Archaeoastronomy in the Maya Ruins of Chiapas

Traveling down the Usumacinta River in the pre-dawn fog towards the ruins of Yaxchilan, participants in MEC’s first student abroad were so mesmerized by the misty, swirling fog that we forgot about the slight chill in the air. Upon arrival at the site, we saw the sun rising over the trees and entering the silent temples. This journey was just one of several that the MEC study abroad short course Archaeoastronomy in the Maya Ruins of Chiapas would make.

The previous day, we had visited the incredibly well preserved murals at Bonampak and the remote Lacandon Maya village of Lakanja. Before that, an extensive tour through the site center of Palenque.

Interspersed with jungle travels were classes on the geometry and solar alignments of structures at Palenque and a full day seminar on ancient Maya astronomy. Later the group hiked through the unexcavated, jungle covered portions of Palenque where Dr. Barnhart and his mapping team had spent three years (1998 to 2000) creating a complete map of the site that includes over 1400 structures previously unknown to the world.

The course culminated on December 21, Winter Solstice, with the group recording a newly observed hierophany, or trick of sunlight and shadow, at sunset, in the North Group at Palenque.

After the course, student Mark Sullivan wrote in an email “I had an awesome time down there, and really got a lot out of the course... it really sank in after getting back.”

MEC has two more short courses scheduled for 2004. Running from March 7 - 12, Ancient Maya Science and Culture in the Ruins of Chiapas, will not only focus on geometry and astronomy of the ancient Maya, but will also provide students with an opportunity to meet traditional Lacandon Maya during an overnight stay in the rainforest village of Lakanja. While the March program was designed for University of Pittsburgh professor Isabelle Champlin’s student group, there are still openings for college-level students from other schools.

The same course will be offered from May 20 to 25. Organized for the students of professors Sam Claussen and Conrad Gubera of Oklahoma State University, Tulsa, this course also has more openings for students from other universities.

Additionally, MEC is in the early planning phases a course for the Winter Solstice 2004. For more information and course schedule updates, visit our website at www.mayaexploration.org.
The end of 2003 brought to a close Maya Exploration Center’s first calendar year in existence, and I am proud of what a strong start we’ve made.

Most of the spring of 2003 was spent establishing the business—putting together the model, recruiting board members, creating budgets, building the website and, not least, petitioning the IRS for non-profit status. By summer, we had put together a team of research associates and laid the groundwork for our educational and research programs. By August, MEC was ready to get the word out to the public. I began by reaching out to the local community in Austin with two speaking engagements at Rotary Clubs and interviews in the West Lake Picayune and on News 8 Austin television. Since we started on a tight budget, we purchased one advertisement in a travel industry magazine, “Adventure Travel Index”. Finally, we were ready to make the trip to Palenque, Chiapas, Mexico—the home base of our research and education programs.

MEC hit the ground running, establishing both our weekly public lecture series and our periodic interview series before Halloween. While attendance at the lectures started small, I am now pleased to see an average of 30 people each week. Our interview series, in which we request interviews from the many eminent scholars who pass through Palenque from time to time, started out quickly with three interviews in as many weeks. You can read excerpts from the first of these, an interview with Dr. Robert Rands, in this issue of ArchaeoMaya. Both the interview and the lectures have been wonderful learning experiences—as much for us as for our audience.

In November we hosted our first custom educational tour and in December we ran our first study abroad program. With the Winter Solstice sun shining down on us, the program was a great success.

2004 promises to be even bigger for MEC. Our next two study abroad programs—one in March and another in May—are filling up rapidly. Our small but effective marketing strategy through the website, word of mouth, and a little bit of press exposure, is starting to generate a steady stream of interest in our custom educational tours. I am excited and hopeful that by summer we will have raised enough money to begin funding some of our new research projects.

Finally, I want to thank everyone who has supported us. We couldn’t have started without you.

Regards,

Ed Barnhart, Director
MEC Fall / Winter Lecture Series

Starting on October 21, 2003, MEC began presenting one-hour multimedia programs to the general public every Tuesday evening in the Sala Linda Schele. Named for the late University of Texas Professor and eminent Maya scholar Linda Schele, Don Moises Morales created the Sala as a cultural studies center in El Panchan, just three kilometers from the ruins of Palenque. Program topics are varied within the general theme of ancient Maya culture and civilization. Presenters thus far have included Christopher Powell, Alfonso Morales, Moises Morales, Alonso Mendez and MEC Director Ed Barnhart. Although attendance began slowly, public awareness has increased. The lectures currently attract about 30 people every week. Lectures of this type occur nowhere else in the Maya world and MEC is proud to offer this a unique and valuable service to travelers and local residents alike. Even the professional tour guides from the ruins are showing up. Below is a brief description of just two of the ten presentations given during the fall series.

December 2, 2003—The Tomb of Pakal: With the Tomb of Pakal as a major attraction at the ruins and closed during the Fall for restoration, it seemed natural to Director Ed Barnhart to give a presentation on the tomb. Covering the history of the tomb from the original early drawings of the Temple of the Inscriptions to the discovery by Alberto Ruz of the staircase down, the lecture began by telling the story of the first people in over 1200 years to enter this sacred space. The presentation then shifted to the exceptional artifacts found within the tomb; the intricately carved sarcophagus lid, the jade jewelry adorning the king and the stucco figures on the walls. The lecture closed with the fascinating story of the events that led to the identification of the individual buried there, an identification that did not occur until 20 years after the opening of the chamber.

December 16, 2003—How to Write Your Name in Maya Hieroglyphs: With a special presentation given by Moises Morales to more than 40 local junior high school students and attended by another 25 adults, the sala was filled to capacity. Students and travelers alike learned about Maya hieroglyphs, not by reading them but by actually using them as a functional writing system. Moises’ skill as a public speaker carried the presentation, bringing fun and learning together in an effective way. Everyone went home with a smile and a little extra knowledge.

MEC Interview Series

Palenque, one of the most beautiful and compelling of all Maya ruins, attracts a steady stream of world-renowned archaeologists and anthropologists. MEC has successfully tapped into this resource with the “MEC Periodic Interview Series.” As scholars of note pass through Palenque, MEC requests a brief interview concerning their research and personal background. These interviews are then transcribed and posted on the MEC website. Thus far, MEC has interviewed Dr. Robert Rands, creator of the Palenque ceramic sequence, Dr. Merle Greene Robertson, Director of PARI and famous for creating thousands of rice paper rubbings of Maya stone carvings, and Dr. Robert Laughlin, an eminent anthropologist who has studied the modern Maya of highland Chiapas for over 40 years. You can read excerpts from the interview with Dr. Robert Rands in this issue of ArchaeoMAYA.
Alonso Mendez (right) interviews Dr. Robert Rands

On October 26, 2003, Alonso Mendez conducted MEC’s first interview of an ongoing series to be published on www.mayaexploration.org. Special thanks to Dr. Rands for being our first subject. Here are some excerpts:

**ALONSO MENDEZ:** Robert, it’s a great pleasure to have you in Palenque once again. I have a lot of fairly technical questions to ask. But let me start with something personal. What inspired you to begin studying the Maya?

**DR. ROBERT RANDS:** I’ll begin by sharing a short anecdote, which shows when I should have begun studying the Maya but did not. When I was a junior in high school I had a history professor who knew more about me than I knew about myself. He loaned me a Reader’s Digest Condensed book set at the time of the Spanish Conquest. It included some Maya, but was mainly about the Aztec, and I was fascinated by it. However, I did not have enough perspective, or sense, to realize that this was something I wanted to continue. Between high school and college I became aware of anthropological archaeology. Now that’s a broad field with an early concentration on the Americas—Inca, Aztec, Maya, Olmec. But why the Maya? I suppose Stephens and Catherwood had something to do with it. I liked the fact that, through such people as Bishop Landa, there was a connection between ethnohistory and archaeology. But if ethnohistory had been the overriding reason, my interest probably would’ve been Aztec, but it wasn’t. I very much liked some aspects of Maya art. I liked Olmec art, too. In those days I was as interested in the Olmec, who were just beginning to be known, as in the Maya. But my general interest in Mesoamerica became more and more Maya-oriented. It is difficult, at least in a few words, to say why. It became the Maya partly by accident. I don’t like the way my career has developed, because it concentrated too much on the Maya. I think we need to look at Mesoamerica as a whole. And within the Maya field, as it happened, my career focused on Palenque, to the detriment of some of my other Mayan interests.

**AM:** Why did you choose ceramics as your field?

**RR:** I was a doctoral candidate at Columbia University. At that time Alberto Ruz was working at Palenque and the opportunity came for me to work with him. Everybody was studying different things and nobody was doing anything with pottery. I had paid attention to pottery, but not with the intention of being a ceramics specialist. However, here was Palenque, a wonderful place—I love Palenque—and it was wide open in terms of ceramics. I wouldn’t be duplicating what somebody else was doing. And that is the reason I focused on ceramics and had to become a ceramics specialist.

**AM:** Let’s get a little deeper into the work that you’ve done. When you developed the ceramic sequence of Palenque, you named the different phases by the rivers at the site. Do those rivers have a specific connection to the locations and the chronology of Palenque?

**RR:** In one case: the Picota phase. I had made an excavation close to the Picota arroyo that was my best definition of the Picota ceramic phase. So there was a definite connection. For the most part, it’s arbitrary. However, it is no accident that the Otolum arroyo, which flows through the center of Palenque, is used to designate pottery such as that from the Temple of the Inscriptions.

**AM:** What’s driven you to continue? You have one of the longest careers of anyone in this field.

**RR:** The problems that I originally raised were such that in order to answer them I needed to use a number of techniques, physical techniques, which normally are not used in archaeology. This takes time. I could have sent them some samplings and said fine, they have enough information, I’ll publish it, and go somewhere else. However, I was so interested in the questions I raised that I wasn’t satisfied with the initial results, as a set of unsatisfactory conclusions. Besides, I wanted to find relationships between Palenque and other sites. And I still do. I have some idea about the (Continued page 5)
relationships, but not as close as I would like to have. For these reasons I have been like a dog with the bone in regard to Palenque and the surrounding area.

I have tried to find out more, but the time has come in my life where I have better control of the data. The primary goal now is to finish the comprehensive monograph that deals not only with Palenque, but also with other sites and their interaction, or lack of interaction, as seen in the ceramics of Palenque. I've written a lot of notes on things that have been quantified, so I'm not starting out from scratch. But there is still a lot to put together and to write, and that's driving me.

AM: Finally, what is your fondest memory of your work here in Palenque?

RR: Again, I'd like to answer, not in terms of one, but in terms of a few.

In one excavation I found an effigy of a nauhayaca snake. It looked so fierce, so realistic, that I dreamed about it that night. Now I normally do not dream about what I find. I think about it, yes, dream about it, no. Obviously it made an impression on me.

Being the fondest memory, I’d rather turn to people. I will first of all mention Merle Greene, who was working as an artist for me at the ruins. I was her introduction to Palenque. Right at the beginning it was very much our little core—Merle, Moises Morales, Mario Leon, plus Alberto Ruz. Again, I want to say that my relationship with Ruz was very good. And I especially want to acknowledge the chief of my excavation crew. His name is Pancho Cortes. He died a couple of years ago from a heart attack. He was a friend, very helpful to me, and one whose friendship I value.

For the full interview transcription go to www.mayaexploration.org/rands.aspx

Rands Interview (cont’d)

News from Palenque

MEC on Russian TV
On December 12, 2003, at eleven o'clock at night with the rain pounding down on the tin roof, Christopher Powell and MEC gave an impromptu presentation to Russian Public Television. The film crew was visiting Palenque as part of their global travels for the popular Russian program, Vokrug Sveta or Around the World. Powell explained, with the aid of a MEC multimedia presentation, his latest research on ancient Maya geometry and astronomy. The program will air in Russia sometime this Spring and will be viewed by an audience of over one hundred million people.

Pakal’s Tomb Reopened
After being closed since last summer for restoration and lighting system improvements, the Tomb of Pakal in Palenque was opened to visitors in the second week of January 2004. The INAH (National Institute of Anthropology and History) restoration team was able to stabilize the deterioration of the tomb’s modeled stucco walls. The new lights illuminate the sarcophagus lid better than ever before. The Temple of the Inscriptions is still off limits, but visitors can now request INAH permission to see the tomb inside. Short visits of 20 minutes for groups of no more than ten people can be scheduled from 3:30 – 5 pm.

Temple XXI Bench Panel Now on Display
In the spring of 2003, a team of INAH archaeologists led by Arnoldo Gonzalez Cruz discovered a carved panel on the side of a bench in Palenque’s Temple XXI. Its beautiful carved images and texts provide the latest clues to the identity and life story of K’inich Ahkal Mo’ Naab III, one of Palenque’s last kings. Centrally located on the panel is Lord Pakal (Continued page 6)
Modern Tech Meets Ancient Maya

Sitting inside a tin-roofed, screened-in bungalow in the jungle, a the furthest reaches of Moises Morales’ land, known as El Panchan, Stephen Siemer works at his computer. A study in contrasts, El Panchan offers wireless internet but no phones, world-class Italian food under a thatch roof but no potable tap water.

But then, as Siemer explains, the contrasts are one of the things he loves about Palenque. “From the beginning, when I first got involved with Ed and the mapping project, I was interested in the contrast of the ancient and the modern,” says Siemer.

The contrast here is the high tech world of 3D computer animation and the ancient Maya. Siemer, who first became interested in Palenque through working with Dr. Ed Barnhart on the Palenque Mapping Project, and who now serves as Vice President of MEC, is working on a recreation of the ruins in three dimensions. Right now, he is building on a roof comb, the grand architectural feature that sits atop each of Palenque’s temples. Using software called 3D Studio, he is cutting the many small holes of the roof comb out of a virtual block of stone. Eventually, he will create a model of the entire site, a virtual Palenque cyber tourists can visit and a tool that will assist MEC’s research team who are studying the effects produced by sunlight and shadow at important times of the year.

“One of the problems of studying sunlight is that it is not always there when you want it and you have to wait a whole year for it to come back around,” Siemer notes. With this software, and a model of the site, Siemer can put the sun in the sky at the correct date and time whenever he likes. And, there are never clouds in the computer. Another benefit is that the sun can be animated every day of the year. That will allow researchers to study effects that they may not have noticed in the real world because they weren’t expecting anything at that time or on that day.

“It is exciting that I can contribute something to the study of the Maya, that I can give important tools to the archaeologists, even make observations of my own. And, besides, it’s really cool looking.”
MEC Mission Statement

Maya Exploration Center is organized exclusively for charitable, scientific and educational purposes, more specifically to study ancient Maya civilization through exploration and archaeological research.

MEC conducts and supports:

1) the survey and mapping of undocumented ruins still hidden in the jungles of Mexico and Central America

2) the search for and compilation of evidence of ancient Maya sciences; and

3) the analysis and interpretation of Maya art and hieroglyphic texts.

In addition to archaeological investigation, MEC seeks to illuminate the ancient traditions still practiced among the modern Maya. In doing so, MEC strives to both better understand the archaeological record and to celebrate the modern Maya as the descendants of one of the world’s great early civilizations.

MEC’s research is disseminated through educational short courses, tours for the general public, weekly lectures and a website where various educational and informational resources will be made available.

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Thank You!

MEC’s first year was a success in large part thanks to the generosity of our first donors. We would like to specially recognize these donors and say thank you for their important help in our start-up year.

The Siemer Family Foundation • Linda and Martin Barber
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