



ARCHAEO MAYA

The Newsletter of Maya Exploration Center

www.mayaexploration.org

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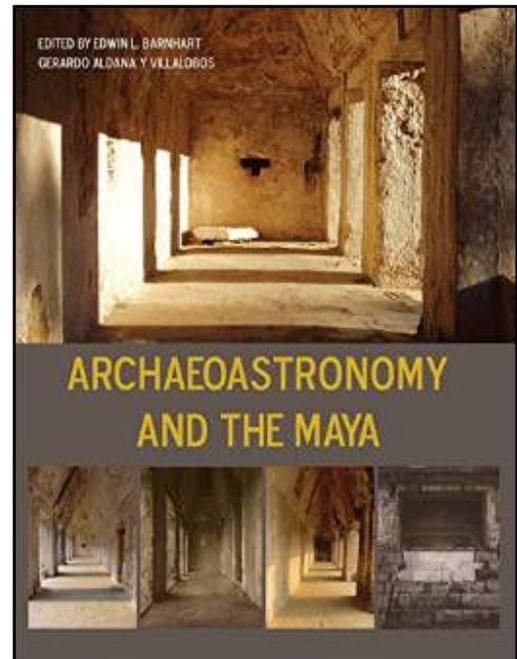
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A New Book on Maya Archaeoastronomy

The research of multiple MEC scholars is featured in a brand new edited volume about Maya archaeoastronomy. *Archaeoastronomy and the Maya* was published by Oxbow Books and edited by Gerardo Aldana y Villalobos and Edwin L. Barnhart. Chapter 1 of the volume was authored by former MEC Board Member Harold Green and explains his ground breaking field work on solar movements as observed along the eastern horizon from Chocoma in the Guatemalan highlands. Chapter 3 updates the MEC team's research on how Palenque's Temple of the Sun is indeed a Sun temple, functioning as an annual solar clock. In Chapter 5, Alonso Mendez and Carol Karasik explain their still on-going studies of the importance of zenith and nadir passages at Palenque. The book's final chapter was authored by MEC's Michael Grofe and tackles some outstanding issues in the still enigmatic Maya lunar series.

In addition to MEC scholars, some other big names in Maya archaeoastronomy made contributions. Above and beyond being co-editor of the volume, Gerardo Aldana y Villalobos penned the introduction, the epilogue, and Chapter 4 on the oracular nature of the Dresden Codex Venus Pages. Susan Milbrath, author of the celebrated book *Star Gods of the Maya*, contributed a discussion of Venus and its importance in the wider context of Mesoamerica. Last but not least, Ivan Sprajc - recently famous in the international press for his discovery of unknown Maya cities in Campeche - wrote Chapter 2. In that chapter he discusses some of the other Maya cities he's found in the jungles of Campeche and the repeated patterns of



what he terms "Teotihuacan architectural alignments" he documented within them.

Overall, the volume is a dynamic set of studies that highlight some of the best recent advances in Maya archaeoastronomy. We at MEC are happy to have contributed so strongly and look forward to the peer reviews. *Archaeoastronomy and the Maya* is available at amazon.com. Please consider supporting MEC with your purchase of the book and all your holiday gifts by simply going through our Amazon Affiliates portal at this link:

http://www.amazon.com//ref=as_sl_pd_tf_lc?tag=mayaexplorati-20&camp=1&creative=4265&linkCode=as1&ref-refURL=http%3A%2F%2Fwww.mayaexploration.org%2Fresources_books.php



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Letter from the Director



It was a generally quiet summer for MEC, perhaps linked to what a busy summer it was for me. Since June I've been to Chile, Peru, Mexico, Easter Island, and then three weeks in the Washington DC area. Some of that was spent leading my 2014 Chautauqua program courses, a little was personal family vacation, but the bulk of my summer energies were spent developing a new video lecture series. I finished writing the lectures with every spare moment on the road and then presented them in a DC area studio in early September. With any luck, my 48 lecture series on Mesoamerican civilizations should be available in the summer of 2015. So, though MEC didn't get as much of my attention as it usually does over the last few months, I'm confident that the ground work I've now laid will eventually result in an increase in awareness of our programs and research.

In this issue of ArchaeoMaya, we're proud to begin with the announcement of our published volume of Maya archaeoastronomy – *Archaeoastronomy and the Maya*. It was a project I began over 6 years ago and my special thanks go out to my co-editor Gerardo Aldana who finally gave it the push it needed to become a reality. We're also

pleased to present a review of MEC's philanthropic works in 2014, much of which would not have been possible without the tireless efforts of David Hixson. For a change of pace, I decided to report on the 2014 Chautauqua courses from my own perspective this year. Both of those reports can be found on the pages within. And as always, recent news from the field and notices of our current program offerings are featured. Not featured within but of importance is our 8th year in a row of publishing the Mayan Calendar. Last year's edition had a few troubling errors, but I personally checked the 2015 calendar three times over and am confident that it's one of our best yet.

As we move into the 2014 holiday season, I look forward to the work of planning our 2015 travel programs with our many partner institutions. From schools like Carroll University who are entering their second year to Midland College who's in their ninth, each of our partners are vital parts of MEC's mission to educate and disseminate our research. We're always looking for new partners and program challenges, so if you've been thinking of organizing a travel course for your institution, please contact us!

Happy Fall,

MEC Philanthropy in 2014

MEC's community service reached its all-time high in 2014, thanks in large part to our newest staff member, Dr. David Hixson. Our first community giving project was back in March, donating laptops to the elementary school of San Angel, a small Maya village in Yucatan. The laptops were donated by Carroll University and then transported by Carroll University students, one each in the hands of the twelve participants in MEC's study abroad travel course that month. Dr. Hixson arranged the donation and translated during the gifting ceremony in the school yard on a sunny Friday afternoon. The ceremony was followed by a wonderful lunch hosted by the community and lots of playing with the children.

MEC's second act of support in 2014 was a true community effort. In early 2014, Maya for Ancient Mayan (MAM) launched an Indiegogo crowdfunding campaign to raise money in support of the first ever all-Maya conference of Maya epigraphers. MEC donated \$500 to their campaign and then reached out to our community to help out as well. To our delight, you responded with an addition \$3000 in support for the conference! The meeting took place successfully in Ocosingo, Chiapas with 110 Maya teachers and students in attendance. With that success under their belts, they announced that their next conference will be held in Guatemala in 2016. This time it will be not just taught, but also completely organized and hosted by its Maya leaders. It's a true Maya revival and the MEC community can proud to have sponsored it.



Laptop giving ceremony at San Angel



Children at Kisicancha eating a chicken lunch

Our third community service project took place in the highlands of Peru, on a cold May morning (remember, May is winter in South America). Students from Simpson College, led by their professor Mark Freyberg and Dr. Hixson brought food and mobile kitchen supplies to the remote community of Kisicancha. They worked all day preparing plates of chicken and rice that they served to over 400 people in the village. For many in their potato dependent community, it was the most robust meal they had eaten in months. The service project and community connection was facilitated by Siste Rosa at the Hogar de Niños Transitorios in Cuzco. The Hogar is an orphanage housing dozens of abandoned children and feeding 100's of street kids every day. The amazing students of Simpson College also helped there, cleaning the facility from top to bottom, helping prepare the mid-day meals, and caring for the smallest children. Cash donations brought from the USA bought baby formulas, several hundred diapers and essential medicines for the orphanage. Dr. Hixson personally transported dozens of jars of gummy vitamins for the children. This was the third time that MEC and Simpson College had teamed up to support the good works of Sister Rosa, but Dr. Hixson's involvement with the project brought it to new heights. In addition to the donations of MEC and Simpson, Dr. Hixson and his wife Alison held fundraisers in their West Virginia community to which Rosemont Elementary School families and Stantec Anthropologists gave generously.

People helping people with respect, friendship, and dignity is a core principle at Maya Exploration Center. We're proud of our community projects this year, and recognize that they couldn't have happened without the support of our own wonderful community. Our thanks go out to each and every person who supported our efforts. Together, let's do even more in 2015!

Chautauqua 2014 – Easter Island and North Peru

Dr. Barnhart's Chautauqua travel courses for the University of Texas at Austin's Center for STEM Education led he and 37 seekers of knowledge to South America this summer. Here are two reports from Dr. Barnhart reflecting on those adventures.

Easter Island Course – June 25 – July 1

I knew the group and I would get a different perspective by actually visiting Easter Island, but that turned out to be quite an understatement! Even from the air before landing, the trip was full of surprises. Across the mid-section of the island was a large swath of forest. What? Books say that Easter Island lost all of its trees 100's of years ago. Well, surprise #1, its been reforested. It's eucalyptus now, not palm trees, but the Rapa Nui people have wood to use again. Our second surprise came on our first morning of touring the island. On either side of our bus were many, many horses. When we asked our guide who owned them, she replied "no one." Apparently, over the last 100 years of chaotic history on the island, people lost track of their horses. Now over 1000 wild horses roam the tiny island.

Our mission on the island was, as on all of my Chautauqua travel courses, to think about ancient science and mathematics. To aid in our discussions, I invited local archaeologist and resident archaeoastronomer Edmundo Edwards to speak to our group. His lecture was eye opening! He explained that there were specialized astronomical viewing towers all over the island and how a specific class of astronomers once manned them almost year-round. He talked about stars, constellations, and moon phases. My first reaction, based on years of studying Mesoamerican astronomy, was to ask why he had no data on solar or planetary observations. Edmundo's answer was as simple as it was instructive – seafarers don't care about those things. The Sun can't help you navigate the oceans and the planets wander. Only the stars guide sailors home. Since all of my studies were about archaeoastronomy on land, that thought had never even occurred to me! In addition to being a world class archaeoastronomer, Edmundo also turned out to be one heck of a story teller who kept the group in stitches for most of the evening.

One of my other aspirations for the group while on Easter Island was to measure buildings and

search for patterns of geometrical proportions. Alas, all of the ahus, which are the platforms upon which the moai stand, were roped off. We measured a few rectangular chicken coops, but my objectives seemed thwarted until Missouri Southern State University mathematics professor Linda Hand mentioned how perfectly elliptical all of the Rapa Nui house foundations were. All that remains are the stone bases of those homes, but she was right. There was the geometry of the island, and I had been stepping over it all week! She and I (along with her son and daughter who had joined her on the trip) measured a few and found some encouraging patterns. It will take a return trip to really see if there's an ancient building code to discover.



A ancient Rapa Nui house foundation

Of all the surprises on Easter Island, I think the knowledge of the local Rapa Nui people struck the group the most. Contrary to popular books about the "mysteries of the moai", local people refer to "oral tradition" and explain many of those mysteries in detail. Who are the moai? Statues of ancestors. For a few, they even still remember the name of who that statue represents. Why did they erect them? To connect with those ancestors and receive spiritual power called mana. How did they make them? They were all carved in the Raraku quarry by a specific clan who lived there. How did they move them? Walking them on prepared roads with ropes. All the answers are there. But for some odd reason, no one seems to believe them!

Our last surprise came once again from Edmundo Edwards. He has lived on Easter Island for most of his life and ended up marrying into a prominent Rapa Nui family. As it turns out, his father-in-law is the currently recognized Ariki, or king of the island. In his 80's now, Valentin Riroroko has reluctantly held the title for decades. It's a title of responsibility but little privilege, and the last Ariki was murdered on the mainland while on a diplomatic mission. The Ariki graciously agreed to join our group for our final dinner and to share his thoughts on the future of Easter Island. His primary concern is the quickly changing demographic of the island's only town, Hanga Roa. For the 1st time in the island's history, residences of mainland Chilean descent outnumber the Rapa Nui. A fast paced migration over the last decade has in-

creased its population to over 7000 people, less than half Rapa Nui. Since the island is a territory of Chile,



Valentin Riroroko, king of Easter Island

mainlanders seeking work in its thriving tourist industry can just pick up and move there. Though the Rapa Nui still have the exclusive rights of land ownership, many cannot resist the big profits of renting their properties to foreigners. Akiri Valentin wants the Rapa Nui people to have a voice in who gets to reside and work on the island, not just the Chilean government. If something isn't done to control migration, the Rapa Nui bloodlines will become mixed and fade completely away in just a few more generations. We wished the aging Ariki the best with his mission and told him we would spread the word of this latest challenge to his people as far as we could. Now you know too. Help us to tell the world and preserve Rapa Nui (Easter Island's local name) for the Rapa Nui people.

Northern Coastal Peru Course – July 1 – 7

At 1:30am, July 1st, just 36 hours after leaving Easter Island, I landed in Lima, Peru to start my second Chau-tauqua course for the summer. This time we were headed north, along the coast, to visit little known and very ancient Pre-Inca archaeological sites. After a first day in Lima's amazing Larco Hoyle museum as an overview and introduction to Andean culture history, 18 course participants and I climbed in our bus and travelled to our first site – Caral.

Caral is the largest of 18 cities in the Supe Valley. It surprised archaeologists about a decade ago by dating back to 3200 BC. It was four hours north of Lima, and as we turned into the desolate Supe Valley's inland track, participants asked, "Ed, are you sure we're going the right way?" I replied, "No, I've never been here either." The truth is, few do visit Caral. We arrived to a beautifully prepared visitor's center, almost completely alone. Photos of Caral focus on its unique sunken circular plazas, but our tour enlightened us to



A view across the ruins of Caral

the multiple stone built pyramids of the city as well. It was an amazing first stop for our journey into the unknown.

It was after sunset when we made it to the Casma Valley, where we barely made our hotel's dinner hours and flopped into our beds. Casma was our overnight choice because of our next remote site – the ruins of Sechin. There are three Sechin sites, but our destination was Cerro Sechin because of its distinction as the first city to carve scenes of violence along Peru's northern coast. Sometime about 1900 BC, Cerro Sechin covered the exterior of a palace-like structure with images of men brandishing weapons and severed headed. As I hoped, our actual visit to the site enlightened us to what our books did not explain. Walking around the structure where the carvings still stand, we could see that archaeologists had unearthed the images from underneath a subsequent building phase



Severed head carving at Sechin

that had covered them completely. That means that whoever commissioned the violent images thought better of them and choose to hide them away from the public eye before the city's abandonment some time around 1500 BC. Another pleasant discovery was that the sites of Sechin Alto and Sechin Bajo could both be seen from Cerro Sechin. They were clearly not as separated as our books seemed to indicate. And like Caral, besides school children, we were the only visitors there all morning.

Our next stop was the modern city of Trujillo, a perfect base from which to visit the major centers of the Moche and Chimu cultures. Trujillo was built on top of Chan Chan, the royal capital of the Chimu. Built perhaps as early as 900 AD, by 1450 AD Chan Chan was a thriving urban community of at least 30,000 people. Of its nine royal Ciudadela complexes, only Tschudi is open to the public today. We spent hours roaming its spacious labyrinth, marveling how its many plazas, temples, residences and a reservoir made it a self-sufficient city within a city. I also brought the group to a Chimu temple complex in town called Huaca Arco Iris, not so much for the temple as for my friend Angel Tamay who sells traditional pottery in its courtyard. He was kind enough to demonstrate how he uses old techniques to make his pieces as I did my best to translate his excited explanations. As an unexpected treat, a group of local high school students arrived in full Chimu regalia.

News From the Field

[Aztec Codex Returned to Mexico](#)

An ancient three-volume manuscript written at the time of the Spanish conquest of Mexico has been returned to its country of origin. On September 17, a ceremony was held to present the volumes and celebrate their purchase from the London Bible Society. The volumes are collectively called the Codex Chimalpahin, though in reality they are chronicles written in European-style books, not pictographic fan fold books like traditional pre-Columbian codices. The chronicles document native life, customs, and history in the Aztec city of Texcoco before the conquest. The London Bible Society had acquired the codex in the early 1800's, but in May of 2014 it appeared on Christie's auction list. INAH contacted Christie's and made a private offer, which was accepted. The repatriation of the Codex Chimalpahin is the 1st of its kind for Mexico.

[Reimagining Stonehenge](#)

A host of previously unknown archaeological monuments have been discovered around Stonehenge as part of an unprecedented digital mapping project. Remote sensing techniques and geophysical surveys have discovered hundreds of new features which vastly expand the map of Stonehenge's wider landscape. Seventeen previously unknown ritual monuments, dozens of burial mounds, and sections of the Durrington Walls (dubbed a "superhenge") that pre-date Stonehenge itself were just a few of the major discoveries during the survey. British project leader Professor Vincent Gaffney of the University of Birmingham was quoted to say, "The project has revealed that the area around Stonehenge is teeming with previously unseen archaeology."

Chautauqua Report (cont.)

Their teachers were judging a contest for which team could recreate the most authentic ancient Chimú religious procession. As usual, we were the only tourists there. Still, our group of 18 was a welcome audience for their efforts and we ended up taking photos with them on the temple top.



A photo with the high school Chimú performers

Also accessible from our base in Trujillo were the Moche ruins of the Huacas de Sol y de la Luna. Our bus arrived to their sand-swept parking lot alone and the site's English speaking guide was thrilled to see us. At the top of the Huaca de la Luna we saw repeated images of the Fanged Deity, a god who I have long argued is the Andean creator deity. Then from below the complex we stood in awe of the seven stories of full color murals covering the entire structure's façade. But what really gripped us was the next day at the Moche site of El Brujo. Though we were over 100 kms away from Huaca de la Luna, we stood beneath an almost identical seven-story program of mural art. Clearly, there was a stronger political/religious link between these two ancient cities than our old text books had hypothesized.

Standing less than 2km from Huaca del Brujo and just meters from the coastline is the neglected site of Huaca Prieta. Its ugliness is only rivaled by its utter importance to American pre-history. Littered with trash along its base and protected by absolutely nothing, Huaca Prieta has long been recognized as one of the oldest pyramids in the Americas. But 2011 excavations by Tom Dillehay found an innermost phase dating back to 4500 BC. It was a stone built platform mound almost 2000 years earlier than the pyramids of Egypt! As we climbed to its top and looked down on Dillehay's excavation pits, I thought to myself, "now this is unknown America!"

Our last stop on our adventure took us a few more hours up the coast to the city of Chiclayo, where the surprised looks of people on the streets told us that few Americans visit. We made it just in time to explore the city's magnificent Royal Tombs of Sipan Museum, where the outrageous quantities of gold and silver artifacts found in Sipan's Moche tombs are on display. Our final morning was filled by a visit to the Lambeyeque ruins of Tucame. As we stood on the middle of the ruins, once again all alone admiring its absolutely massive pyramids, we were struck with thoughts of how some place so grand could now be all but forgotten. At our final lunch together before heading to the airport and back to Lima, I thanked the group for joining me and for their patience in suffering the long bus rides, which I admitted I had underestimated. But as I always say, there's a good reason amazing sites like those are called remote! It was a tough week of travel, but I'll do it again. Join me next year for Chautauqua adventures in Ireland and Bolivia!

**Pillars of the Classic Maya: Palenque to Copan
November 21-30, 2014**



Led by Dr. David Hixson, this tour Thanksgiving week adventure will begin in Palenque and go by land, river and rainforests all the way to Copan in Honduras.

<http://www.mayaexploration.org/tours.php>

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