with elevation diagrams, of the primary aguada, *Ch'en Chan Akal*, and of the tanks, also with diagrams. These tanks were created in the depth of the aguada to provide water after the sun had dried the water in the aguada. There is also a detailed description of the construction methods. Huchim stresses the fact that the water system at Uxmal was highly complex and that those who conceived and designed the hydraulic system and aguadas must have had great engineering knowledge and intimate familiarity with the qualities of different soils and plants in the area.

This dissertation provided a major leap forward in our understanding of Uxmal's complex water system. Clearly, further fieldwork and excavation at Uxmal is justified and comparable studies should be considered for other sites in the Yucatan.

Huchim Herrera, José

"Trabajos de restauracion e investigación en los edificios que integran el Cuadrángulo de los Pájaros de Uxmal, Yucatán: temporada de cmpo de 1992". Reporte preliminar presentado en el Consejo Nacional de Arqueología del Instituto Nacional de Antropología e Historia, Mérida, March 1993.

Photographs of the Quadrangle of the Birds, showing restoration over the years, are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-birds.htm>

Huchim Herrera, José

"Uxmal". *Atlas de procesos territoriales de Yucatán*: 315. Mérida: Universidad Autónoma de Yucatán (UADY), Facultad de Arquitectura, 1999.

Huchim Herrera, José, and César García Ayala

"La arquitectura que denota una ocupación tardía en Uxmal, Yuc." *Los investigadores de la cultura maya 8*, Vol. 1 (2000): 138 -154.

The authors describe the results of excavations at Uxmal, begun in 1997 and continuing in 2000. Their study focuses on structures in the form of a "C", concluding that (in translation): "the presence of the structures in the form of a 'C' denotes late occupation in Uxmal. . . . They are vestiges of a complex monumental occupation which is found in the important centers of the late classical and which function as markers of the classical terminal transition" (p. 139). Huchim Herrera and García Ayala note that structures in the form of a "C" have been recorded at sites throughout the Maya area. They review previous studies of "C" structures, beginning with Alberto Ruz, who was the first to recognize that they date later than monumental structures at Maya sites, and Gair Tourtellot, who, in his studies in Guatemala, was the first to record them in detail. The authors provide detailed descriptions of their range in form, material, and construction at Uxmal, with 8 diagrams and 2 maps. Most notably, they describe the distribution of "C" structures within Uxmal, noting that the ones within the wall are constructed of material of the finest quality, often using stones from the monumental buildings, in contrast to the structures located outside the walls. From this, they conclude that, despite social-political changes, there was most likely permanence of social stratification in the late classical society at Uxmal.

Huchim Herrera, José, and César García Ayala

"Las intervenciones en el adivino de Uxmal, Yucatan". *Los investigadores de la cultura maya*, Vol. 9 (2001): 174 -182.

Photographs of the Pyramid of the Magician, showing restoration over the years, are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-magician.htm>

Huchim Herrera, José, and César García Ayala

"La restauracion del Edificio del Dios Pajaro de Uxmal, Yucatan". *Los investigadores de la cultura maya*, Vol. 10 (2002): 208-225.

Photographs of the Quadrangle of the Birds, showing restoration over the years, are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-birds.htm>

Huchim Herrera, José, and I. A. Sánchez y Pinto

“Una Interpretación de Balance Hidrico en el Asentamiento Prehispánico de Uxmal”. Paper presented at the 21st Mesa Redonda de la Sociedad Mexicana de Antropología, October 1989, Mérida,

Huchim Herrera, José, and Lourdes Toscano Hernández

“Algunas anotaciones acerca de los sistemas constructivos de los edificios de Uxmal y Labná”. *Memorias del Tercer Congreso Internacional de Mayistas (9 al 15 de julio 1995)*, 729-739. Mexico [D.F.]: Universidad Nacional Autónoma de México, 1998.

A detailed description and interpretation of new observations of the masonry construction at Uxmal and Labná, based on excavations begun in the 1990s by the Centro INAH Yucatán. The article is divided into 4 sections. The Introduction reviews previous studies of Puuc construction by Pollock, Gendrop, and George Andrews, which however were not based on excavations. The INAH studies aimed to obtain new data from extensive excavations and to revise previous descriptions of the architectural sequence. These were conducted at the Palace and Mirador Group, Labná, and at the Pyramid of the Magician, Quadrangle of the Birds, and Nunnery Quadrangle, Uxmal. Especially studied were the constructive content of the Labná Palace and Quadrangle of the Birds at Uxmal.

In the section on Vaults and Friezes, the authors describe some of the results of their excavation of 18 vaults, 9 with mosaic decoration, some showing evidence of the early Puuc style. Photo 1 and figure 2 show spikes discovered and their positions in the nucleus of vaults in order to increase stability. Photo 2 shows that a layer of stucco was placed over the nucleus of a vault before applying the covering frieze area with mosaic decoration. The section on Foundations describes 2 techniques employed for construction of foundations. The brief section on Walls provides a vertical cross-section of the foundation wall of the East Building of the Nunnery. In the section on Remodeling of the Buildings, the authors describe examples of modifications carried out by the Maya when remodeling their buildings, some simply widening foundations, others requiring dismantling of an entire frieze.

This brief article adds significantly to our understanding of innovative Puuc construction processes. There are 7 photographs and 3 diagrams, especially informative in showing important masonry details described in the text.

Huchim Herrera, José, and Lourdes Toscano Hernández

“El Cuadrángulo de los Pájaros de Uxmal”. *Arqueología Mexicana*, Vol. VII, No. 37 (May-June 1999): 18-23.

Photograph of the Quadrangle of the Birds, showing restoration over the years, are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-birds.htm>

As a report on the exploration, restoration, and reconstruction of the Quadrangle of the Birds at Uxmal, written by the director of the Uxmal project, jointly with the director of the Yaxuná project, **this article is uniquely important. It includes three paragraphs stating the purpose, principles, and methods followed in their work.** This must be read by anyone studying the restoration and reconstruction of Uxmal. After a page describing Uxmal, with ground plan of the Quadrangle of the Birds and other near-by structures, the authors devote 4 pages to the 4 buildings that surround the closed patio, forming the Quadrangle. They include 7 photographs and 4 especially clear diagrams showing the main stages in the construction of these 4 buildings. The authors provide **an exemplary account of the sequence of construction of these buildings.** They conclude that the sequence of development “[in translation] spanned nearly 500 years: it began around 550 A.D. and ended between the years 1000-1100 A.D.” (p.22).

There is relatively little detail regarding individual discoveries and individual restoration choices. However, the authors note that the buildings surrounding the close patio, though closely related, have different characteristics. They call special attention to the unusual façade of the south building, which consists of 13 openings separated by 12 columns, opening into a spacious vaulted portico, which leads to 3 rooms behind. Page 20 includes 5 revealing photographs, showing stages in the exploration and restoration of the north and south buildings. Reproducing these photographs at more reasonable size would allow for more careful looking. The authors note that the diversity of elite materials, from other regions of Mesoamerica, was found in the last stages of construction. **They make the important new claim that** (in translation): “the prestige of the goods found and characteristics of the buildings, such as the restricted access, indicate that **during the last architectural stage the Quadrangle of the Birds was the residence of Chac, last governor of Uxmal**” (p.23).

Huchim Herrera, José, Lourdes Toscano Hernández, and Carlos Peraza L.

“Proyecto Uxmal: reporte de la temporada 1994.” Paper presented at the III Conferencia de Mayista, Chetumal, Quintana Roo, 1995; ms. on deposit at Centro Regional de Yucatán, Instituto Nacional de Antropología e Historia.

K

Konieczna, Barbara and Pablo Mayer Guala

“Uxmal, Yucatán. Informe de la Temporada 1973-1974”. *Investigaciones Arqueologicas en el surest, Cuadernos de los Centros Regionales*, No. 27: 1-18. Mexico, D.F.: Instituto Nacional de Antropología e Historia, 1976.

Kowalski, Jeffrey Karl

“The Ballcourt at Uxmal, Yucatán, Mexico: A Summary of Its Chronological Placement and Mythic Significance”. *The Mesoamerican Ballgame: Papers Presented at the International Colloquium, The Mesoamerican Ballgame 2000 BC-AS 2000, Leiden, June 30th-July 3rd*,

1988 : 81-90. Ed. Gerard W. van Bussel, Paul L. F. van Dongen, and Ted J. J. Leyenaar. Leiden, The Netherlands: Rijksmuseum voor Volkenkunde, 1991. Leiden, The Netherlands: Rijksmuseum voor Volkenkunde, 1991.

Photographs of the Ballcourt at Uxmal are reproduced on this web site.
<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-ballcourt.htm>

Kowalski, Jeffrey Karl

“Collaboration and Conflict: An Interpretation of the Relationship between Uxmal and Chichen Itza during the Terminal Classic / Early Postclassic Periods. Paper presented in the Second Maler Symposium on the Archaeology of Northwestern Yucatan, 3-8 July 2000, Bonn, Germany. Organized by Hanns J. Prem. Published in *Escondido en la selva arqueologia en el norte de Yucatan*, ed. Hanns J. Prem. Mexico, D.F.: Instituto Nacional de Antropologia e Historia; Universidad de Bonn, 2003: 235-272.

Kowalski provides a thorough review of alternative theories in previous scholarship about the Uxmal-Chichén Itzá relationship, describing the evidence in detail. He writes that “Nicholas Dunning and I have proposed that Uxmal’s ruler “Lord Chaak” established a formal military alliance with the Itzá during the Terminal Classic period” (p. 243). Then, importantly, he writes that “it seems much less plausible that the feathered serpents on the West Structure [of the Nunnery] represent ‘late additions’, but rather than they formed part of the original conception for the façade sculpture” (p. 245). Kowalski writes that “I basically agree with Reindel’s [1998] interpretation of the processes involved in the disruption of centralized power in the Puuc region”, however claiming that, most likely, “the dissolution of local political authority at these major Puuc cities . . . involved at least some military encounters that effectively resulted in the conquest of these sites” (p. 271). The article is filled with specific details, carefully described and interpreted.

Kowalski, Jeffrey Karl

“An Historical Interpretation of the Inscriptions at Uxmal”. *Fourth Palenque Round Table*, held at Chiapas, Mexico, 1980. Vol. 6, ed. Elizabeth P. Benson. Gen ed. Merle Greene Robertson. San Francisco: Pre-Columbian Art Research Institute, 1985: 235-248.

On the web at:

<http://www.mesoweb.com/pari/publications/RT06/Uxmal.pdf>

and

<http://216.239.57.104/search?q=cache:RvDdUdMCHCMJ:www.mesoweb.com/pari/publications/RT06/Uxmal.pdf+historical+interpretation+of+the+inscriptions+of+Uxmal&hl=en>

(accessed 2006 Dec. 14)

This is the most detailed examination of the hieroglyphic inscriptions at Uxmal. For those unfamiliar with the reading of Maya glyphs, this article provides an example of the careful reasoning involved, building probable new readings on the evidence of glyphs at other sites and patterns of use. Kowalski presents the evidence for interpreting the images on Stela 14 at Uxmal as a portrait of Lord Chaac and for his

name on a capstone of the East Building, the Nunnery, and on the ballcourt rings, at Uxmal, and possibly on the low hieroglyphic platform in front of the Codz Poop at Kabah. He notes also that several of the glyphs on this low platform must represent noble women. **Based on the Nunnery capstone, he places the reign of Lord Chaac at about A.D. 906.**

Kowalski, Jeffrey Karl

The House of the Governor: A Maya Palace at Uxmal, Yucatán, México. Norman: University of Oklahoma Press, 1987.

Photographs of the Governor's Palace, Uxmal, are reproduced on this web site.
<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-govpalace.htm>

This is **a masterpiece of scholarship**, providing detailed description of a single, remarkable building, its interpretive meaning, and full historical context for many aspects of the building and sculpture. In his introduction, Kowalski makes clear the multifaceted aim of his study. **"In this book I portray the House of the Governor in its richness and complexity of meaning – as a monument in which material, cultural, spiritual, and aesthetic aspects are inextricably interrelated"** (p.4). Although focused on a single building, this book is altogether the single most information publication on Uxmal. The material is presented in three sections: "History and Function," "Architecture," and "Architectural Sculpture." In addition, there is an epilogue providing political context for Uxmal's architectural forms and their relation to Maya architecture elsewhere. This is followed by an appendix with a unique "Summary of Mexican Archaeological Activities and Reconstruction at Uxmal and the House of the Governor," providing a chronology of research and restoration at Uxmal with invaluable details.

Among the major, individual findings, **Kowalski was able to identify the ruler of Uxmal, Lord Chac, through study of the hieroglyphic inscriptions.** All dates referring to Lord Chac fall within the first decade of the tenth century, when both the Nunnery Quadrangle and House of the Governor were built.

There are 28 pages of endnotes, many annotated, and an 18-page bibliography. Of the 199 illustrations (all grey-scale but unusually clear) about half are of the Governor's Palace. Following standard practice, these are unfortunately not dated, and only a few dates for the photos are provided in the text. However, these make available the most comprehensive body of details previous to this web site, and many of the photographs could only have been taken by someone intimately familiar with the subject, recording specific types of information. Profile and elevation diagrams reveal information and ideas not available elsewhere. Descriptions of the Governor's Palace itself include an extraordinary chapter on its construction, possible only because of Kowalski's detailed on-site study of the fabric - undertaken initially during his 1976-1977 year of residence - and carefully reasoned conclusions drawn from it. Although Roys' 1934 publication is more comprehensive, treating the entire Maya region and all aspect of structure, **Kowalski's description of Puuc region construction is more detailed and up-to-date in laying out the sequence of construction and**

answering many questions one might have on site. In many ways, this web site is heavily dependent on Kowalski's masterful book.

Kowalski, Jeffrey Karl

"Lords of the Northern Maya: Dynastic History in the Inscriptions of Uxmal and Chichén Itzá". *Expedition*, Vol. 27, No. 3 (Special issue on the Discovery of Maya History): 50-60. Philadelphia: University Museum, University of Pennsylvania Press, 1985.

Kowalski, Jeff K.

"Los Mascarones de Tláloc del Cuadrángulo de las Monjas, Uxmal: Formas Teotihuacanos Como Símbolos 'Toltecas'". *Memorias del Primer Congreso Internacional de Mayistas*, Vol. 3: 104-132. México: Universidad Nacional Autónoma de México, 1994.

An in-depth study of the sculptural masks representing Tláloc on the buildings of the Nunnery Quadrangle, Uxmal. These are examined in the context of other images of Tláloc on the Pyramid of the Magician, Uxmal, at Teotihuacan, Tikal, Xcalumkin, and elsewhere. Kowalski first provides a comprehensive review of previous interpretations of these images. He concludes that (in translation) "The evidence presented above suggests that the masks of Tláloc on the north building of the Nunnery Quadrangle are polyvalent and can be interpreted in various ways simultaneously. They were probably recognized as goddesses of the storm. In a more limited sense, they were probably emblematic of the art of war and of sacrifices and publicized the military successes of the rulers of Uxmal" (p.116). Kowalski relates the Tláloc reliefs at Uxmal to various realistically sculpted figures on the façades of the same buildings, including tied captives and figures armored for battle. He presents examples showing that the Tláloc masks at Uxmal have foreign connotations but were used to differentiate the lineage of the Uxmal elite from that of foreigners. Kowalski notes that the Xiu founders of Uxmal were intruders who rose to power rapidly at the end of the 8th century A.D., and that, like other classic and terminal classic governing families, they borrowed symbols from various predecessors and contemporaries in order to validate their claim to power. Thus, images of Tláloc on the Nunnery buildings are seen as Toltec symbols validating their Toltec ancestry.

Kowalski, Jeffrey Karl

"A Preliminary Report on the 1988 Field Season at the Nunnery Quadrangle, Uxmal, Yucatán, México". *Mexicon* (1990), Berlin. Vol.12: 27-33.

Kowalski, Jeff Karl

"The Puuc as seen from Uxmal". *Hidden among the Hills: Maya Archaeology of the Northwest Yucatan Peninsula; Acta Mesoamericana*, Vol. 7, ed. Hanns J. Prem: 93-120. First Maler Symposium, Bonn, 1990. Möckmühl, Germany: Verlag von Flemming, 1994 (2nd ed. 1999).

In this essay, Kowalski describes the cosmological meaning of the Nunnery Quadrangle at Uxmal and the political role of Uxmal in the Puuc region and Northern Yucatan. He concludes that the design of the Nunnery and its symbolic figures "represents a conscious decision on the part of the architect and royal patron to create

an architectural complex that embodied the Maya universe in stone, and which would serve as a theatre for rituals providing divine sanction for the king of Uxmal” (p. 97). With meticulous references to the range of previous scholarship, he describes the symbolism of the overall design of the Nunnery and its sculpture. Kowalski considers that this interpretation of the Nunnery Quadrangle supports the idea that the ruler of Uxmal, Lord Chac, was sending an ideological message that Uxmal was “the primate religious and political capital for the Puuc region” (p. 95).

The small, gray-scale illustrations are adequate for the drawings and diagrams reproduced, though not for many of the photographs.

Kowalski, Jeffrey Karl

“Some Comments on Uxmal Inscriptions: A Reference to a Historical Figure and a Probable Tun-Ahau Date”. *Mexicon*, Vol. 8, No. 5 (1985): 93-95.

Kowalski, Jeffrey Karl

“Sylvanus G. Morley, Uxmal y los Xiu”. *Coloquio en tomo a la obra de un mayista (Sylvanus G. Morley 1883-1984)*. Ed. Alfredo Barrera Rubio: 29-32. Mérida: Universidad Autónoma de Yucatán, 1992.

Kowalski, Jeffrey Karl

“Uxmal”. *The Oxford Encyclopedia of Mesoamerican Cultures: The Civilizations of Mexico and Central America*. Vol. 1, ed. David Carrasco: 299-303. 3 vols. Oxford University Press, 2001.

Authoritative survey of Uxmal, noting that “the settlement-pattern data indicate that Uxmal became the capital of a regional state – one which coalesced in the eastern Puuc region during the reign of the ruler “Lord Chac” (p. 301). In support of this idea, Kowalski writes that the “quadripartite ‘world-directional’ plan and architectural sculpture program [of the Nunnery Quadrangle] embody fundamental Maya cosmological concepts, to convey the idea that Uxmal identified itself as the principal religious center and political capital of the eastern Puuc region” (pp. 301-302). Kowalski describes the character of the distinctive Puuc architectural style and of the most important buildings at Uxmal. There is a good basic bibliography. See Kowalski’s much longer 1999 article with Nicholas Dunning, “The Architecture of Uxmal: the Symbolics of State-making at a Puuc Maya Regional Capital,” for a more in-depth account.

Kowalski, Jeffrey Karl

“Uxmal: A Terminal Classic Maya Capita in Northern Yucatan”. *City States of the Maya: Art and Architecture*. Comp. Elizabeth P. Benson. A conference organized by the Rocky Mountain Institute for Pre-Columbian Studies, held at the Denver Museum of Natural History, January 1986: 138-171. Denver: Rocky Mountain Institute for Pre-Columbian Studies, 1986.

An especially informative, clearly written example of the author’s several excellent summaries of Uxmal. Kowalski interrelates “Uxmal’s architectural development,

epigraphy, iconography, and cultural history” (p.140). Recognition of the aesthetic basis for aspects of Puuc design is noted in his observation: “the transverse vaults of the House of the Governor were planned to accentuate the tripartite division of the façade by their striking contours and deep shadows, emphasizing an aesthetic-compositional role over their function as passageways” (p.153). At the same time, he notes that “most designs applied to Puuc buildings were not purely decorative, but carried important religious and cultural meanings” (p. 141). **It is refreshing to see that he does not accept technical evidence at face value.** About the surprisingly early radiocarbon date for the lintel from the lower west temple of the Pyramid of the Magician, Kowalski writes: “the wood sample may have been obtained from the inside rather than the outside of the tree from which the dated lintel was carved, which would produce an artificially early date” (p. 147). Bravo! It is too seldom emphasized that all technical data requires interpretation.

Kowalski, Jeffrey Karl

“Uxmal and the Puuc Zone: Monumental Architecture, Sculptured Facades and Political Power in the Terminal Classic Period”. Peter Schmidt, Mercedes de la Garza, and Enrique Nalda, eds., *Maya*, New York: Rizzoli, 1998 (identical to *Maya Civilization*, London: Thames and Hudson; and to *Los Mayas*, Milan: Conaculta; Instituto Nacional de Antropología e Historia; all 1998): all 401-425.

One of the clearest and most informed brief reviews of Puuc architecture and society, balanced and up-to-date. There are sixteen Puuc region photographs within his essay and seven in other sections of this large volume. A number of these are exception two page spreads, one **a remarkable four-page foldout of the Uxmal Nunnery, which, by surrounding the viewer, manages to convey a sense of the enveloping courtyard.** Equally rare are three different views of the Queen of Uxmal sculpture, allowing one to compare sides and to see the nearly uniform width of the piece. (On page 416, the photo of the better preserved and restored left half of the Great Palace, Sayil, has been mistakenly reversed right-left, so that it appears to be the right half.)

Kowalski, Jeffrey Karl

“Uxmal como un ciudad real-ritual: el asenso y descenso de un estado segmentario en la region este de la zona Puuc”. *Modelos de entidades politicos mayas; Primero Seminario de la Mesa Redonda de Palenque, Palenque, Chiapas, Mexico. Sept. 29-Oct. 1, 1994*, ed. Silvia Trejo: 161-182. Mexico, D.F.: Instituto Nacional de Antropología e Historia, 1994.

Kowalski, Jeffrey Karl

“Uxmal y la zona Puuc: arquitectura monumental, fachadas esculpidas y poder político en el periodo Clásico terminal”. *Los Mayas*, ed. Peter Schmidt, M. de la Garza, and E. Nalda: 401-425. Milan: Conaculta: Instituto Nacional de Antropología e Historia, 1999.

Kowalski, Jeffrey Karl

“What’s Toltec and What’s Maya at Uxmal and Chichén Itzá? Merging Mayan and Mesoamerican Worldviews and World Systems in Terminal Classic / Early Postclassic Yucatán”. Paper presented at the colloquium “Rethinking Chichen Itzá, Tula, and Tollan”,

February 19-20, 2000, Dumbarton Oaks Research Library and Collections, Washington, D.C. Organized by Charles Kriistan-Graham and Jeff K. Kowalski.

Kowalski, Jeff Karl, and Nicholas Dunning.

"The Architecture of Uxmal: the Symbolics of Statemaking at a Puuc Maya Regional Capital". *Mesoamerican Architecture as a Cultural Symbol*, ed. Jeff Karl Kowalski. Oxford: Oxford University Press, 1999: 274-297.

This up-to-date chapter presents the evidence for the view that "Uxmal was the dominant site in the eastern Puuc district during the late Terminal Classic period and that it became the capital of a regional state which coalesced during the late ninth and early tenth centuries" (p.275). In support of this conclusion, the authors examine the archaeological evidence for the relationship of Uxmal to other Puuc cites and to Chichen Itzá. Much of the chapter is devoted to the symbolism of the architecture, including the various axes and directional lines that "embody traditional Maya cosmological concepts" (p.286).

Kowalski, Jeffrey Karl, Rhonda B. Silverstein, and Mya Follansbee

"Seats of Power and Cycles of Creation: Continuities and Changes in Iconography and Political Organization at Dzibilchaltun, Uxmal, Chichen Itza and Mayapan. *Estudios de cultura Maya*, Vol. 22: 87-111.

Kowalski, Jeffrey Karl, Alfredo Barrera Rubio, Herber Ojeda Más, and Huchim Herrera, José

"Archaeological Excavations of a Round Temple at Uxmal: Summary Discussion and Implications for Northern Maya Culture History". *Eighth Palenque Round Table*, 1993, Vol. X, ed. Martha J. Macri and Jan McHargue: 281-296. M. G. Robertson, gen. ed. San Francisco: Pre-Columbian Art Research Institute, 1993.

On the web at:

http://www.mesoweb.com/pari/publications/RT10/28_RoundTemple.html

(accessed 29 Jan. 2007)

Photographs of the Round Structure at Uxmal are reproduced on this web site:

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-round.htm>

A model report, describing in detail (with 4 diagrams and 8 photographs) the results of the 1992 excavation and consolidation of a round structure at Uxmal. The structure had been discovered in 1988 and briefly published in 1990, the first circular building discovered at a Puuc site. The authors relate the round structure at Uxmal to those at other Maya sites and offer reasons for possible datings of the Uxmal structure and what it suggests about the relationship between Uxmal and Chichen Itza. In the process of excavation, a small, north-south oriented ballcourt was discovered just in front of the round structure.

Kurjack, Edward B., Ruben Maldonado C., and Merle Greene Robertson

"Ballcourts of the Northern Maya Lowlands". *The Mesoamerican Ballgame*, ed. Vernon Scarborough and David R. Wilcox: 145-159. Tucson: University of Arizona Press, 1991.

Photographs of the Ballcourt at Uxmal are reproduced on this web site.
<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-ballcourt.htm>

After reviewing the evolution of various, partially conflicting, scholarly theories about the Pre-Columbian ball game, the authors **survey northern Maya ballcourts, describing those at Chichén Itzá and Uxmal in detail**. For Uxmal, they provide a detailed chronology of excavation discoveries and scholarly interpretations, aimed especially at examining the role of diffusion in Mesoamerica and “to elucidate the chronological position of the ballcourt at Uxmal” in relation to those at other near-by sites, especially the Great Ball Court at Chichén Itzá. They conclude that “Seriation of form, dimension, and height of these Puuc ballcourts suggests a sequence that approaches the characteristics of the Great Ball Court at Chichen Itzá. The Uxmal court appears transitional between the high-walled Great Court and lower structures at Sayil, Oxkintok, Tzum, and Xculoc’ (p. 157).

L

Lamb, Weldon

“The Sun, Moon and Venus at Uxmal”. *American Antiquity*, Vol. 45, No.1 (Jan. 1980): 79-86.

Available on the web through JSTOR subscription at:
<http://www.jstor.org/view/00027316/ap010172/01a00100/0>

Lamb describes many aspects of the East, West and North Buildings of the Nunnery Quadrangle to support his conclusion that they record specific Maya observations about the sun, moon, and Venus. **He conducts a complex reading of the number of various parts of the East Building**, especially the carved X pieces. He writes: “The most striking fact about the East Building façade is that the Xs of the 48 main bars total 584, a fine value for the Venus synodic mean of 583.92 days” (p.82).

It is reassuring to note that Lamb is aware that much of the architecture at Uxmal has been restored, so that such detailed number counts of today do not necessarily agree with the original designs. He writes: “Most likely the array of Xs that we are counting is true to the original. In late December 1841, John L. Stephens . . . described the East Building façade as virtually intact. Photos from the 1839 expedition of Frans Blom are on file at the Middle American Research Institute of Tulane University, and one (Figure 3) clearly shows [that] only the fourth set of bars, designated as D, had been badly damaged; a few other bars had been only slightly disturbed. Repairs were undertaken by the Instituto Nacional de Antropologia e Historia beginning in 1936” (p. 81).

Le Plongeon, Alice Dixon

"Ruined Uxmal" *The World* (N.Y.) (June 27, 1881): 1- 2; (July 18, 1881): 2.

A selection of the photographs of Augustus and Alice Le Plongeon are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/drawings/Drawings-LePlongeon.htm>

Le Plongeon, Augustus

"The Ancient Palaces of Uxmal, Mexico". *Scientific American* (Jan. 21, 1882): p. 5042.

Le Plongeon, Augustus

"An Interesting Discovery: A Temple with Masonic Symbols in the Ruined City of Uxmal," *Harper's Weekly* (Dec. 17, 1881): 851-852.

Leyrer, Dan

"A New Method Used in Photographing Maya Hieroglyphics". *Maya Research*, Vol. 2 (Jan. 1935): 60-63.

A selection of Leyrer's photographs of Uxmal, including the type described in this article, are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/drawings/Drawings-Leyrer-Blom.htm>

The author describes a new photographic method he devised when official photographer of the 1930 Tulane expedition to Uxmal, commissioned to prepare for the 1933 World's Fair in Chicago. The new method was devised in order to photograph in more detail and more clearly the glyphs and images carved in low relief on limestone slabs. The new method involved photographing with "a small portable electric power plant and a 500 watt studio reflector". A photograph illustrated in the article shows a stela fragment being photographed at night with this set up. Leyrer writes that "In all cases time exposures were taken. The reflector [light source] was set up at an angle to the monument and the shutter [of the camera] was left open while the reflector was moved forward and backward behind the camera in order that the carvings might throw different shadows and thus underline the low relief designs on the stone" (p. 61). An illustration compared a fragment photographed by daylight and by this new artificial light method. This new photographic method was used partly for the relief on stelae on what is now known as the stelae platform. Leyrer writes that the 1930 Tulane expedition "locate[d] a large terrace mound . . . upon which lay several large monoliths carved with figures of warriors or priests, and columns of hieroglyphs . . . fragments of nineteen different monuments" (p. 61).

Ligorred Perramon, Josep

"Valor estético en la escultura Maya: la apreciación del símbolo en el Puuc (la Casa de las Tortugas, Uxmal)." *Perspectivas antropológicas en el mundo Maya*. Ed. M. Josefa Inglesias Ponc de León and Francesc Ligorred Perramón. Sociedad Española de Estudios Mayas (Publicaciones Sociedad Española de Estudios Mayas, No. 2): 181-198. Madrid, 1993.

The first half of the article consists of a general theoretical introduction to Maya sculpture, stressing the symbolic language of the artists. The author attempts to

establish a philosophical bases for the socio-economic and political function of Maya art. **The second half describes the iconology of the House of the Turtles.** After attention to dating, the author points out that the House of the Turtles is the only Maya example in which the turtle is used as a separate, decorative element. He then impressively brings together many Maya references to turtles and their appearance in other Maya imagery. He also notes the Yucatec Maya liking for the meat and shell of the turtle, the traditional use of turtle oil for respiratory diseases, and the Maya appreciation of the turtle's long life. Adding to what he describes as the long accepted religious and mythological symbolism of the turtle, Ligorred Perramon develops the turtle's historical meaning, connecting turtles with the principle lineage of Uxmal through identification with the dwarf legend. Drawing on Panofsky's distinction between iconography and iconology, he **stresses the interplay of meanings in the House of the Turtles imagery and their involvement with various aspects of Yucatec culture.**

Images of the House of the Turtles are reproduced on this web site.
<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-turtles.htm>

Lorenzo de Zarala, M., Ambassadeur du Mexique en France

"Notice sur les monuments antiques d'Uxmal, dans la Province de Yucatan," No. VI, pp.33-35. *Antiquités mexicaines*, Première Partie. Notes et Documents Divers.

Loten, H. Stanley

Plaza and Platform in Mesoamerica: a Study of Architectural Design in the Quadrangle of the Nunnery, Uxmal. M.A. thesis, Department of Anthropology, University of Toronto, 1966.

M

Maldonado Cárdenas, Rubén

"Intervención de restauración en el juego de pelota de Uxmal, Yucatán".
Memoria del Congreso Interno 1979 : 233-243. México: Instituto Nacional de Antropología e Historia, Centro Regional del Sureste, 1981.

Photographs of the Ballcourt at Uxmal, showing restoration over the years, are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-ballcourt.htm>

For the subjects of this web site, the most important of the congress articles is this thorough report of the 1977 and 1978 intervention and restoration of the Uxmal ballcourt. **The publication of such an informative, well illustrated, restoration report had previously been unusual for the Puuc region.** There are 12 carefully taken, clear, gray-scale photos, showing the entire ballcourt before and after, showing research and

work in progress and important details. For example, figures 6-9 show the top of the west structure before and during liberation, and during and after restoration.

Although the ballcourt had been worked on in 1941, 1948, and 1956, it was in such an advanced stage of deterioration that the decision was taken to study, liberate, consolidate, reintegrate, and restore it. Following now standard archaeological practice, as the remains of the ballcourt were uncovered, every stone was carefully labeled with its location on the control grid. Upper levels were sealed with small stones against water seepage, because throughout the project stability was a major concern. Where there was sufficient evidence to tell where fallen stones had originally been, these were reintegrated, set off 1 or 2 cm. from the originals. Interior walls of the central nucleus were filled in some places to indicate the height of the original rooms. As always, the survival of a few key original elements *in situ* was crucial, such as, here, a piece of the original cornice. Various discoveries were made, such as the location of stairways on the east and west sides, the fallen remains of an entrance to a room in the west structure, and evidence for dating 800-1000 A.D. In finishing, the ballcourt was reintegrated with the entire architectural complex.

Maldonado Cárdenas, Rubén

"Dos ofrendas encontradas en el Juego de Pelota, Uxmal," unpublished report on file at the Centro Regional del Sureste, Merida, n.d.

Maldonado Cárdenas, Rubén

"Ofrendas del Juego de Pelota en Uxmal". *Novedades de Yucatan* (April 25, 1979).

Maldonado C., Rubén and Beatriz Repetto Tio

"Tlalocs at Uxmal". *Sixth Palenque Round Table, 1986*. Merle Greene Robertson, gen. ed., Virginia M. Fields, vol. ed.: 97-101. Norman: University of Oklahoma Press, 1991.

This essay is devoted to the only known relief sculptures representing the face of the Rain God, Tlaloc. Ten of these reliefs were for years on the ground on the west sides of the Pyramid of the Magician at Uxmal and are thought to have fallen from the façade of the lowest and earliest known temple of the Pyramid. The authors include illustrations of rubbings of these ten largely intact reliefs with a comparative chart of their exterior and interior shapes. The images of Tlaloc on these ten stones are similar, all with the prominent goggle-like eyes of the central Mexican Tlalocs. Of the other facial parts described, the authors state that "the most significant symbolism . . . is the Teotihuacán year sign . . . over the headdress and at the ears" of each relief. The authors also describes four similar relief sculptures of Tlaloc, for which there are only fragmentary remains, situated on top of mask stacks on the North Building of the Nunnery Quadrangle, Uxmal, and a few lesser remains also on the North Building. The authors also review descriptions of Tlaloc in historical sources and discuss his meaning.

Images of some of these Tlaloc reliefs are reproduced on this web site:

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-Museum.htm>

Martínez, Cantón E.

"Informe de los trabajos efectuados a la 'Casa del Gobernador' en Uxmal," in *Informe inédito en el Archivo Técnico de la Dirección de Monumentos Prehispánicos*. México, D.F., 1927.

Photographs of the Governor's Palace, Uxmal, are reproduced on this web site.
<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-govpalace.htm>

Martínez, Cantón E.

"Informe detallado sobre el derrumbe ocurrido al edificio del Gobernador," in *Informe inédito en el Archivo Técnico de la Dirección de Monumentos Prehispánicos*. México, D.F., 1926.

Martínez, Cantón E.

Monografía de las Ruinas Arqueológicas de Uxmal," in *Informe inédito en el Archivo Técnico de la Dirección de Monumentos Prehispánicos*. México, D.F., 1918.

Martínez, Hernandez, Juan

"Informe acerca de la visita practicada recientemente en los monumentos arqueológicos de Uxmal, 31 de marzo, 1914," in *Estado de Yucatan: Uxmal*, vol.1. Instituto Nacional de Antropología e Historia Archives, Mexico City, 1914.

Mayer, Karl H.

"La Pintura mural 1 de Uxmal". *Boletín informativo: la pintura mural prehispánica en México*, Vol. 3, Nos. 6-7: 13-17

Mayer, Karl H.

"Uxmal, miscellaneos text 1". *Revindi*, Vol. 4: 74-80. Editorial Pallas Interedition, Budapest, 1989.

McAllister, Mitchell A.

An Archaeological Museum/Visitor's Center and Research Center for Uxmal, Mexico. M. Arch. thesis, University of Utah, Salt Lake City, 1983.

Meldonado C., R. and B. Repetto Tio

"Tlalocs at Uxmal," in *Sixth Palenque Round Table*, 1986. Ed. Virginia M. Fields. Norman: University of Oklahoma Press, 1991. Pp.97-101.

Mena, Ramón

"Cipactonal de la 'Casa del Adivino', en Uxmal, Yucatán." *Memorias y revista de la Sociedad Científica "Antonio Alzate"*, Vol. 38: 271-275. México, 1919.

Menendez, Oscar

Observaciones arqueográficas sobre la cultura maya (particularmente Chichén-Itzá y Uxmal): Guía de las 200 proyecciones (dibujos y fotografías) que ilustran el ciclo de conferencias. Mexico, D.F.: Talleres Gráficos de la Nación, 1936.

This 75-page booklet was primarily a list of images to accompany presentations at conferences. For Uxmal 7 images are listed showing the geographic situation of Uxmal and some 40 showing individual buildings and their details.

Merrill, Robert H.

Mapa de la zona arqueológica de Uxmal, Yucatan. Scale: 1: 2,400. New Orleans: Tulane University, 1930.

Merrill, Robert H.

"Mapping Maya Cities in Yucatan". *The Military Engineer*. Journal of the Society of American Military Engineers (Sept.-Oct. 1930): 421-422.

Some of Merrill's maps of Uxmal are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/drawings/Drawings-Leyrer-Blom-3.htm>

A detailed account of the techniques and equipment used in mapping, by the participant-surveyor of the 1930 expedition to Uxmal, by the Department of Middle American Research of Tulane University, under the direction of Frans Blom. The main purpose of the expedition was to record the Nunnery Quadrangle at Uxmal, in preparation for the creation of a full-size reproduction at the Chicago World's Fair of 1933. The article suggests that originally the intention was to produce a full-size reproduction of all 4 buildings of the Nunnery, though eventually only a reproduction of the North Building appeared at the Fair.

Merrill provides detailed information about the physical conditions under which the study of the Nunnery was conducted and the surveying and recording techniques used. In addition to study of the Nunnery, extensive surveying of a large area of the archaeological site was conducted and "a reconnaissance trip to neighboring ruined cities".

Morley, Sylvanus Griswold

"Ancient Temples and Cities of the New World: Uxmal, the City of the Xius." *Bulletin of the Pan American Union*, Vol. 32 (April 1911): 627-642. Washington, D.C.: Pan American Union.

Morley, Sylvanus Griswold

"A Group of Related Structures at Uxmal, Mexico". *American Journal of Archaeology*. Second Series. Vol. 14, No. 1 (Jan. - Mar. 1910): 1-18 plus 2 plates (also published in *Papers of the School of American Archaeology*, Vol. 6 , 1909).

Photographs of the Dovecote Group are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-dovecote.htm>

The author writes that "the object [of his paper] has been to describe as fully as possible without excavation a single group of buildings" at Uxmal: the South Pyramid, the quadrangles north and south of the House of the Pigeons, and the 2 intermediate platforms. Although based on a single field season in 1900, Morley provides a

remarkably detailed description of every section of the group with measurements. These are keyed to a large, detailed ground plan and matching elevation. The article is **filled with perceptive observations and carefully reasoned interpretations**. Morley includes description of the Maya method of construction, Maya arch, half arch (used at Uxmal and Kabah), and roofcomb. For the early 20th century, this is an exceptional professional study and a model for later archaeological reports.

Morley, Sylvanus Griswold

"The Stela Platform at Uxmal, Yucatan, Mexico", ed. with notes by H. E. D. Pollock. *Archaeological Studies in Middle America*. Middle American Research Institute Publications, no.26: 151-180. New Orleans: Tulane University, 1970.

Photographs of the Stelae Platform at Uxmal are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-stelaeplatform.htm>

In his foreword, Pollock notes that this unfinished manuscript was very likely written in 1941 and 1942. It was published posthumously, in the volume listed above, respectively edited by Pollock, with a very few noted changes and additions. This article was **the first widely available report of the stela platform**, by which time all of the stelae had fallen, most of them unfortunately with their carved faces up and vulnerable. All were turned on their sides with their carved fronts facing west. Morley provides a five-page introduction to the platform, stelae, altars and other sculptured stones on the Uxmal stela platform. There follow detailed descriptions of sixteen individual stelae, with a photograph of each (except no.1) and detailed line drawings of the six most important (nos. 2-5, 11 and 14). Morley notes that "the relief of all the Uxmal stelae is very low and, generally speaking, poorly executed" and badly eroded (p.160).

Morley, Sylvanus Griswold

"Uxmal, the City of the Xius". *Bulletin of the Pan-American Union*. Vol. 32: 627-642.

Morley, Sylvanus Griswold

"Yucatan: Uxmal". *Carnegie Institution of Washington Year Book*, Vol. 41: 251-253. Washington, D.C.: Carnegie Institution of Washington, 1942.

N

Narberhaus, Mechthild

"Typologie und Chronologie der Steinarchitektur in Uxmal, Yucatán". Universität Bonn, 1998.

"New Finds at Uxmal"

Art and Archaeology, Vol. 30 (1930): 96

O

Orellana Tapia, Rafael

“La Reina de Uxmal”. *Tlatoani*, Vol. 1, Nos. 5-6 (1952): 42-44.

P

Palacios, Enrique Juan

“Guía arqueológica de Chacmultún, Labná, Sayil, Kabah, Uxmal, Chichén-Itzá y Tulum”. *Enciclopedia Yucatanense*, Vol. 2, *Epoca Maya: 405-553*, ed. Carlos A. Echánove Trujillo. Oficial del Gobierno de Yucatán, México, 1945.

A series of 8 sections on individual sites. There are 32 pages on Uxmal, 5 on Kabah, 7 on Sayil, and 13 on Labná. These are well illustrated, though mostly with small, weak, brown-tone photographs. Notable are photographs of models of the Nunnery Quadrangle, Pyramid of the Magician, and Governor's House, Uxmal; Palace, Kabah; and Arch and another structure at Labná. Several other photographs are valuable in showing portions of the architecture before restoration.

Peabody Museum of Archaeology and Ethnology, Harvard University: Collections Online

On the web at:

<http://www.peabody.harvard.edu/col/default.cfm>

(accessed 2007 Nov. 27)

This is **one of the two most extensive, publically available collections of early photographs of Uxmal, Kabah, Sayil, and Labná**, either in print or on the web. The other equally large collection is also on the web, hosted by ARTstor (which see), which earlier this month posted on their web site early photographs from the Carnegie Institution of Washington Maya Excavations, which are now **also housed at the Peabody**.

Some of the same photographs appear on both web sites. These include distant views, views of individual buildings, including lesser known structures, interiors, many details of collapsing sections and individual pieces of fallen architectural sculpture, reliefs, etc. Both sets of photographs show structures as discovered, some uncovered, and some at various early stages of restoration.

The main differences are that the **ARTstor images can be opened larger and at higher resolution**, allowing viewers to examine the images in greater detail, a significant advantage for photographs of these elaborate and much restored Maya sites. Also, as of December 2007, the catalogue information posted with the ARTstor images is much more extensive than that on the Peabody site. However, ARTstor images are only

available at subscribing institutions in the United States, whereas the **Peabody images can be viewed by anyone with Internet connection anywhere in the world.**

On the Peabody web site, there are 426 images of Uxmal, 347 of Kabah, 197 of Sayil, and 374 of Labná. The images can be opened mid-size, ca. 640 x 460 ppi. **Nearly all appear to be from the very late 19th and early 20th centuries,** though there are also recent color photographs of some artifacts. Not surprisingly, some of the photographs are badly faded, though most are in remarkably good condition.

Pech Cassanova, Jorge, and Celia Pedrero

Guide for Uxmal and the Region Puuc. Merida: Editorial Dante (paperback), 1997.

An especially clearly written brief tourist guide to the Puuc region. Following a balanced, brief introduction to the region, there are 34 short pages on Uxmal, and 4 each on Kabah, Sayil, and Labná. The photograph of Uxmal on the back cover is reversed left-right.

Peer, Johann

"Planungskriterien im präkolumbianischen Städtebau am Beispiel von Uxmal". *Transparent*, Vols. 11-12 (19780: 13-31.

Pérez de Lara, Jorge

"A Tour of Uxmal with a Brief History of the Site and its Archaeology".

On the web at:

<http://www.mesoweb.com/features/uxmal/index.html>

(accessed 2007 Nov. 27)

This handsome and informative web site provides **one of the best brief introductions for visitors to Uxmal.** There are 39 first-rate photographs (some now slightly out-of-date), mostly of the Nunnery and Governor's Palace, each with a brief, informative description. These descriptions provide basic information, helpful but properly cautious interpretations, and especially perceptive visual observations. Of special note, there is a brief, chronological review of early references to Uxmal and to early explorers and scholars of the site. **Most valuable (because, as far as I know, it is the only published list of its type) is a brief, chronological review of major restoration projects at Uxmal, beginning with the initial work of the Mexican government in 1927 and mentioning about 9 later restoration and related projects.** The web site is beautifully and clearly laid out, a model which might well be imitated by those with more artsy and chaotic designs.

Plan of the Nunnery Quadrangle at Uxmal

Tulane News Bulletin, Vol. 11, No. 6 (1931): 95-97.

Pollock, Harry E. D., et al.

Arte Maya: Uxmal, Sayil, Labna, etc. México: Editora del Sureste, 1982.

Porro, Antonio G. B.

“O año de Uxmal e os gémeos deo Popul Vuh”. *Revista do Museu Paulista*, Vol. 24 (1977): 7-21.

Prowe, Hermann

“Neue Forschungen in den Ruinen von Uxmal (Yukatan)”. *Globus*, Vol. 71: 220-224, and 240-242 (an original manuscript, “Recent Researches in the Ruins of Uxmal (Yucatan)”, is in the Tozzer Library, Harvard University).

Q

Quirante, Jacinto

“Diferencias arquitectónicas en dos ciudades nayas: Uxmal y Chichén Itzá”. *Boletín del Centro de Investigaciones Históricas y Estéticas*, Vol. 5 (1966): 51-119.

R

Ramón Carrasco, Vargas

“Formación sociopolítica en el Puuc: el Sacbé Uxmal-Nohpat-Kabah”. *Perspectivas antropológicas en el mundo Maya*, ed. M. Josefa Inglesias Ponc de León and Francesc Ligorred Perramón. Sociedad Española de Estudios Mayas (Publicaciones Sociedad Española de Estudios Mayas, No. 2): 199-212. Madrid, 1993.

The author observes that the Uxmal-Nohpat-Kabah sacbé has been used to claim the position of Uxmal as regional capital. Instead **he argues that the evidence from an exploration of the sacbé in 1990 demonstrates that all three cities were part of a regional organization, based on a political agreement that allowed their autonomous populations to interact equally and to retain their own integrity.** Carrasco Vargas calls attention to the overlooked importance of Chetulix as the end of the sacbé, which never arrived at Uxmal. Based on the remaining evidence, he makes the extraordinary claim that Nohpat may have been as important as Uxmal. He describes the monumental area of Nohpat as surpassing in some ways the monuments of Uxmal. In tracing the sacbé from Kabah to Nohpat to Chetulix, the author provides **the most detailed description of various aspects of this often mentioned roadway.**

Riese, Berthold

“Altar 10 von Uxmal, Yukatan, Mexico”. *Mexicon*, Vol. 6, No. 5 (1984): 70-73.

Robertson, Merle Greene

“The Iconography of ‘Isolated Art Styles’, that are ‘Group Supported’ and ‘Individual Supported’ occurring at Chichen Itza and Uxmal”. *Hidden among the Hills: Maya*

Archaeology of the Northwest Yucatan Peninsula; Acta Mesoamericana, Vol.7, ed. Hanns J. Prem: 197-211. First Maler Symposium, Bonn, 1990, Möckmühl, Germany: Verlag von Flemming, 1994 (2nd ed. 1999).

Although only 3 of the 15 pages and none of the illustrations deal with Uxmal, the comparison the Chichen Itza is telling. The author recounts the various features in the architectural sculpture at Uxmal that correspond to features of Chichen Itza and elsewhere. In contrasting Uxmal with Chichen Itza, she notes that “Uxmal has no works of art that display large or small groups of individuals. Nowhere in the city is there a display of group orientated public art. Uxmal art is oriented toward the individual ruler, one person. Stela 14 portrays and names Lord Chac, king of Uxmal. His name is associated in several occurrences with structures of the Nunnery and Ballcourt (Kowalski 1987:38). Other stelae at Uxmal depict standing human figures who probably were rulers also. All other art at Uxmal is decorative in style” (p. 210). Robertson asks “why is there this difference in ‘group orientated’ public art at Chichen Itza and ‘individual oriented’ public art at Uxmal?” (p. 210). In contrast to the politicized, competitive ethnic and kin groups at Chichen Itza, which stimulated “large group oriented projects . . . financed by individuals who wished to have their ancestors or prominent persons in their families commemorated by having their portraits carved in stone where they could be seen by everyone”, “Uxmal’s ruling class must have been strong enough to support their elegant style of art either [through] conscription or reaching into the city treasury but it did not have the political organization of a large group of citizens willing, desiring to, or capable of supporting mass commemoration of its people, or possibly there was not the need in the Puuc and there was at Chichen Itza” (p. 211).

Rosenthal, David

The Southernmost Rise of Venus at Uxmal, 1997 and 2005”.

On the web at:

<http://www.ridgecrest.ca.us/~n6tst/maya/event.html>

(accessed 2007 March 21)

Pictorial story of the expedition to document the southernmost rise of the planet Venus as seen from the ancient Mayan city of Uxmal in the Yucatan Peninsula. This event only occurs once every eight years and the account describes efforts necessary to view and photograph it from a Mayan temple specially oriented to face it.

Ruz Lhuillier, Alberto

“Exploraciones arqueológicas en Uxmal, Yuc.. Temporada de 1947. Estado de Yucatán, Uxmal, Tomo 3: 1942-1947. Archivo Técnico del Departamento de Monumentos Prehispánicos-INAH, Tomo 160. México, D.F., 1947.

Ruz Lhuillier, Alberto

“Exploraciones y obras de reconstrucción en Uxmal, Yucatán”. *Boletín Bibliográfico de*

Antropología Americana, Vol. XIV, No.1: 31-32. Instituto Panamericano de Geografía e Historia, México, 1952.

Ruz Lhuillier, Alberto

“El juego de pelota de Uxmal”. *Miscellánea Paul Rivet, Octogenario Dictata; Proceedings of the International Congress of Americanists (Mexico 1954)*, Vol. 1: 635-667. México, D.F.: Universidad Autónoma de México (UNAM), 1958.

Photographs of the Ballcourt at Uxmal are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-ballcourt.htm>

Ruz Lhuillier, Alberto

Maya Zone, January 1948: Archaeological Investigations in Kabáh and Uxmal, Yucatan, Financed by Benjamin B. Felix (Zona Maya, Enero de 1948. Exploraciones arqueológicas en Kabah y Uxmal, Yucatan). Typescript. Cambridge, MA: Tozzer Library, Harvard University, 1948.

Ruz Lhuillier, Alberto

“Trabajos de restauración en Uxmal. Temporada de 1956”. *Informe inédito en el Archivo Técnico de la Dirección de Monumentos Prehispánicos*. Report to the Instituto Nacional de Antropología e Historia, T162, No.2. México, D.F., INAH, 1957.

Ruz Lhuillier, Alberto

Uxmal: Guía Oficial. México, D.F.: Instituto Nacional de Antropología e Historia (I.N.A.H.), 1966, 3rd. ed. (1st ed. 1959, 2nd ed. 1963).

Nearly identical to the English version of the same guide, described below.

Ruz Lhuillier, Alberto

Uxmal: Official Guide of the Instituto Nacional de Antropología e Historia, trans. F. and M. Camara Barbachano. Mexico City, D.F.: Instituto Nacional de Antropología e Historia, 1963, 2nd ed. (1st English ed. 1959)..

This small guidebook is of interest because it includes 7 nearly unique illustrations. There are photographs of 4 rarely illustrated (presumably architectural) sculpture heads from Uxmal. Most importantly, there are 3 reconstruction drawings by Archaeologist (spelling? Ponciado Salazar Orteón, drawn by Nipoletto Sánchez Vera). One is a large foldout with the Ballcourt large and detailed in the foreground and the Nunnery and Pyramid of the Magician in the background. The other 2 are reconstruction drawings representing the south passage through the Governor's Palace; one showing the passage still open front to back, the other showing the passage after it had been closed and a new façade constructed. These are instructively reproduced on facing pages (figs. 18 and 19).

Ruz Lhuillier, Alberto

“Uxmal: temporada de trabajos 1951-1952”. *Anales del Instituto Nacional de Antropología*

e *Historia*, Vol. 6, No. 1, 3-4: 49-67. México, D. F.: Centro de Yucatán, Instituto Nacional de Antropología e Historia, 1955.

Ruz Lhuillier, Alberto

“Uxmal-Temporada de Trabajos 1951-52”. *Anales del I.N.A.H.*, Tomo. VI (1s parte, 1952). México, D.F.: 1955.

S

Sáenz Vargas, César A.

“El adoratorio central, palacio del gobernador, Uxmal”. *Revista Tlatoani*. Period 1, Nos. 5-6: 45-50. México, D.F.: Escuela Nacional de Antropología e Historia (ENAH), 1952.

Photographs of the Governor's Palace, Uxmal, are reproduced on this web site.
<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-govpalace.htm>

Sáenz Vargas, César A.

“Cerámica de Uxmal, Yucatán”. *Anales del Instituto Nacional de Antropología e Historia*. Vol. 5 (1975): 171-186. México, D.F.: 1975.

Sáenz Vargas, César A.

“Exploraciones y reconstrucciones en la Gran Pirámide de Uxmal (1970-1971), Yucatán”. *Boletín del INAH*, Epoca 11, No. 2: 31-40. México, D.F.: Instituto Nacional de Antropología e Historia, 1975:

Photographs of the Great Pyramid at Uxmal are reproduced on this web site.
<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-grpyramid.htm>

Sáenz Vargas, César A.

“Exploraciones y restauraciones en Uxmal, Yucatán”. *Boletín del Instituto Nacional de Antropología e Historia (INAH)*, Vol. 36: 5-13. México, D.F.: Instituto Nacional de Antropología e Historia, June 1969.

Photographs of Uxmal, showing restoration over the years, are reproduced on this web site.
<http://academic.reed.edu/uxmal/uxmalmap.html>

A summary report of the sixth campaign of excavation, restoration, consolidation, and reconstruction at Uxmal, completed in April 1969, written by the director of the project. For the Governor's Palace, there is a one-sentence description of the strengthening of the mosaic of the frieze on the rear façade. For the House of the Turtles, there is a one sentence statement that the southwest section was restored and consolidated, and photo taken after restoration.

The remainder of the article describes in exemplary detail work carried out on the Pyramid of the Magician, the major focus of recent work. There are five unique photographs showing excavation and restoration in progress, plus four after restoration, and six showing sculpture and ceramics discovered. There are also three large-scale diagrams of the newly discovered architectural sculpture. The director notes that “[in translation] the Adivino waited, for so long, an intensive exploration and restoration such as that which we had the opportunity to carry out” (p.4), and that “We believe that in it’s interior other constructions are enclosed, but its exploration could be extremely costly and difficult” (p.13). The most important exploration took place in the northwest base of the Pyramid, where a well-preserved tunnel was discovered, including the façade of Temple I. Also discovered was a partially destroyed stairway leading down from the tunnel, indicating an additional, previous stage of construction, thus at least six epochs for the Pyramid as a whole. In addition to restoration, extensive reconstruction was carried out. This included the pavement surrounding the Pyramid, exterior surfaces of much of the Pyramid, especially north and south, and two stairways at the sides of Temple IV, the so-called “Chenes Temple”. The director writes that a beam in Temple I was carbonated to 569+- 50 D.C., the earliest date so far known at Uxmal.

Sáenz Vargas, César A.

“Exploraciones y Restauraciones en Uxmal, Yucatán (1970-1971)”. *Boletín del INAH*, Period 2, No.2: 31-40. *Instituto Nacional de Antropología e Historia*. México, D.F., July-Sept. 1972.

Sáenz Vargas, César A.

“Exploraciones y reconstrucciones en la gran Pirámide de Uxmal, Yucatán,” in *Boletín del Instituto Nacional de Antropología e Historia*, Period 2, No. 12: 39-44. México, D.F., 1975.

Sáenz Vargas, César A.

“Exploraciones y restauración en Yucatán”. *Boletín del Instituto Nacional de Antropología e Historia (INAH)*, No. 31: 17-23. México, D.F.: Instituto Nacional de Antropología e Historia, 1968.

A report of the archaeological work carried out at Uxmal and Xlapak in 1965, written by the director of the project. As one of the very few early published reports of conservation, restoration and reconstruction in the Puuc region, it is especially valuable. The first third of the article (1 page of text and 5 photographs) describes work carried out on the House of the Doves, Uxmal. The principle aim was to save the roofcomb from further collapse. As the author states, it had almost miraculously survived, especially given the progressive collapse of the building beneath. Exploration of the stone debris on either side of the central wall supporting the roofcomb revealed 10 rooms on the north side facing the Quadrangle on the north side and 8 rooms on the south side facing the Quadrangle on the south side. These rooms were cleaned and partly reconstructed, most importantly providing a wider roof to support the roofcomb above. The director notes that the roofcomb “[in translation] was decorated with figures made of colorful painted stucco, which has become a famous part of the building”. Only a few remnants of these have survived into the 21st

century. The photographs show before and after views of the north and south sides of the roofcomb and buildings below.

Most of the article describes the discovery, exploration, and reconstruction of the Palace at Xlapak. There are 2 full pages of text, a ground plan and cross-section, 3 drawings of masks on the frieze, and 3 photographs of the east façade of the Palace, taken before, during, and after consolidation and reconstruction. The extensive reconstruction of the frieze included both replacement of fallen stones and reproduction ["reproducias (esculpidas)"] of portions of the masks. To prevent further deterioration of vaults, the director emphasizes the necessity of waterproofing the roofs of all Maya buildings with a mixture of cement and stone dust, as he has done at this palace. Some ceramic evidence was found.

Saville, Marshall H.

"Bibliographic Notes on Uxmal, Yucatan". *Indian Notes and Monographs*. Ed. F. W. Hodges. Vol. 9, No. 2. New York: Museum of the American Indian, Heye Foundation, 1921.

Although a very small soft cover book of 77 pages text plus 7 illustrations, this is a basic scholarly resource. Saville presents a chronological list of every document known to him that mentions Uxmal. These include documents as early as 1556, the earliest known only from Stephen's descriptions and quotes, and others published later in the 19th century. Saville include an 8 pages English translation (published by Spinden, 1913) of by far the most extensive early description of the buildings of Uxmal, in a report by Fray Antonio de Ciudad Real in 1588. Beginning with publications in the early 19th century, Saville's descriptions are much briefer, except for Stephens' landmark 1843 *Incidents of Travel in Yucatan*. A few of the references are to publications too slight to be included in this web bibliography. Saville provides informed evaluations of the importance, or not, of many of the publications, notably including descriptions of the types and importance of illustrations. *Bibliographic Notes* includes illustrations of and comments on a previously unpublished 1841 painting by Catherwood, 4 rare photographs of the Nunnery, and the 3 painted stucco heads recently discovered in the Governor's Palace.

He provides an invaluable, detailed description of these 3 stucco heads, including their color, by then in the Museum of the American Indian, Heye Foundation.

In addition to his bibliography, Saville writes that "In excavation, no work has been done except the desultory digging of the Le Plongeon, and the exploration of a mound back of the hacienda by the writer. The site requires careful exploration and much restoration work is necessary to strengthen weak walls, especially to replace the wooden lintels which have fallen in practically all of the buildings, the loss of which will ultimately prove fatal to the security of the walls" (pp. 57-58).

Schele, Linda, and Peter Mathews

"Uxmal: The Nunnery Quadrangle of Chan-Chak-K'ak'nal-Ahaw". *The Code of Kings: The Language of Seven Sacred Maya Temples and Tombs*. Photographs by MacDuff Everton and Justin Kerr: 257-289 and three unnumbered color plates. New York, Scribner, 1998.

Photographs and other images of the Nunnery Quadrangle are reproduced on this web site.

Overall Views:

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-NunneryQuad.htm>

North Building

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-NunneryNorth.htm>

West Building

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-NunneryWest.htm>

East Building

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-NunneryEast.htm>

South Building

<http://academic.reed.edu/uxmal/galleries/thumbnails/uxmal/uxmal-NunnerySouth.htm>

This chapter brings the Nunnery Quadrangle to life. Taking up each of the four buildings and court in turn (with sixteen pages on the North Building alone) **the authors describe the design and ornamentation of each building focusing on the interpretation of their many parts.** As acknowledged, much of this is built on the research of previous scholars, though the authors advance a consistent range of new interpretations, drawing on their wide-ranging familiarity with Maya culture. **What is most remarkable is the convincing, in-depth, synthetic interpretation of the entire quadrangle, its function and multifaceted meaning to those who designed and used it.** About the stone sculpture of the upper-facades, the authors write: “For the ancient Maya, these extraordinary sculptural passages were not just decorations; they transformed the buildings into sacred spaces that were the habitations of gods, supernatural beings of all sorts, ancestors, and kings. They also identified and labeled the buildings so that from afar people could understand their function in both the political and spiritual life of the city” (p.262).

Amid this profusion and complexity of symbolism, the authors call attention to the too easily assumed visual design. “At the same time, the builders integrated these discrete groups into a greater whole by means of vistas, lines of sight, controlled access, imagery, and the repetition of pattern and design” (p.258). About the front façade of the North Building they write: “The dark openings of eleven doorways punctuate the front façade.” How much more revealing this is than the simple statement that there are eleven doorways in the façade. Their sentence captures the powerful, three-dimensional effect of the dark doorways, which transform a plain wall into a strong base supporting the great entablature. This is especially effective on the South façade of the North Building, over which the daylight plays longer than on the façades of the other three buildings. For the West Building, the authors describe the evidence for reconstructed portions of the facades, essential information almost always missing from publications for the public. But how else can viewers know what they are looking at?

McDuff Everton, which convey the dramatic sweep of the Nunnery Quadrangle as few other photos do. It is a shame that they must be reproduced at such small scale, where they give a somewhat distorted sense of the relative size of the buildings. **Reproduced large and in color, they would dramatically convey the experiential presence of this extraordinary quadrangle.**

Altogether, there are thirty-one photographs of the Nunnery Quadrangle, which provide significantly more visual evidence for the text than does any other print publications. Moreover, the photographs are intelligently taken so that the raking light reveals the three-dimensional reliefs and one can see the way in which platforms and moldings of adjacent buildings are aligned. At such small scale, however, and reproduced in gray-scale on pulp paper, much of the detail of the original photographs is lost.

In addition, there are ten groundplans and elevations and forty some other line drawings, which provide diagrammatic information and distinction of parts sometimes not visible in photographs. Here too, however, *it is a shame to see the largest and most complex drawings, such as Mark Van Stone's superb drawings of the four immense mask stacks of the North Building, so compressed.* If the photographs on this web site serve to more fully illustrate this masterful chapter, one of the purposes of this web site will have been fulfilled.

Segovia, Victor

"La Astronomía en Uxmal". *Arqueoastronomía y etnoastronomía en Mesoamérica*. Ed. Johanna Broda, Stanislaw Iwaniszewski, and Lucrecia Maupomé. México: Universidad Nacional Autónoma de México, 1991. Chapter 6: 61-63. Based on a symposium held 24-28 Sept. 1984.

The author describes his discoveries of the ways in which the Maya designed, oriented, and laid out their buildings in relation to the sun, including using them as astronomical calibrators. He describes aspects of Uxmal as examples.

Seler, Eduard Georg

"Die Ruinen von Uxmal". *Abhandlungen der Königlich Preussischen Akademie der Wissenschaften* Philosophisch-Historische Klasse, Nr. 3. Berlin, 1917.

[Seler's images of Uxmal are reproduced on this web site.](http://academic.reed.edu/uxmal/galleries/thumbnails/drawings/Drawings-Seler.htm)

<http://academic.reed.edu/uxmal/galleries/thumbnails/drawings/Drawings-Seler.htm>

A truly remarkable publication for its time, based on three visits during 1902- *A truly remarkable publication for its time, based on three visits during 1902-1911.* Includes 154 pages of text with *some 130 diagrams and line drawings* and about 60 photographs and closely related material, constituting *by far the most in-depth study of Uxmal until Pollock's volume on the Puuc in 1980.* Seler takes up the major buildings at Uxmal one by one, describing them in detail along with his own meticulous ground plans, sections, and especially numerous details of masks, figures, and mosaic designs (there are ten or so drawings from other publications, credited). Among these are the first detailed diagrams of the design patterns for the frieze of the House of the Governor. About four of the photographs are his own with some thirty by Caecilie Seler, his wife. There are also two by Le Plongeon and *an important, previously unpublished group of twenty-two photographs by Maler,* fully credited. The most elaborate drawings as published (based on Seler's material and drawings and

photographs by others) are signed by Wilhelm von den Steinem, and most of the other drawings are consistent with his hand.

Seler's other publications make massive contributions to our understanding of ancient Mexican culture, most notably in the interpretation of imagery. However, this text is **almost entirely descriptive, impressively so**. Presumably as a result of this, in several extensive accounts of Seler's career and publications, this monumental work is not mentioned. If he considered this type of study worthy of his time and effort we should acknowledge it, especially as it has proved to be impressively accurate and records information no longer visible.

Seler, Eduard

"Die Ruinen von Uxmal". *Zeitschrift für Ethnologie*. Vol. 47 (1915): 429-432.

Seler, Eduard

"Ruins of Uxmal". Manuscript in the Tozzer Library, Harvard University, 1967.

Seler, Eduard

"Some Older Systems in the Ruins of Uxmal". Manuscript in the Tozzer Library, Harvard University, 1912.

Seler, Eduard Georg

"Ueber einige ältere Systeme in den Ruinen von Uxmal". *Proceedings of the 18th International Congress of Americanists* (London 1912), Vol. 1: 220-235. London, 1913.

The first publication of Seler's introductory description of Uxmal, reused, slightly expanded, as the first 32 pages of his monumental 1917 "Die Ruinen von Uxmal", described above.

Smith, A. Ledyard and Karl Ruppert

"Ceremonial or Formal Archway, Uxmal". *Carnegie Institution of Washington: Notes on Middle American Archaeology and Ethnology*. Vol. V, No. 116: 1-3. Washington, D.C.: Carnegie Institution of Washington, 1954.

Smyth, Michael

"Uxmal (Yucatán, Mexico)". *Archaeology of Ancient Mexico and Central America: An Encyclopedia*, ed. Susan Toby Evans and David L. Webster: 792-796. NY: Garland Pub. Inc., 2001.

The most up-to-date four page summary of Uxmal, including site map and brief bibliography, pointing out that Uxmal benefited from being situated "within a relatively flat, bowl-shaped basin of deep, rich agricultural soils, flanked on the southwest by five clay-filled sinkholes, or aguadas, which provided a vital source of water in this semiarid tropical environment." Importantly, Smyth notes that **"the densest settlement zone at Uxmal, largely unexcavated, is associated with the Cemetery Group."**

Spinden, Herbert J.

"The Stephens Sculptures from Yucatan". *Natural History: The Journal of the American Museum*. Vol. 20, No. 4 (Sept.-Oct. 1920): 378-389.

Photographs of the 2 Kabah doorjambs described in this article are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/kabah/Kabah-RedHands.htm>

This is the most informed and detailed account of the 6 major sculptures removed from Uxmal and Kabah by Stephens and Catherwood in 1841, the so-called "Stephens stones". Spinden first gives a brief account of Stephens' remarkably productive professional life with a history of the Stephens stones. He notes that they had recently [1919] become a part of the collection at the American Museum of Natural History in New York, having been for 80 years in the private family collection of John Church Cruger, to whom they had been given by Stephens.

There are a number of detailed observations about these sculptures, unpublished elsewhere, in this eminently informed article by the curator in charge of the collection at the Museum. These include the only detailed description of the 2 carved doorjambs from Kabah, easily the most important pieces among the Stephens stones. Reproduced side-by-side with a photograph of one of the jambs (not both as stated in the text, p. 385) and the print from Catherwood's summary drawing of it is a more informative drawing by John Held Jr., carefully studied from the original jamb. Spinden notes that "Each [jamb] consists of two separate stones, as indicated in the engravings. In each the upper stone is one foot five inches high, and the lower one four feet six inches, and both are two feet three inches wide" (p. 385). He notes also that the top portion of one of the jambs had been lost and has been restored. He describes the figures on each jamb as a warrior standing over a kneeling warrior or vanquished chief and notes that the standing figures are uncharacteristically slender in Maya sculpture. Spinden provides an unusually careful description of each figure, noting that the standing figures have nose plugs, which accounts for the seemingly long noses in the less studied Catherwood drawings.

Describing the mask from the façade of the East Building of the Nunnery, Uxmal, Spinden notes that it is "made up of several stones carefully mortised together by the pin and dowel method" (p. 380), and that "the built-up head with headdress . . . may contain parts from the other two heads [that had fallen from the façade], especially since some of the joints do not fit properly" (p. 383). He writes also that "It is possible that the crevices in this composite ornament were filled in with plaster, and that the whole was painted in bright colors" [almost certainly true]. Curatorial information of this type is extremely rare in publication on Maya art.

There are 3 photographs of the 3 Uxmal facades from which some of the sculptures came. There are 7 photographs of the 6 Stephens sculptures, including an especially informative one of the mask from the East Building of the Nunnery.

Spinden, Herbert Joseph and Mrs. Ellen S. Spinden

"The Mystery of the House of the Magician; Sidelights on Studies at Uxmal". *Hobbies, The Magazine of the Buffalo Museum of Science*, Vol. 2 (1930): 69-74.

Staines Cicero, Leticia

"Uxmal y el estilo Puuc: semblanza de Marta Foncerrada". *Arqueología Mexicana*, Vol. 2, No. 11 (Feb. 1995): 35-37.

A recounting of the studies of Marta Foncerrada published in the 1960s, describing **the originality of her stylistic approach and ideas resulting**. Staines Cicero emphasizes that it was the aesthetic-stylistic basis of Foncerrada's studies that made possible her discovery of the relationship of Uxmal's architectural sculpture to that of other regions and her identification of its originality and autonomy. This same approach served her in discovering (in translation) "the evolutionary schema that determined the stylistic sequence of the plastic symbols of Uxmal". The author calls attention to Foncerrada's revision of the five constructive phases of the Pyramid of the Magician (Adivino) and study of the origin and evolution of individual elements such as the column.

Storniolo, Judith

"Blinded by the Light: A View of Uxmal's House of the Governor at Summer Solstice". *Codex*, Vol. 7, No. 1 (1998): 9-25.

T

Termer, Franz

"Der Erste Bericht über die Ruinen von Uxmal, Yucatan, aus dem 16. Jahrhundert". *Beiträge zur Völkerforschung*, Vol. 65: 654-664.

Thompson, J. Eric S.

"The painted capstone at Sacniete, Yucatan, and two others at Uxmal". *Indiana*, Vol.1: 59-64. Berlin: Ibero-Amerikanisches Institut, 1973.

Trevelyan, Amelia M. and Heather W. Forbes

"The Gendered Architecture of Uxmal". *Ancient Maya Gender Identity and Relations*, Ed. Lowell S. Gustafson and America M. Trevelyan: 93-140. Westport, Connecticut: Bergin & Garvey, 2002.

This extensive essay has **the dual purpose of demonstrating the important role of women in the socio-political realm of Maya society in general and of exploring how this helped determine the distinctive style of architecture in the Puuc region**. Uxmal is examined as the primary example, especially the Nunnery Quadrangle. There are eleven small black-white photographs of Uxmal, including four details. The authors provide a revealing description of the ways in the Puuc architecture continues certain aspects of Maya architecture from the Southern Lowlands but, more importantly, of the ways in which Puuc architecture departs from previous Maya architecture,

creating new form and meaning. The authors stress that this was a conscious, deliberate change, that **the creation of a new architectural style at Uxmal and other Puuc region cities coincided with the conscious creation of a new political and social order.** They argue that **this “new vocabulary was unquestionable borrowed from the textile arts and, as such, had strong associations with women and things feminine, in general”** (p.95). They describe how the striking similarities between motifs, forms and organization, of Maya textiles, and the processes through which they were created, closely parallel the characteristics of the highly original Puuc region stone mosaics, presenting the viewer with “weaving in stone”. There are many original ideas in this essay. In their probing exploration of possible connections between textile based architecture and other aspects of culture, the authors even suggest that, in the public architectural display of the mosaic friezes, “the metaphorical richness of textile-based symbol and process may have rendered more explicit texts superfluous” (p.101).

U

UNESCO

“World Heritage: Pre-Hispanic Town of Uxmal”.

On the web at:

<http://whc.unesco.org/en/list/791>

(accessed 2007 April 12)

Quoted from UNESCO web site:

Date of Inscription: 1996

Criteria: (i)(ii)(iii)

Brief Description

The Mayan town of Uxmal, in Yucatán, was founded c. A.D. 700 and had some 25,000 inhabitants. The layout of the buildings, which date from between 700 and 1000, reveals knowledge of astronomy. The Pyramid of the Soothsayer, as the Spaniards called it, dominates the ceremonial centre, which has well-designed buildings decorated with a profusion of symbolic motifs and sculptures depicting Chaac, the god of rain. The ceremonial sites of Uxmal, Kabah, Labna and Sayil are considered the high points of Mayan art and architecture.

Justification for Inscription

The Committee decided to inscribe the nominated property on the basis of cultural criteria (i), (ii) and (iii) considering that the site is of outstanding universal value. The ruins of the ceremonial structures at Uxmal represent the pinnacle of late Mayan art and architecture in their design, layout and

ornamentation, and the complex of Uxmal and its three related towns of Kabáh, Labná and Sayil admirably demonstrate the social and economic structure of late Mayan society.

V

Viollet-le-Duc, [Eugene Emmanuel]

“Antiquités Américaines”. Charnay, *Cités et ruines américaines: Mitla, Palenqué, Izamal, Chichen-Itza, Uxmal, recueillies et photographiées par Désiré Charnay, avec un texte par M Viollet-le-Duc*, 3-80. Paris: Gide Éditeur, A Morel et C, 1862-1863 (a Spanish translation, side-by-side with the original French, was published in *Ciudades de Luz*, by Désiré Charnay and Viollet-Le-Duc, introduction by Guillermo Tovar de Teresa; México: Grupo Financiero del Sureste, 1993; 13-80).

The drawings and map of Uxmal accompanying Viollet-le-Duc's article are reproduced on this web site.

<http://academic.reed.edu/uxmal/galleries/thumbnails/drawings/Drawings-Charnay-1.htm>

Viollet-le-Duc's essay was published as part of the 1863 text volume of Charnay's classic *Cités et ruines américaines*. Viollet-le-Duc's account was **based primarily on photographs, drawings, and notes provided by Charnay, though the interpretation is his own and heavily influenced by writers other than Charnay**. At least 1 of the 3 drawings in the section on Uxmal must have been drawn by him, probably all 3. Viollet-le-Duc describes research of the Americas by previous authors and explorers, like them drawing analogies between the architecture and sculpture of Mexico and that of cultures in Egypt, India, China and Japan, and Europe. **As had other authors, he claims that the art and architecture of Pre-Columbian Meso-America are based on foreign prototypes**.

He then describes the ruins of Izamal, Chichen-Itza, Uxmal, Palenque, and Mitla, providing a section of 12 short pages on the ruins of Uxmal. Here he describes Charnay's photographs of Uxmal and, more importantly, includes 3 drawings with descriptive and interpretive text (pp. 61-72). Figure 8 is **the first published map of Uxmal**, obviously either by Charnay or based on his notes. The major buildings and a few altars and cisterns are identified on the map by letters and, in Viollet-le-Duc's text, named and briefly described.

In **the most revealing section of his description**, Viollet-le-Duc writes:

“Let us take a moment to examine this interior façade of the building marked K [Nunnery East Building]. Here, the tradition of construction with wooden piers and interposed openwork is evident. Moreover, underneath the masonry, the lintels of these square doors are made of wood. . . . Between the two columns projecting from the base that simulate supporting framework beams, the architect placed a series of juxtaposed wooden beams. **No doubt this was meant to recall primitive wooden**

buildings of the people of mixed white and yellow descent that consisted first of a corbelled arrangement timbers stacked in such a way as to leave large spaces at their base. These spaces were then closed off by lattices that suggest openwork.

In order that these stacked structures, which are still in use in regions where yellow and white races are intermixed, are clearly understood, it is useful to have a diagram of this primitive work of carpentry.

In figure 9, A represents columns or interior walls. At the top of these stacks lay the first pieces of wood, B, onto which cross beams are interlocked at right angles, C. Another layer of beams B' are parallel to B; then a second layer of corbelled crossbars is stacked, C'. This method of construction creates vertical partitions directly above the bearing walls that incline in the direction of the openings and support the beam D, into which crossbars are inserted. If we were to fit lintel E between the two piers, yet set deeper than the front section of BB', and then lay trellis upon these lintels, we would have a primitive wooden structure, which was obviously the guiding decorative principle of the stone facades of the edifice (plate XXXIX) [Plate 39 is Charnay's photo of the north-west corner and façade of the East Building of the Nunnery]. But this primitive construction method was not understood by the artists who erected these facades: we will notice that these wooden corbels are arranged haphazardly over walls and openings alike" (pp. 64-66).

Figure 10 is a plan of the south end of the East Building, showing the shape of the vault in one of the back rooms. About this Viollet-le-Duc writes (in translation):

"we can see in figure 10, giving a portion of the layout of the building, that the inclined walls of the room are arranged parallel to the opposite walls, as indicated by section G, rather than perpendicular to these walls. While this tradition of wooden construction was conserved at Uxmal, it functioned only as decoration, which indicates a long artistic era between the tradition's origin and the construction of these edifices" (p. 66).

W

Waldeck, Frédéric de

Voyage pittoresque et archéologique dan la province d'Yucatan (Amérique Centrale), pendant les années 1834 et 1836, par Frédéric de Waldeck, dédié a la Mémoire de Le Vicomte de Kingsborough. Paris: Bellizard Dufour et Co; Londres, J. et W. Boone, Bossages Barthes et Lowell, 1838 (for description of the two 1838 versions, see annotation below)

1930 Spanish edition: *Viaje pintoresco y arqueológico a la provincia de Yucatán (América Central) durante los años 1834 y 1836, por Federico de Waldeck ... Traducción y prólogo del dr. Manuel Mestre Ghigliazza; editor, Carlos R. Menéndez, Merida: Compañía tipográfica yucateca, s.a., 1930.*

1930 Italian edition.

1996 Spanish edition: *Viaje pintoresco y arqueológico a la Provincia de Yucatán*, 1834 y 1836. Trans. Manuel Mestre Ghigliazza. "Presentation" Hernán Menéndez Rodríguez. México, D.F.: Consejo Nacional para la Cultura y las Artes, 1996.

1997 Spanish edition: *Viaje pintoresco y arqueológico a la Provincia de Yucatán*, 1834 y 1836. "Prologo" Miguel Leon-Portilla. México: Servicios Condumex, S.A. de C.V., Centro de Estudios de Historia de México Condumex, Núm. 186.

All of Waldeck's images of Uxmal in this book are reproduced on this web site.
<http://academic.reed.edu/uxmal/galleries/thumbnails/drawings/Drawings-Waldeck.htm>

The original 1838 French edition was published in two slightly different forms, with the same text and illustrations. One form, an extremely elegant version, had a slightly larger binding, making it possible for the fold-out plates to be folded once instead of with two folds as in the slightly smaller version. In both versions, the Yucatan map plate includes some color, but 4 of the plates in the more elegant version were in rich color whereas the same 4 plates were without color in the slightly smaller binding.

The plates constitute by far the most important section of this lavishly produced folio volume. There are 22 large prints on pages 22-1/32 x ca. 16 inches. Three of the pages are 22 1/32 x ca. 32 inch foldouts. Accompanying the plates are 18 pages of text identifying and describing the images. A number of the plates represent Yucatan men and women. All but one of the architectural plates are of Uxmal, representing the Pyramid of the Magician and the Nunnery Quadrangle (the other plate represents Palenque). The Turtles, a portion of the Governor's Palace and other structures are noted on Waldeck's Uxmal map. This was the first publication to include illustrations of Maya architecture and sculpture, and as such served as an impetus for the pursuit of Maya culture until the vastly more informative and accurate publications by Stephens and Catherwood 3 and 5 years later.

Waldeck's publication is a mixed bag. Because he often presented false information about his own life, and because his interpretations of archaeological evidence in both text and illustrations are often speculative, scholars have largely criticized the accuracy of Waldeck's prints and his descriptions of them. For examples, in his excellent *History of Mexican Archaeology*, Ignacio Bernal, then Director of the National Museum of Anthropology, wrote: "his book had its part to play in the general flow of interest towards the Maya remains, along with his very beautiful drawings which were yet, archaeology speaking, so highly inaccurate" (p. 119).

But many of Waldeck's drawings are quite accurate and, in a few cases, provide more informative details of the Nunnery than in any of Catherwood's prints. Comparing his recreation of a section of the façade of the West Building of the Nunnery (plate 13) with the 1843 world-class print after Catherwood, representing the small, then existing portion (Vol. 1, p. 302), Waldeck's print appears reasonably accurate for the portions

still existing when Catherwood drew them. His drawing of a large portion of this façade is especially important because Stephens reported that he was told by the proprietor of the local hacienda “that in 1835 the whole front stood, and the two serpents were seen encircling every ornament in the buildings” (Vol. 1, p. 198). We cannot assume that his drawing of the portions that had fallen were accurate, but the areas that remained when photographed by Charnay in 1859-60 are reasonably accurate in Waldeck’s print. Likewise, his drawings of the courtyard facades of the East and South Buildings, which were relatively well preserved and therefore did not require much imaginative reconstruction, are reasonably accurate. His detail of a section of the courtyard façade of the East Building, which has been well preserved, is an impressive print and the most informative until Le Plongeon’s photograph 25 years later.

The generalized contrast made by Bernal and other scholars between archaeology and art is oversimplified and misunderstands Waldeck’s intentions. He was not attempting primarily to make beautiful drawings. Two distinctions must be made about the text and images in Waldeck’s volume. First, it is **important to distinguish between the descriptive aspects of Waldeck’s text and images of Uxmal and, on the other hand, his interpretations of this evidence**. In describing each of the prints, he often provides detailed information, including measurements, and comments such as (in translation) “The colors that the buildings were painted, in the past, are blue, red, yellow, and white. There can be found in some places visible traces of these different shades; especially in the back of the carvings where the rain has not been able to penetrate, they are perfectly apparent” (p. 223).

Most importantly, in evaluating Waldeck’s images, it is **important to distinguish between drawings that are intended primarily to record visible evidence of buildings as they appeared when Waldeck drew them, comparable to the drawings of Catherwood, and, on the otherhand, drawings which are intended to suggest how they might have looked when new**. Where facades were well preserved, Waldeck had sufficient evidence and his drawings and detailed descriptions are reasonably accurate. But where parts of facades had collapsed, details are missing, and stone carvings badly worn, he has attempted to suggest how they might have looked. Thus, he speculated that the tumbled down pile of the Pyramid of the Magician originally had four sloping sides, comparable to Egyptian pyramids. He drew carvings with the sharp edges more representative of newly carved stone, and, in his few color plates, filled in the largely missing color.

Some of these, such as his famous drawings and descriptions of caryatids on Temple V of the Pyramid of the Magician, are not only highly speculative, but **seem deliberately falsified**. The remaining fragments of these figure as they exist today, which were seen by Waldeck, though small, clearly disagree with his imaginative reconstructions of them. Yet Waldeck writes: “I was very surprised to find in these caryatid figures a drawing so correct, especially in the lower part, that after having recomposed and drawn one of the statues . . . ” (p. 222). These and a few other of Waldeck’s drawings are not justified even as speculative reconstructions, and warn us to view all of his drawings with caution. But they do not justify wholesale rejection of the information recorded in his drawings and descriptions of them.

We should note also that he demonstrates an early concern for preservation. About several masks, fallen from the façade of the Nunnery's East Building, he wrote (in translation): "the masks will not be lost for travelers who come to visit these ruins after me. They will be found in a pile and covered with earth in the second room of the north side where I had the precaution to deposit them" (p. 244, 246).

The excellent prologue, by Miguel Leon-Portilla, to the 1997 Spanish translation, is separately listed and annotated in this web bibliography.

Weitzel, R. B.

"Uxmal Inscriptions". *American Journal of Archaeology*, Vol. 35, No. 1 (Jan. 1931): 53-56.

Presents evidence to show that Maya inscriptions at Uxmal do not support the claim that "the position of the days in the Maya months underwent a shift of but a single day which left unimpaired an otherwise uniform calendar system" (p.56).

Z

Zapata Alonzo, Gualberto

Guide to Puuc Region: Uxmal, Kabah, Xlaapaak, Sayil, Labná.
Mérida: Producción Editorial Dante, (n.d., 1983).

Although titled a guide, this is a 110 page account by an archaeological expert, **more detailed and scholarly than guide books normally available**. For example, about the West Building of the Nunnery, he writes: "Some years ago, a hole was dug in the rear platform of the western building, which clearly allowed us to see the upper part of an arch and some of the stones used to seal it. This hole was covered when the Light and Sound Show installations were put in. This tells us . . . that the western building was built over an existing structure" (p. 42).

Although most of the illustrations are small, it is remarkable to see 90 photographs and drawings, 13 of which are in color. A few of these are rare, especially **7 photographs by the author, with text, showing the "sequence of restoration, in 1972-73, of the Great Pyramid** by archaeologist Cesar Sáenz of the I.N.A.H. of México" (pp. 63-66). 6 of the illustrations are aerial photos by José López Nájera.

In one of the most specific summaries of the architectural qualities of Uxmal, the author writes: "it has been unequivocally stated that the architecture at Uxmal was the most beautiful of the American continent during Pre-Hispanic times – its fine finish, the delicacy of its soft lines, the proportions of its majestic buildings, and the richness of its varied reliefs, are all indications of its builder's high sense of esthetics" (p. 27).

Zavala, Lorenzo de

“Notice sur les monuments antiques d’Ushmal, dans la province de Yucatan, fournie par M. Lorenzo de Zavala, Ambassadeur du Mexique en France”. *Antiquités Mexicaines, relation des trios expéditions du Capitaine Dupaix*. Part 1, Notes et documents divers. Vol. 1, No. 6, pp. 33-35. Folio. Paris, 1834.

As Ignacio Bernal writes: “Most of these articles [of the time] consist of hypotheses originating in Paris, lacking factual foundations and not to be taken too seriously. Even Lorenzo de Zavala’s piece on Uxmal, for all the writer’s high standing, is inferior to Ciudad Real’s description of 250 years before” (Bernal, 1962, p.104).