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
Sayil

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

Three hundred photographs and diagrams of Sayil are reproduced on this web site.
http://academic.reed.edu/uxmal/galleries/thumbnails/kabah/Kabah-RedHands.htm

Andrews, George

Andrews, George

ARTstor
Available on the web though 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.

Barrera Rubio, Alfredo, et al.

Boucher, Sylviane
Carmean, Kelli Cummins

Carmean set out to examine “whether wealth within Sayil society was produced through mechanisms external or internal to the local community”. She based her study on a comparison of 2 models. As a possible external mechanism, she studied evidence for long distance trade. As a possible type of internal mechanism, she studied evidence for feudalism. The primary material studied was “the patterning of [Sayil's] architecture and ceramic assemblages” (p. ii). Carmean concludes that “neither model was recognized in Sayil’s archaeological record” (p. 224). Nevertheless, this study was carefully organized and conducted and the thesis provides information about wealth and household organization in Sayil. There are diagrams of 8 different platforms with their structures and a high quality, selective bibliography.

Carmean, Kelli

This paper is based on a 1990 Ph. D. dissertation, listed above, for the Department of Anthropology, University of Pittsburgh, The Ancient Household of Sayil: A Study of Wealth in Terminal Classic Maya Society.

This paper describes an architectural wealth hierarchy for the residential area of Sayil. Using the vault area and per-capita labor investment as guides, Carmean attempts to determine the architectural variability of households and, through this, the social stratification. Because her study does not include the ceremonial center or outlying chich mounds of the poorest inhabitants, the author points out that the study concerns mainly the middle rank of Sayil society. Nevertheless, within this middle rank, the study defines 6 ranks of households indicating a range of social prestige. She concludes that “the Conquest period assertion that land was communally owned by the Maya does not negate the possibility that other mechanisms limiting access to land may have produced social structures similar to those resulting from private land tenure” (p.152).

Of equal importance to the social stratification are the highly detailed ground-plans presented of domestic architecture at Sayil, indicating a surprising range in design and providing important information not discussed in the article. They indicate the varying size and shape of the basal platforms on which the discreet residential units were constructed, the size, divisions, and interrelationships of the buildings, chultunes, and communal spaces, and their relationships to the platform edges. All these provide important comparisons with the individual buildings and communal design in the ceremonial center.
Carmean, Kelli

Carrasco Vargas, Ramón, and Sylviane Boucher

Images of the Great Palace at Sayil are reproduced on this web site: http://academic.reed.edu/uxmal/galleries/thumbnails/sayil/sayil-grpalace.htm

Carrillo, Estanislao

Dunning, Nicholas P.

Dunning, Nicholas P.

E

“La excavación de montículos chich en Sayil, Yucatán.

K

Killion, Thomas W., Jeremy A. Sabloff, Gair Tourtellot, and Nicholas P. Dunning.
M

Mayer, Karl H.

“A Megalithic Phallus from Sayil, Yucatan”.
*Mexico*, Vol. 25, No. 5: 118.

Images of the Phallic Stela at Sayil are reproduced on this web site.
http://academic.reed.edu/uxmal/galleries/thumbnails/sayil/sayil-pstela.htm

P

Palacios, Enrique Juan
“Guía arqueológica de Chacmultún, Labná, Sayil, Kabah, Uxmal, Chichén-itzá y Tulum”.
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.

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reliefs, etc. Both sets of photographs show structures as discovered, some uncovered, and some at various early stages of restoration.

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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.

R

Reygadas Vertiz, J.

Rosado Ojeda, Vladimiro

Images of the Great Palace at Sayil are reproduced on this web site.
http://academic.reed.edu/uxmal/galleries/thumbnails/sayil/sayil-grpalace.htm

S

Sabloff, Jeremy, and Gair Tourtellot.

Sabloff, Jeremy, and Gair Tourtellot.
The authors provide an exceptionally clear, detailed description of their mapping of Sayil during the 1983-1985 seasons (this was followed by two seasons of surface collection and excavation in 1987-1988). Their careful, guarded interpretation of these findings and comparisons with other Maya areas is notable. The inability to photograph areas lacking in above ground remains and, except when cleared, even those with remaining platforms and foundations, makes these site maps and their descriptions of unique importance. This is a most instructive read for students being introduced to the ways in which archaeological mapping can reveal major aspects of ancient civilizations.


Photographs of the limestone foundation and lower wall remains of 1 domestic structure are reproduced on this web site. http://academic.reed.edu/uxmal/galleries/thumbnails/sayil/sayil-domestic.htm


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Sayil mapping project, conducted 1983-85, is first described: noting the special significance of Sayil research, previous Puuc settlement studies, and the goals and organization of the project. These are “the first large-scale settlement maps for a Puuc region site” (p. xi). Next, the methods and procedures of the project are described, including some twenty feature types, such as basal platforms, chich mounds, and solution holes. This is followed by an analysis of the types and distribution of soils, so central to understanding the role of agriculture in the density and layout of Puuc cities. Next a list is provided of the extensive, detailed coding used for recording nearly a hundred features, coordinates, and stylistic features. All of this is intelligently organized and presented with exemplary clarity.

The main body of the publication is the sixteen large, separate, folded maps, in a pocket at the back of the volume, at a scale of 1:1,000 (overall site map of Sayil is at a scale of 1:5,000). Appendix 3, “Sayil Feature Database,” is provided on a computer diskette, a form unfortunately not readable on most recent computers. Phase two of the project, including excavations, completed 1987-88, is not included in this report.

In addition to a list of specific questions being examined, four long-term goals of the project are identified: “(1) to determine the nature of the adaptation of Sayil’s former inhabitants to the little-known Puuc hills environment, focusing on their patterns of land and water use; (2) for the first time to classify and assign functions to the full range of features and structures of an ancient Puuc community, concentrating on the long-neglected small feature clusters or potential households; (3) to reveal, analyze, and codify the population and internal organization of a Puuc community and model
its sociopolitical organization; and (4) to delimit the organization of Sayil and its relation to neighboring sites” (p.7).


The authors first describe the underlying questions of their research and the need for intensive settlement pattern and household studies at Puuc region sites. In particular, they describe their reasons for selecting Sayil (they review the limited previous research). These reasons are laid out in 13 pages with great clarity. There follow 26 pages describing the results of the May-June 1983 field season and their analysis, supported by 11 tables and figures. The 2 zones surveyed in the 1983 study are identified: the “Western Transect”, just southwest of the Palace, and the “South-central Survey Zone”, immediately north of the Southern Palace on both sides of the north-south causeway. The amount of new information resulting from this study is impressive and served as the basis for more in-depth field research the next year.


A report of an intensive study of the community and household settlement patterns at Sayil, undertaken Feb.-May 1984. Introducing this report, the authors write: “Unlike the situation at other Maya sites like Tikal or Seibal in the Southern Maya Lowlands, or Dzibilchaltun or Cobâ in the north, there never has been an intensive settlement pattern study at any of the Puuc region sites” (p. 2). This document reports on just such a study at Sayil. The study consisted of 4 moods of investigation: (1) survey and mapping, (2) excavation, (3) historical research, and (4) environmental research” (p. 5), each of which is broken down into constituent elements and described in detail. What is especially impressive is the interplay of description with meaningful interpretation. Building on the report of the previous year’s study, this report provides a more comprehensive and detailed account, which allows the authors to make promising speculations in answer to the many questions posed at the beginning of the 1984 report. The text is supported by 2 tables and 13 analytical diagrams.


Apart from its importance in reporting on Chac and its chronological relationship to the Puuc region and beyond, this is a crucial article for arguing the importance of certain excavation techniques in order to provide secure bases for dating.
The article reports on 3 field seasons (1995-1997) at Chac II (Chac), the Yucatan, Mexico. Fig. 2 is a full-page “digitized map of the Great Pyramid Plaza and Hol-Be groups”. The intent of the research was to establish an absolute chronology for the site, with implications for the entire Puuc region and beyond. Smyth concludes that “Chac, in particular, and the Puuc region—by extension—underwent significant cultural development well before the Terminal Classic period (A.D. 800-1000). Chac also appears to have experienced foreign influence, contacts, or both, from the southern Maya area, central Mexico, and Chichen Itza. These new chronological data suggest an earlier, longer developmental sequence for the Puuc region than has been traditionally supposed”.

The author writes that “Unfortunately, chronological reconstructions for the region have not been rigorous and are largely based upon relative dating techniques using primarily architecture and ceramics. Furthermore, there are few chronometric dates taken from stratigraphic contexts necessary to place architectural and ceramic sequence in absolute time”. Instead, this study is based on “independently linking architectural styles to ceramic sequences via a program of absolute dating” (p. 137). Smyth provides a detailed description of evidence, independently, for “Architectural Chronology”, “Ceramic Sequences”, and “Absolute Dating”.

Smyth writes that “the paucity of chronometric dates from controlled contexts associated with ceramics and architecture has been a significant problem for the reconstruction of Puuc prehistory” but that “such data are obtainable if comprehensive stratigraphic excavations are conducted systematically” (p. 126).

Smyth, Michael P.

Smyth, Michael P.

Based on 6 seasons of research at Chac II (1995-2000), this paper provides detailed, systematic information on this recently rediscovered site that is serving as the basis for new understanding of the Puuc Region. Smyth has established that Chac II began to emerge in 300-500 AD, became a substantial settlement in 500-650 AD (Middle Classic), was a large center by 650-800 AD (Late Classic), and had largely disappeared by 800-1000 AD (Terminal Classic). This corrects the previous view that northern Yucatan developed significantly later than southern Maya centers. Smyth has also demonstrated long-distance contact with other Mesoamerican centers, most notably Teotihuacán, earlier than previously recognized. He has mapped some 100 architectural groups at Chac II. He describes various sculptural objects, ceramic and
other artifacts, relating their characteristics to those at other sites in the Puuc Region and elsewhere. He provides a table of radiocarbon readings.

Especially important was the discovered “a remarkably intact pyramid substructure beneath the Great Pyramid dated to around 400 AD”, showing “that substantial stone architecture was being constructed in the heart of the Puuc region during the Early Classic period” (p. 116). Also important, he writes that the data gathered “strongly suggests a relationship with central Mexico that went beyond long-distance influence” suggesting that “the presence of foreigners at the site cannot be easily dismissed” (p. 118). Smyth concludes that “the site holds great promise for addressing the nature of cultural links between the Puuc region and the rest of Mesoamerica during the Early-Middle Classic periods, a time of strategic importance for the development of northern Maya urbanism and the rise of complex societies in Yucatan” (p. 118).

Smyth, Michael P.

Smyth, Michael P.

Smyth, Michael P.

This is an especially rich report of new findings resulting from a new study of the Chac cave conducted summer 1998. The cave is less than 1 km north of Chac II, which is thought to be “the original settlement from which nearby Sayil emerged” (p.2). Through cave exploration and excavation, settlement survey, ceramic analysis, neutron activated analysis, and radiocarbon dating, Smyth reaches several conclusions that further our understanding of this important center. Among these are that “the sites of Chac I and Chac II are one and the same” and that “the Gruta de Chac was contemporary with Chac II” (p. 5). Smyth provides multiple support for his conclusion that the Gruta de Chac became not primarily a source of everyday drinking water but rather “one of their most sacred and holy places” in the Puuc area (p. 6). There are 3 maps and diagrams and 6 photos.

Smyth, Michael P.
Smyth, Michael P.

The most up-to-date one page summary plus brief bibliography of Sayil.

Smyth, Michael P.

Smyth, Michael P., and Christopher D. Dore

The authors claim that “the important means of understanding transformations in Maya society and its social and cultural adaptations to the natural environment must lie in the ways in which suprahousehold or community organization systems changed” (p. 16). To pursue this approach, Smyth and Dore conducted an in-depth study of community organization at a major Terminal-Classic Puuc site, based on broad scale, systematic surface collecting in 1990. Their study, constituted Phase III of the Sayil Project, built on the important mapping and study of architectural remains by Sabloff, Tourtellot and associates in previous field seasons. The authors urge comparable studies at other Maya sites to provide interpretational links to better understand societal change in the Maya world. Includes an extensive bibliography.

Smyth, Michael P., and Christopher D. Dore

Following up previous groundbreaking Sayil mapping projects, this article reports on broad-scale surface collecting during the summer of 1990. Unlike some previous studies, this study focused on “community phenomena organized at a hierarchical level above that of individual behavior, households, or specific archaeological/architectural features”, focusing on “community organization, city planning, and site development” (p. 52). The authors describe various preliminary results of their study.

Smyth, Michael P., and Christopher D. Dore

This article presents evidence to support the following hypotheses: 1) Large monumental buildings were probably not elite residences, but rather special places for political, ceremonial & economic activity of the greater
community. 2) Sayil appears to have had a large community specializing in the manufacture of ceramic vessels. The ceramic-making barrio had many stone building yet a low percentage of elite ceramics and no stone altars, which suggests an economically viable but politically constrained middle class. 3) Elite communities were spatially decentralized & distributed across the site in patterns that suggests they controlled the largest and most fertile tracts of cultivable land within the city. 4) The distribution of stone altars within & outside the civic-ceremonial precinct imply that ceremonialism, elite groups, and perhaps political power was not rigidly centralized at Sayil but shared among competing factions within Maya society.

**Smyth, Michael P., and David Ortegón Zapata**

**Smyth, Michael P., and Daniel Rogart**

**Smyth, Michael P., Christopher D. Dore, and Nicholas Dunning**

**Smyth, Michael P., Christopher D, Dore, Hector Neff, and Michael Glascock**

**Smyth, Michael P., J. Ligorred P., D. Ortegon Z., and P. Farrell**

**Smyth, Michael P., et al.**
“Un estudio de la antigua comunidad de Chac II, Yucatán, México: Reporte final de las investigaciones arqueológicas de 1999”. Reporte presentado en el Consejo de Arqueología del Instituto Nacional de Antropología e Historia, México [1999]

**Smyth, Michael P., et al.**
Smyth, Michael P., et al.

Smyth, Michael P., et al.

Smyth, Michael P., et al.

Suárez, Luis

Tourtellot, Gair, and Diana Christensen

Tourtellot, Gair, and Jeremy A. Sabloff

This article is a summary of the authors’ previous publications on Sayil, based on their five investigations during the 1980s, in cooperation with the Southeast Regional Center of INAH. As such, every sentence is packed with essential information. The number of specific observations and carefully informed interpretations is a revelation to anyone not already familiar with their landmark studies. It must be read by everyone. They write that, in comparison with other Maya cities, the population was especially dense, between 2075 and 3147 inhabitants per square km., with houses nearly everywhere it was possible to build a cistern. The city covered 3.5 square km. with well-defined boundaries. They write that there were more than 30 different types of buildings and 5 or 6 types of houses. From archaeological observations of the ground, ceramics, etc., they conclude that (in translation) "every habitation complex was surrounded by a vegetable garden that allowed sustenance and privacy" (p.34).
A review and update of the publications by Sabloff, Tourtellot, Beyer and McAnany, which had been based on on-site research 1983-1988. This research continues to constitute the only in-depth study of the layout and full range of architectural and spatial features for any Puuc city. The authors had concluded that, within its regional context, Sayil’s borders were marked and largely identifiable. They write that “Sayil differs from the well-known amorphous, and seemingly endless, Maya settlements of the Classic period to the south; Sayil more closely resembles later Mayapan, although without a peripheral wall” (p. 71). They had concluded that, internally, Sayil was dispersed, approximating a “garden city, retaining considerable areas of open terrain between clusters of residential buildings” (p. 71). Of special interest was the proposal of a possible “central marketplace or fair ground”.

In this 1991 article, Tourtellot and Sabloff bring these findings up-to-date and discuss more recent data by Dunning, Smyth/Dore and others, which have raised major alternative interpretations (pp. 77-79). The most interesting question with which they conclude is “whether the apparent residential nucleation of Sayil and other Puuc cities is merely an historical by-product of a truncated growth trajectory or a deliberate and protected mode of community organization” (p. 91).

The authors note that Sayil provides an unusual basis for population evidence because it is a single period site that has not been excavated. They write that the
"remarkable clarity of exposed surface plans [at Sayil] stands in sharp contrast to the frequently buried and obscure plans of structures at deep-soil sites farther south" (p. 245). In consort with the intention of the volume, emphasis is on clear, detailed presentation of data, with important warnings about interpretation (e.g., p. 256).

Tourtellot, Gair, Jeremy A. Sabloff, Patricia A. McAnany, Thomas W. Killion, Kelli Carman, Rafael Cobos Palma, Christopher Dore, Bernd Fahmel Beyer, Sandra Lopez Varela, Carlos Pérez Alvarez, and Susan Wurtzburg (appendix by Michael P. Smyth)


U

Uxmal/Kabah/Sayil: Official Guide.

W

Wurtzburg, Susan

Wurtzburg, Susan
"Economic Interactions at Sayil, Mexico". Unpublished MS., Department of Geography and Anthropology, Louisiana State University, 1989.

Wurtzburg, Susan
Wurtzburg, Susan
*Sayil: Investigations of Urbanism and Economic Organization at an Ancient Maya City.*

Zapata Alonzo, Gualberto