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Digging Up the Past

Robert Benfer, professor emeritus of anthropology, makes an important archaeological discovery in Peru.



Robert Benfer is a leading expert on ancient culture in Peru's Casma and Chillon valleys.

Story by Dale Smith. Photos courtesy of Robert Benfer.

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Robert Benfer, professor emeritus of anthropology at MU, has made important archaeological discoveries during his decades of field research in South America. He recently identified eight animal-shaped mounds that resemble whales, condors, snakes, birds and the mythical, sharp-clawed *monstruo* — creatures represented in the South American zodiac. The Andeans used the zodiac, which moved across the night sky during the year, to gauge when to plant and harvest, Benfer says. The stars were their “agriculture calendar in the sky.” Ceremonies probably took place atop the effigy mounds to curry favor with the forces they believed controlled the weather and seasons.

Learn more about the mounds:

- [Mysterious Animal-Shaped Structures Are Oldest Known](#)
- [Giant Preceramic animal effigy mounds in South America?](#)

Benfer’s work on ancient Peruvian civilizations includes a dig at Buena Vista, Peru, which could

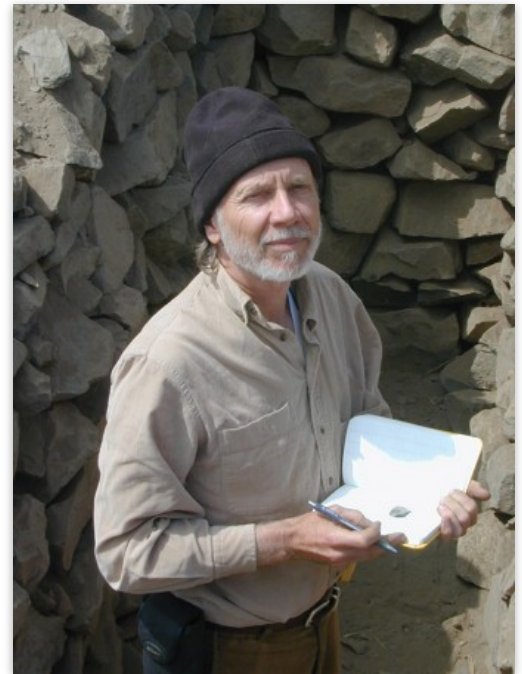
rewrite the timelines of early civilization. Check out the following reprint of a story from the Spring 2007 MIZZOU magazine:

Professor Benfer's Timing Machine

Published Spring 2007

Story by Dale Smith

Tourists and mystics alike make annual pilgrimages to England's Stonehenge and Mexico's Temple of the Sun to celebrate the equinox, the moment each year when night and day are of equal length everywhere on the planet. They come by the hundreds of thousands, buy tickets and wait their turns to walk the grounds. Perhaps some come to connect with ancestors who observed the sun and moon so carefully.



As leader of excavations in Buena Vista, Peru, retired MU archaeologist Robert Benfer uncovered a 4,200-year-old temple complex containing the oldest three-dimensional sculptures in the round in the Western Hemisphere. One of them that Benfer calls the

Perhaps others come wanting to witness the moment our wobbling Earth aligns with the sun and the architecture of these places — to synchronize their psyches with the universe.

“menacing disk,” lines up with the sunrise and is part of one of the earliest astronomical alignments.

There’s just one little hitch, says Robert Benfer, professor emeritus of anthropology. Scientists have determined that those places don’t line up with the sun. “But it’s part of popular culture,” he says, “so they’ll keep coming.”

Benfer, 67, has long studied world cultures and has earned his share of the limelight in popular culture. He appeared on national television in 1987 when he led a team that identified the remains of Spanish explorer Francisco Pizarro, who conquered the Incas in the 1500s. Benfer also led an excavation at Paloma, an 8,000-year-old Peruvian coastal village that he calls the oldest well-studied village in the New World. There he found individuals in tombs and so discovered very early evidence of ancestor veneration.

Benfer finds the menacing disk



“Menacing disk”

But as time passes, Benfer may be remembered best for his most recent find in Buena Vista, Peru, which could rewrite the timelines of early civilization. At a 4,200-year-old portion of the site in the Chillon Valley, an hour north of Lima, he and a team of Peruvian archaeologists uncovered the oldest three-dimensional sculptures in the Western Hemisphere. One of them lines up with the sun and is one of the earliest astronomical alignments. Benfer calls this sculpture the “menacing disk.” It looks abstract and would likely remind most Americans of the omnipresent happy face illustration, except that it appears unhappy, perhaps even fierce. The other sculpture, located

nearby in the same adobe temple complex, is a realistic rendering of a man blowing into a conch, a sort of early trumpet player. Benfer also excavated a precisely made temple observatory that tops a 33-foot-tall pyramid, the Temple of the Fox.



Robert Benfer, right, confers with MU graduate student Neil Duncan, a field crew director at Buena Vista. Peruvian archaeologist Bernardino Ojeda, also a field crew director, works in the background.

The sculptures are 800 years older than any known pieces like them. That's a long time, even for an archaeologist. The use of structures to indicate astronomical alignments for key dates, including winter and summer solstices, is 2,000 years older than similar structures known until now. But there's no hitch this time. Unlike Stonehenge and Temple of the Sun, the observatory and disk at Buena Vista line up perfectly with sunrises and sunsets. Each still works as a timer of the seasons, an architectural almanac.

Benfer carefully calculated the dates from radiocarbon testing of materials at the site. The

dates are revolutionary. But revolutions are always unpopular somewhere, and he is bracing for skepticism from other anthropologists.

For that matter, not even Benfer was prepared for what he found. He had gone to Peru looking for cotton and garments to further develop his theory about trade among early Peruvian ethnic groups in the Chillon Valley and the fishermen of the coast. He also found the observatory, the disk and the player.

Looters almost found Pacha Mama first

In June of 2006, Italian archaeologists made international headlines when they found an Etruscan tomb near Rome. But they needed a little help. The archaeologists “discovered” the tomb based on a police interrogation of an Austrian tour guide potentially involved with trafficking in looted artifacts. Looters also led Benfer to a big find, but in a different way. “The reason we dug where we found the Temple of the Fox was because of a looter’s hole, 30 feet across and 15 feet deep. That’s big. We wondered if there was anything left of the architecture,” Benfer says. “A chinchilla had burrowed down at one of the walls

and was making its home in the temple. If looters had found that wall, they would have kept going,” Benfer says.



The Temple of the Fox is part of the complex Benfer’s group is excavating. In Andean myth, the fox taught farmers to cultivate and irrigate crops, and some still use the call of the fox to predict rainfall.

Another looters pit came within five feet of the small room where the disk sat for 4,100 years. They wouldn’t have found gold or silver or ceramics, but they may well have found the disk. They easily could have stolen or destroyed it. Benfer thinks the sad-faced sculpture of clay and mud plaster is a representation of Pacha Mama, or Earth Mother, the second god in the Peruvian

pantheon. It is flanked by two mythical fox figures. A mural of a fox was found in the other temple.

Pacha Mama is still very much alive in parts of Peru, Benfer says. “The Andes are animated. People there still today don’t live in the world you and I live in, which is dead. A mountain there isn’t dead; it has a spirit, an Apu, that can affect weather, the health of your crops, animals and your family. If you cut into the earth, then you have to make an offering to Pacha Mama because you are damaging her. People still do it.” He excavated these offerings from the Temple of the Fox.

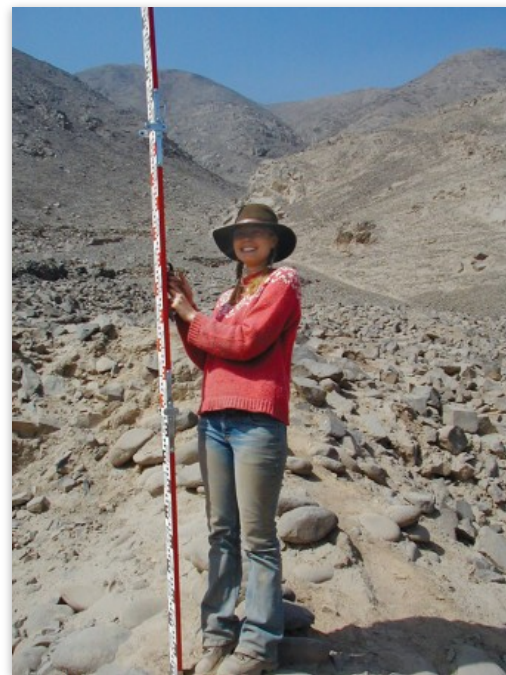
Benfer doesn’t know why Pacha Mama frowns, but he feels confident that the sculpture represents a mask Andeans still use in festivals today.

Surviving flecks of paint hint that, when the sculpture was new 4,200 years ago, it was probably painted white and yellow, Benfer says. “The sculpture is part of a ritual,” Benfer says. “Priests made lots of offerings to Pacha Mama, and eventually they made a series of offerings and carefully covered it up — luckily for us — with

mesh bags full of rock and then built a new floor over it.”

Lining up with the skies to read the calendar of seasons

Pacha Mama is near the temple observatory where priests gathered vital data for the people. A priest could have stood in a doorway and sighted east through an opening toward a nearby mountain. Before sunrise on Dec. 21 every year, this view would have aligned the temple and priest with a stone head carved out of the mountain and with the rising Andean Fox constellation. Dec. 21 is the southern hemisphere’s summer solstice, the longest day of the year. It marked the time when floodwaters would begin to rise beyond the banks of the Chillon River, and it was time to plant crops in the floodplain. On June 21, the shortest day of the year, a priest could have stood at the opposite end of the room and sighted west to align with a platform on a hill across the river valley and the setting sun. This could have



Ann Wright, a member of the crew, helps map the site.

signaled harvest time. Until Benfer's find, scientists had little convincing evidence that people of this time and place organized their lives at least partly around an agricultural calendar.

What's more, Dec. 21 was a key time when people could have hiked the 24 miles to the coast to see whether this was going to be an El Niño year. Not only would most of the fish have left in such a year, but the farmers would know to expect droughts or extreme flooding. In that case, they might have headed to the uplands to gather food. The alignments were about survival.

“They wanted to symbolically represent when to plant. It doesn't mean that they needed to construct these particular alignments,” Benfer says. “They could have based it on when foxes bear young. It's December. Today, the Andeans still use the yipping of the foxes to predict how much rain they'll get. However, if your life depends on when the water comes and goes, maybe you don't want to rely on the yipping of foxes. But the sun is absolutely reliable. Using the sun, you could begin to have a sense of control.”

A trumpet player and his audience

In addition to finding the statue of Pacha Mama, Benfer uncovered a life-sized bust of a man playing a conch. Peruvians still make eerie sounds with these natural instruments. Benfer says this player was so realistically sculpted that he may well have been identifiable as a particular person in the community.

“So we have the oldest sculptures in the Western hemisphere. One is supernatural. The other is a human being with a trumpet that announces something to the supernatural. These are very different. They didn’t start off just making a supernatural being, or some Joe who was good with a trumpet. They did both from the beginning,” Benfer says. “The Andean world is one of dualities, connections. There’s a connection between the disk and this human being, our Joe, who has to get his crop in and who blows his horn to a supernatural spirit from time to time. They’re in the same temple complex and may well be connected by a corridor. It says that these people lived there, but that the supernatural beings we don’t see were part of the same world.”

It’s all in the timing



Wright, Meghann O'Brien and Miguel Rodriguez excavate work in the rocky, dry ground. The region's arid climate has preserved much of the site.

For now, the statues are protected by barriers made of plexiglass, wood and metal. But Peru is a poor country, and the looting at Buena Vista could well continue before archaeologists get many of the answers the site has to offer. If the site remains intact, it might eventually work as an alternative for those

pilgrims who travel to Stonehenge or the Temple of the Sun. Buena Vista could present to the world an authentic timing machine — the oldest astronomical calendric complex in the world.

The best hope for preserving Buena Vista is to develop it for tourism along with other sites in the valley. “It’s only 20 minutes from the airport,” Benfer says. “People could walk through these corridors just as the priests did, through the doors, past the statues. That’s 2,200 B.C. That’s a time machine the likes of which we don’t have many.”

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Sections: Around the Columns

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