Yale University

EARLIEST MAP OF NORTH AMERICA—The outlines of Europe, Asia and Africa can be easily recognized on this map which was authenticated recently by scholars from Yale University and the British Museum. But the significant portion is the land mass in the upper left hand corner, representing the earliest known map of North America and indicating that the Norsemen arrived there before Columbus did.

ARCHAEOLOGY

New World Mapped, 1440

An authenticated parchment map drawn in 1440 and rediscovered by scholars in 1957 finally proves that the Norsemen reached North America before Columbus did.

➤ PROOF that the hardy Norsemen really reached North America before Columbus has come to light with an exhaustive authentication of a parchment map drawn in 1440 and rediscovered in 1957.

This is the first map of any part of America, reported members of the Yale University Library, who termed it the "most exciting single acquisition" in modern times.

After eight years of painstaking research by British and American experts, the 11- by 16-inch piece of parchment with brownish ink drawings was proved an authentic map of the world of the 15th century.

Europe is easily recognized and fairly accurate; Africa and Asia much less so, library members report.

In the upper left-hand corner is an accurate representation of Greenland and to its left a large crude island labeled "Vinland" as "discovered by Bjarni and Leif." Two large river inlets open to the ocean on this land, assumed by the Norsemen to be an island not a continent. Scholars say these may be the Hudson Straits and the Gulf of St. Lawrence in Canada.

The map was probably drawn by a monk in Basel, Switzerland, who used source materials dating back to the Norse exploration of the northern American coastlines in the 13th and earlier centuries. The parchment was found in 1957, bound together by mistake with an unknown manuscript account of a medieval expedition to the land of the Tartars.

Together, the Yale and British Museum researchers tried every possible way to authenticate the map and text without subjecting them to modern scientific tests which would destroy parts of the manuscripts.

But scholars are convinced that the map and the text were drawn and written by someone who lived at least 50 years before Columbus "discovered" America.

The discovery of the map raises more questions about possible 12th century Norse settlement in Vinland.

It is also possible that Columbus and other early explorers had heard about or seen copies of the Vinland map or similar maps which were based on Norse accounts of their discoveries.

• Science News Letter, 88:263 October 23, 1965

ARCHAEOLOGY

U.S. Explorers Seek Mayan Cities in Yucatan

➤ TWELVE U.S. EXPLORERS will seek out and follow an ancient, broken Mayan road across Mexico's Yucatan Peninsula to the sea, beginning next month.

The route leads through untouched wild jungle to the isolated ruins of Tulum on the Caribbean Coast.

Object of the expedition set for Nov. 7 is to locate and map Mayan cities that flourished 1,000 years ago. No excavations are planned.

The territory to be mapped, Quintana Roo, ranks among the world's few remaining unexplored areas, because of the hazards it presents.

Snakes, insects and jaguars infest the jungle of Quintana Roo. One particularly harmful insect is the chicle fly whose sting produces a cancerous infection that spreads, leaving permanent disfigurement.

Because of the dangers, two expedition members are doctors. Others include a TV editor, several zoologists, an art professor and a ski instructor. Some of the team members have made prior trips into the inaccessible Yucatan Peninsula.

Starting at the small village of Chemax, the group will hack its way through to Coba, an extensive archaeological site and terminus for 16 Mayan stone highways or "sacbe." Several of the highways, never before explored and broken by tough growth, disappear into the jungle.

From Tulum, the men will be evacuated by sailboat to the Caribbean island of Cozumel.

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TECHNOLOGY

Some Problems Still Stymie the Computers

➤ CONTINUED GROWTH toward still larger and faster computers was predicted by leading U.S. scientists in Yorktown Heights, N.Y.

Computers now operate in a billionth-of-a-second range, and their memories store millions of words of information. Their limitations, however, "are still short of the scope of scientific problems that need to be solved," Dr. Stanislaw M. Ulam of the Atomic Energy Commission and Colorado University told a scientific meeting.

He pointed to such fields as weather forecasting, nuclear physics, astronomy, mathematics, and molecular biology in its search for the origins of life, as fields where larger scale computers are still required.

Dr. Ulam, a leading mathematician and a member of the President's Scientific Advisory Committee, said that computers "still cannot solve some of the higher level mathematics that are so dear to mathematicians."

However, he told 150 scientists attending an IBM-sponsored symposium on computer-aided experimentation that "some new device" will be developed to help solve such problems.

Recent technological advances in scientific computing were reported to the symposium. Dr. Henderson Cole of the Thomas J. Watson Research Center described the use of computers in controlling experiments to determine atomic structures of such substances as saccharine, fumaric acid and tetrodotoxin, the world's most toxic poison.

Operating the experiment by computer, Dr. Cole said, has enabled us to increase the productivity of scientists more than six times.

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