

Researchers Unearths Earliest Western Sculptures and Astronomical Alignments in Peru

April 24 2006

In one of the most significant archaeological and anthropological finds in recent history, Robert Benfer, professor emeritus of anthropology at the University of Missouri-Columbia, has discovered the earliest astronomical alignments and sculptures in the round, which is a sculpture designed to be viewed from many directions and angles, in the New World in Buena Vista, Peru.

The Temple of the Fox, an ancient structure in the Chillon Valley that dates back to 2200 B.C., contains sculptures of unprecedented artistic style that can be associated with the agricultural calendar and Andean myth.

"There hasn't been an archaeological finding like this since the early 1980s," Benfer said. "The Temple of the Fox is 1,000 years older than anything of its kind found before. It's also significant because it suggests people organized their lives around Andean constellations and provides evidence of the beginning of flood-plain agriculture."

In temples such as the one Benfer uncovered, the Andeans constructed offering chambers, used them for ceremonies and then built new chambers above the old. Benfer said this protected the Buena Vista site from looters, who came within one inch of the musician statuary while searching for gold and silver in the ancient temple. The well-preserved offering chamber holds ancient pieces of cotton and burned twigs, and

Benfer's team used the twigs to radio-carbon-date the various components of the excavation site.

At the entrance to the Temple of the Fox, Benfer unearthed a mural of a fox incised inside a painted llama. He said the mural depicts the significance of the fox in Andean myth and astronomy. The fox taught the ancient Andean civilizations how to cultivate and irrigate plants and, according to Andean myth, is reincarnated by drops of water. Today, the constellation of the fox also is associated with water, and farmers use the call of the fox to predict rainfall.

While excavating the temple and sculptures, Benfer discovered several astronomical alignments at the Buena Vista site that suggest Andeans used astronomical signs and constellations to guide their agricultural activities. The lines incorporate points at the temple entrance, at the offering chamber, on sculptures, and on surrounding ridges that align with the rising and setting sun on days of astronomical significance, such as the equinox and solstices. For example, from west to east, the offering chamber aligns with a modified rock on an eastern ridge, forming a 114-degree azimuth and pointing toward the rising sun on December 21, which is the southern hemisphere's summer solstice. This date begins the season where flood waters rise, El Niño weather patterns are predicted and plants should be planted. On March 21, when flood waters recede, this same line points to the rising Andean constellation of the Fox. In addition, among the ancient statues Benfer excavated in Buena Vista is a personified disk that frowns at the sunset on June 21, the day marking the beginning of the harvest.

Benfer has been working at this site in Peru for the past four years but only discovered the Temple of the Fox in June 2004; the frowning disk was unearthed in June 2005. He said no one could have predicted to find something so old, but he added that other Andean temple sites he has studied contain perfect 114-degree alignments and similar astronomical

features, which act as additional evidence to support his findings.

Archaeological and anthropological field school students, including several MU students, have assisted Benfer with his research. His trips to Peru have been funded by the MU Research Board, field schools in the U.S. and Peru, and, most recently, National Geographic. Benfer said he plans to return to Peru to continue the excavation of the Buena Vista site as early as this summer. He and other investigators on his team will present their findings at the annual meetings of the Society for American Archaeology in San Juan, Puerto Rico, next week.

Source: University of Missouri

Citation: Researchers Unearths Earliest Western Sculptures and Astronomical Alignments in Peru (2006, April 24) retrieved 3 May 2024 from <https://phys.org/news/2006-04-unearths-earliest-western-sculptures-astronomical.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--