

# HEALTH & SCIENCE

## This script's an original

■ Mexican artifact is the oldest known in the West and hasn't yet been linked to other writings, scientists say

THE ASSOCIATED PRESS

WASHINGTON — An ancient slab of green stone inscribed with insects, ears of corn, fish and other symbols is indecipherable so far, but one message is clear: It is the earliest known writing in the Western Hemisphere.

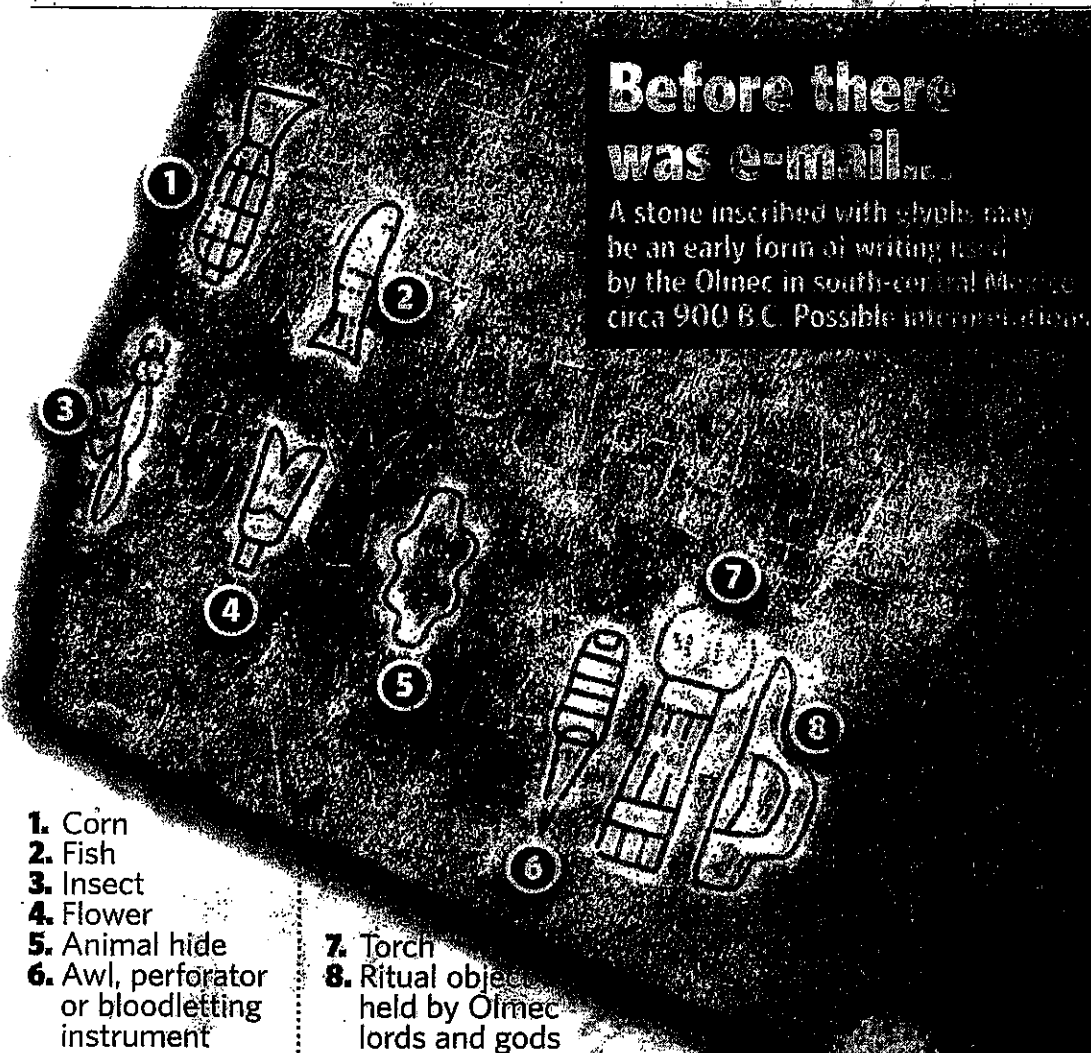
The ancient Olmec civilization, which occupied the Mexican Gulf Coast, probably produced the faintly etched symbols around 900 B.C., or roughly three centuries before what previously had been proposed as the earliest examples of writing in the Americas.

"We are dealing with the first, clear evidence of writing in the New World," said Stephen Houston, a Brown University anthropologist. Houston and his U.S. and Mexican colleagues detail the tablet's discovery and analysis in a study appearing this week in the journal *Science*.

The pattern of symbols covering the face of the rectangular block also represents a previously unknown ancient writing system. The text contains 28 distinct glyphs or symbols, some of which are repeated three and four times. The writing system does not appear to be linked to any known later scripts and may represent an etymological dead end, according to the study.

Other experts not involved in the study agreed with Houston and his colleagues that the horizontally arranged inscription shows patterns that are the hallmarks of true writing, including syntax and language-specific word order.

"That's full-blown, legitimate text — written symbols taking the place of spoken words," said William Saturno, a University of New Hampshire anthropologist and expert in Me-



Before there was e-mail...

A stone inscribed with glyphs may be an early form of writing used by the Olmec in south-central Mexico circa 900 B.C. Possible interpretations:

1. Corn
2. Fish
3. Insect
4. Flower
5. Animal hide
6. Awl, perforator or bloodletting instrument
7. Torch
8. Ritual object held by Olmec lords and gods

PHOTO COURTESY OF SCIENCE

### Other forms of early writing

**6600 B.C. CHINA**  
Signs carved into tortoise shells unearthed in 1999 may be the earliest written words.

**3000 B.C. PRESENT-DAY IRAQ**  
Cuneiform, wedge-shaped pictograms formed by pen and clay, used by Sumerians; Egyptians borrow idea for their hieroglyphics.

**2000 B.C. INDIA**  
Sanskrit is used. It forms basis for modern languages of India, such as Hindi, Bengali and Punjabi.

soamerican writing. The text is roughly arranged in rows across the block's face, which is almost exactly the dimensions of a standard legal pad. The face is smooth and slightly concave, which suggests it may have been worn down as it was inscribed and erased multiple times, Houston said.

There is little hope of deciphering the meaning of the text. The small size of the block and faintness of the inscription imply the text was not a public document but instead was meant for intimate reading, Houston said. Some suggested it may have had a ritual use. Villagers in the Mexican state

of Veracruz discovered the tablet sometime before 1999 while quarrying an ancient Olmec mound. The study's author traveled to the site this year to examine and photograph the block. Based on other material believed to have been found with the slab, the team concluded it is roughly 2,900 years old.

## Sources from the Past

## The Popol Vuh on the Creation of Human Beings

*The Popol Vuh outlines traditional Maya views on the creation of the world and human beings. The version of the work that survives today dates from the mid-sixteenth century, but it reflects beliefs of a much earlier era. According to the Popol Vuh, the gods wanted to create intelligent beings that would recognize and praise them. Three times they tried to fashion such beings out of animals, mud, and wood, but without success. Then they decided to use maize and water as their ingredients.*

And here is the beginning of the conception of humans, and of the search for the ingredients of the human body. When they spoke, the [gods] Bearer, Begetter, the Makers, Modelers named Sovereign Plumed Serpent:

"The dawn has approached, preparations have been made, and morning has come for the provider, nurturer, born in the light, begotten in the light. Morning has come for humankind, for the people of the face of the earth," they said. It all came together as they went on thinking in the darkness, in the night, as they searched and they sifted, they thought and they wondered.

And here their thoughts came out in clear light. They sought and discovered what was needed for human flesh. . . . Broken Place, Bitter Water Place is the name: the yellow corn, white corn came from there. . . .

And these were the ingredients for the flesh of the human work, the human design, and the water was for the blood. It became human blood, and corn was also used by the Bearer, Begetter. . . .

And then the yellow corn and white corn were ground, and Xmucane did the grinding nine times. Corn was used, along with the water she rinsed her hands with, for the creation of grease; it became human fat when it was worked by the Bearer, Begetter, Sovereign Plumed Serpent, as they are called. . . .

It was staples alone that made up their flesh.

These are the names of the first people who were made and modeled.

This is the first person: Jaguar Quitze.

And now the second: Jaguar Night.

And now the third: Mahucutah.

And the fourth: True Jaguar.

And these are the names of our first mother-fathers. They were simply made and modeled, it is said; they had no mother and no father. We have named the men by themselves. No woman gave birth to them, nor were they begotten by the builder, sculptor, Bearer, Begetter. By sacrifice alone, by genius alone they were made, they were modeled by the Maker, Modeler, Bearer, Begetter, Sovereign Plumed Serpent. And when they came to fruition, they came out human:

They talked and they made words.

They looked and they listened.

They walked, they worked. . . .

And then their wives and women came into being. Again, the same gods thought of it. It was as if they were asleep when they received them, truly beautiful women were there with Jaguar Quitze, Jaguar Night, Mahucutah, and True Jaguar. With their women there they became wider awake. Right away they were happy at heart again, because of their wives.

Celebrated Seahouse is the name of the wife of Jaguar Quitze.

Prawn House is the name of the wife of Jaguar Night.

Hummingbird House is the name of the wife of Mahucutah.

Macaw House is the name of the wife of True Jaguar.

So these are the names of their wives, who became ladies of rank, giving birth to the people of the tribes, small and great.

SOURCE: Dennis Tedlock, trans. *Popol Vuh: The Definitive Edition of the Mayan Book of the Dawn of Life and the Glories of Gods and Kings*. New York: Simon and Schuster, 1985, pp.163–65, 167.

*Discuss the extent to which this account of human creation reflects the influences on Maya society of both agriculture and the untamed natural world.*