Alabama Archaeological Society

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NEW PERSPECTIVES ON THE HISTORY OF ANCIENT MAYA CIVILIZATION

Our understanding of ancient Maya civilization has undergone huge changes in recent years. Although the exciting breakthroughs in deciphering Maya hieroglpyhic writing and in appreciating the ideological roles of the Maya elite have justifiably received much publicity, equally significant breakthroughs have been made in understanding the agricultural and adaptive foundation upon which Maya civilization was built. All these advances have caused significant changes in traditionally held views of the rise, development, and so-called "collapse" of Classic Maya civilization. Thus, in contrast to older views, Classic civilization is now thought to have been composed of urban centers, supported by both extensive and intensive agriculture, closely linked economically, politically and ideologically, and subject to widespread raiding and conflict. Whereas Mayan civilization was considered unique, it is now believed to have developed in a similar manner to other pre-industrial complex societies.

For many years, the earliest Maya remains of settled farmers could not be securely dated before about 800 B.C. Although many suspected that earlier remains existed, there were no data to support such suspicions until the major discoveries by Norman Hammond at the site of Cuello in Belize, which pushed this date back about 1,500 years to 2300 B.C. Hammond has argued that the occupants of Cuello in the late third millennium B.C. were settled, pottery-making, maize agriculturists who culturally were Maya. But it remains an open question whether the occupants of Cuello migrated there from outside the Maya lowlands, bringing along with them their agricultural and ceramic skills, or whether they had a long lowland history as well as one of agriculture and pottery-making. Richard MacNeish's recent work in Belize led him to argue for a long, pre-ceramic, lowland occupation.

David Rue's new pollen-core data from western Honduras broaden our understanding of this question. The data provide evidence for slash-and-burn agriculture, probably part of a hunter-gatherer strategy. Given the current lack of ceramics dated to pre-800 B.C. in western Honduras, Rue's results suggest that there were pre-ceramic peoples practicing agriculture there as far back as the fourth millennium B.C. This finding indicates that agriculture existed long before the rise of complex societies in the lowlands and did not have a much shorter history of development, as previously believed.

Moving from the foundation of Maya civilization towards its later stages, the "collapse" of the Classic Maya has also been the focus of much attention. Recent research indicates that earlier notions of cultural collapse and demographic abandonment in the southern lowlands are not tenable, and that some sites and regions were not abandoned or were only partially depopulated. Furthermore, there were significant demographic movements and shifts of economic and political centers during the ninth century A.D. Rue's pollen discoveries made a useful contribution to the consideration of the demographic and cultural changes at this crucial time by indicating first, that there was very widespread clearing of forest cover in the region around the great Classic Maya city of Copan at the time of the collapse of this center; and second, that there was occupation in this region for several centuries after the abandonment of Copan.

(From an article by Erwin Neher in "Nature", Volume 326; March 19, 1987)

The Editors

DENTAL TREATMENT IN THE STONE AGE

Almost 2,000 years ago the two Roman physicians Archigenes and Galen recommended that a hole be drilled into the pulp of aching teeth. However, skeletal finds from that time with evidence of such treatment have never been described. It was therefore surprising to find a skull dating back to the stone age in a passage grave on Langeland, Denmark, with a hole drilled into a carious molar using a flint drill. Through this extraordinary find it is possible to demonstrate that not only trephination or craniotomy was known in pre-historic times, but that dental treatment to relieve toothache was also used more than 4,000 years ago.

(From an article by Pia Bennike, Ph.D., and Lise Fredebo, in "Bulletin of the History of Dentistry", Vol. 34, No. 2; October 1986)

The Editors

ATTENTION BOARD OF DIRECTORS

There will be a meeting of the Board of Directors in early September. Particulars of the meeting, along with an agenda, will be forwarded to Board members by September 1.

The Editors

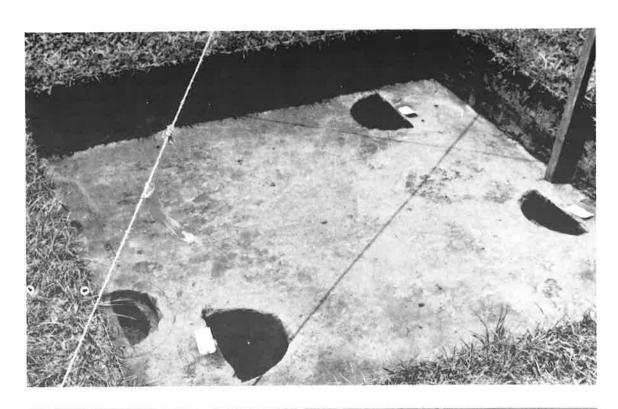
A.A.S. WINTER MEETING

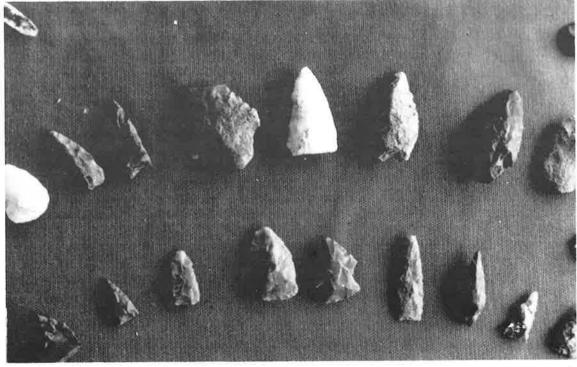
The Winter Meeting of the Alabama Archaeological Society will be held in Huntsville on Saturday, December 5. Program Chairman Nancy Rohr is at work on an agenda; information on the meeting will follow in future issues of the STONES & BONES.

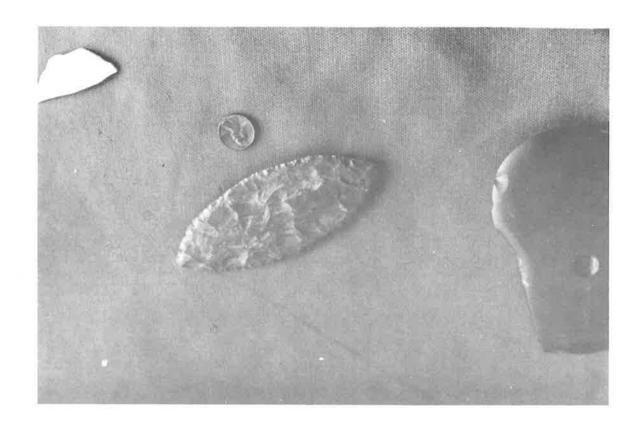
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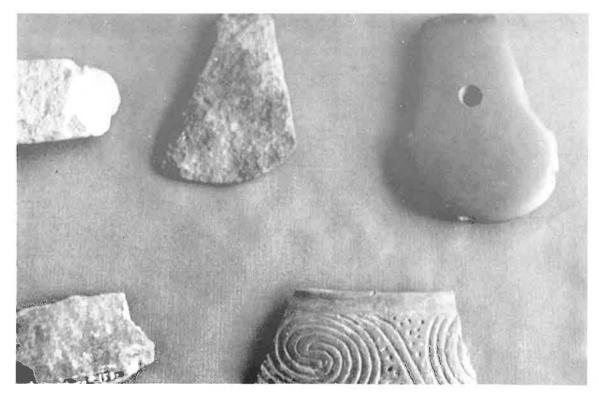
ARTIFACTS FROM THE HIGHTOWER SITE

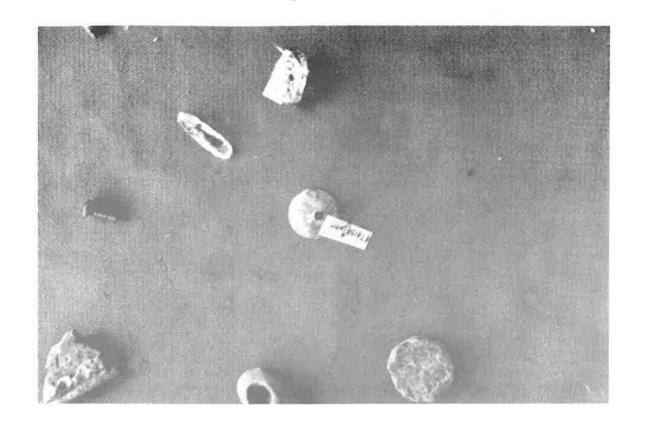
(Photographs in this and July issue courtesy of A. J. Wright)

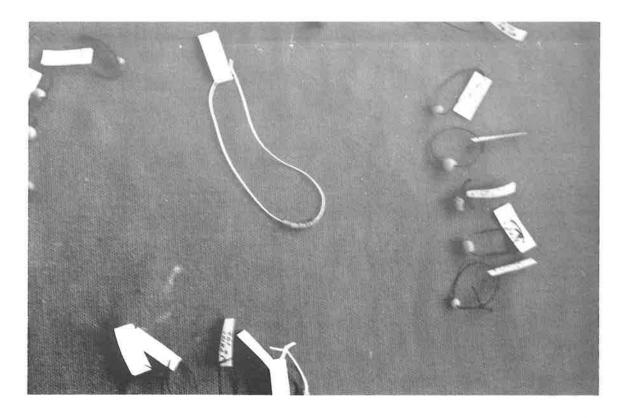












Mr. Amos J. Wright, Editor of Stones and Bonés 2602 Green Mountain Rd. Huntsville, AL 35803

Dear Amos,

On Christmas Day last year, I became ill with a severe case of malaria, which resulted in my spending 6 days in the hospital, 3 of which were in intensive care. This delayed case of malaria was undoubtedly acquired last year at Rio Azul, Guatemala, where I participated in an archaeological dig under the direction of Dr. Richard Adams of the University of Texas (San Antonio). Rio Azul was the subject of a feature article in the April, 1986, issue of National Geographic Magazine.

By the 19th of February, I had recovered enough to head once again for Rio Azul for my third season of digging at this important Maya site. My wife, Peggy,

says that I am a glutton for punishment!

One of the most taxing aspects of the dig is getting in and out of this remote site, which is deep in the jungle in the northeastern part of the Peten, near the borders of Mexico and Belize. Once again, I took my portable amateur radio station and provided a communications link directly to the United States from the jungle. After our arrival, we quickly set up camp and settled down to the tedius work of removing countless tons of earth and stones, searching for clues that would bring this ancient culture into better focus.

I was assigned a team of native workmen and allowed to conduct my own excavations under the general direction of Jack Eaton, a noted authority on Maya architecture, and the discoverer of many important Maya ruins. This was my fifth season of digging in Central America, and my fourth season of digging with Jack. Like many Maya sites, Rio Azul has been found to be much larger than originally thought.

Jack and I excavated again this year at the same plaza as last year, continuing to expose structural details, and searching for artifacts and burials. Connected by a long raised platform to the nearby temple containing the finely decorated royal tomb of Ruler X (born A.D. 417), this plaza was believed to have been the residential site for the royal family. This year, we found additional evidence to support that belief and which also showed the influence which Teotihuacan, in central Mexico, had had on Rio Azul.

Beginning shortly after we started digging, some of our staff and workmen became quite ill with what was diagnosed by the camp doctor as malaria. Some of the patients did not respond to treatment with chloroquine, the normal treatment and preventative, and had to be cured with quinine, which has undesirable side affects. By Holy Week, nine people had been ill, and Dr. Adams decided to terminate the dig and not to return after the Holy Week break as had been originally planned. Although we were all sorry that we had to leave early, we were pleased that the season was considered to have been quite productive.

At this point, Dr. Adams has not disclosed exactly what he will do in the future at Rio Azul. He expressed hope that a regional project can be initiated that will include Kinal, a huge unexplored site near Rio Azul, and other area sites. It is hoped that the Guatemalan government will declare much of the northern part of the Peten to be a protected archaeological area. There are enough ruins there to keep archaeologists busy for at least a hundred years.

The Alabama Archaeological Society is doing a great job. Keep up the good work! Please give my regards to my many friends.

Gincerely, Gim Harrion

CHAPTER NEWS

Tuscaloosa Chapter

The Tuscaloosa Chapter of the A.A.S. held its July meeting at the Town Library on River Road. Guest speaker was Dr. Jerry Oldshue from The University of Alabama. Dr. Oldshue spoke and showed slides on a dig he conducted on the campus of the University in the mid 70's. Dr. Oldshue and his students excavated Madison Hall dormitory, which was destroyed in 1865 by Union troops.

John Wm. (Bill) Adkison

PHARAOHS' CONCRETE

The heavy blocks in the Egyptian pyramids were probably molded onsite out of a type of concrete rather than handhewn out of solid rock at distant quarries and transported to the site, Joseph Davidovits, a chemist at Barry University in Miami Shores, Florida, says.

The massive blocks were not hoisted into place, says Margie Morris, his research assistant. "Every stone was cast exactly where you see it. The edge of a finished stone was used as part of the mold for the next stone".

Morris says the chemist basis his theory on analyses of pyramid block samples he obtained in 1982 (Egypt's government, which challenges the hypothesis, has refused Davidovits access to further samples.) His analysis led him to believe that the stones were made of minerals not occurring naturally in limestone, a building material in the great pyramids. Davidovits took samples from limestone quarries in Egypt where the stones ostensibly would have come from and found that those samples contained nothing but limestone plus small amounts of dolomite.

Davidovits says that, to bind the limestone and rock rubble used to cast the stones, the ancient Egyptians used cement made of natural minerals, such as socium carbonate, lime and a silicate, mixed with Nile water and silt, which was 60 percent alumina.

(From "Insight", May 18, 1987)

The Editors

| PUBLICATIONS | = | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------|
| Available issues of Journal of Alabama Archaeology Vol. 20-29 each issue | | |
| Stanfield-Worley Bluff Shelter Excavations (Journal of Alabama Archaeology) Vol. VIII Nos. 1 & 2 - Reprint, each issue \$5,00 pp | | |
| Special Publication 1 — Fort Mitchell \$2.00 pp | | |
| Special Publication 2 — The Archaeological Sequence at Durant Bend, Dallas County Alabama \$4.50 pp | | |
| Special Publication 3 — Archaeological Investigations at Horseshoe Bend | | |
| Handbook of Alabama Archaeology Part 1, Point Types | | |
| Lively, Long, Josselyn - Pebble Tool Paper\$3.00 pp | | |
| Investigations in Russell Cave, published by the National Park Service | | |
| Exploring Prehistoric Alabama through Archaeology (Juvenile) | | |
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