

# AMERICAN DISCOVERY



THOMPSON





# AMERICAN DISCOVERY

## OUR MULTICULTURAL HERITAGE

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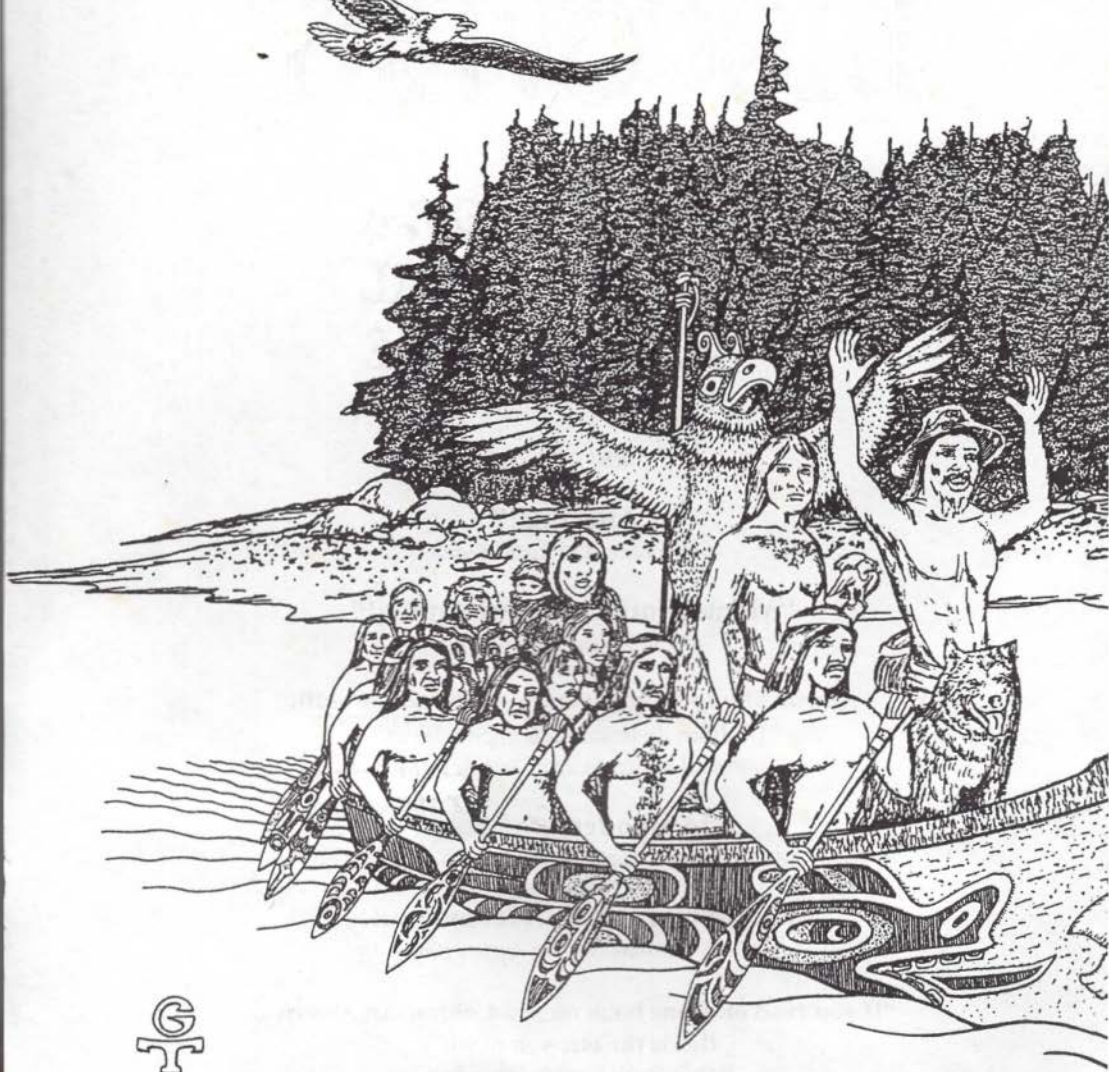
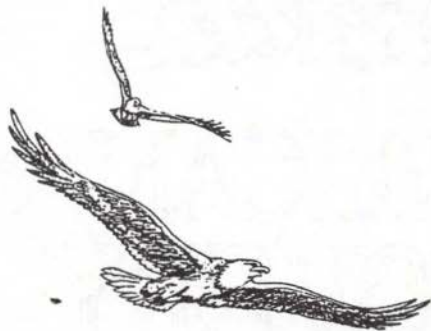
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this is the one you need.”**

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# AMERICAN



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# DISCOVERY

## OUR MULTICULTURAL HERITAGE

by

GUNNAR THOMPSON, Ph.D.

*Best Weber,  
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1996*



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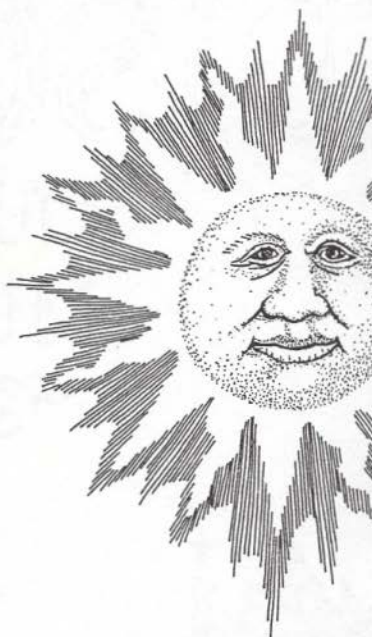




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**THE AUTHOR EXTENDS HIS HEARTFELT  
GRATITUDE FOR YOUR SUPPORT**



"Dog Dancer," by Karl Bodmer (1834)



in Kromm 1892

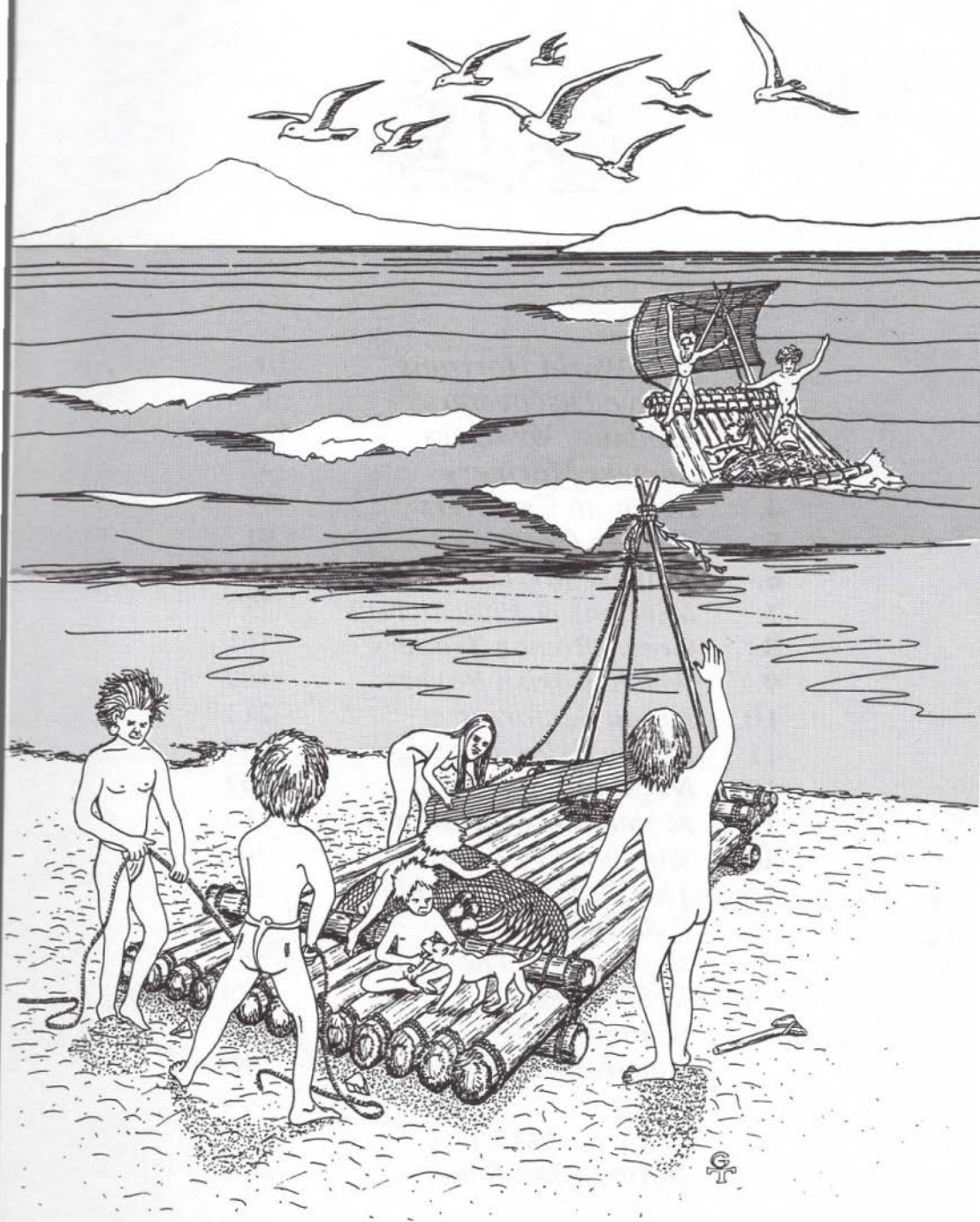
**Dedicated to the Native Peoples whose  
sacrifices and wisdom gave birth to the  
United Nations of All Tribes.**



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### ***The Voyage Begins***

*Southeast Asians prepare for a raft crossing to the Australian islands, circa 100,000 BC.*



## NEW WORLD HORIZONS

**American Discovery** was a multi-ethnic achievement. The first explorers came from Siberia during the Pleistocene Ice Age. They were followed by countless voyagers from Asia, Africa, and Europe. Among their ranks were Indo-Sumerians, Phoenicians, Celts, Britons, Danes, Norwegians, West Africans, Egyptians, Polynesians, Chinese, Japanese, Koreans, Romans, Greeks, Arabs, Hindus, and many others. Eventually, the New World became a meeting ground of races and a congress of ethnic diversity—the *first* United Nations.

Old World voyagers shared a common belief that the land across the seas was an Earthly Paradise. This belief was expressed by names they gave to the mysterious continents. Chinese merchants called ancient America “the Isle of Immortals.” Egyptians believed the land was the abode of pharaohs and honorable citizens: their paradise was called *Sekhet-Hetepet*. Among the Greeks, the land was known as the *Hesperides*—or land of mythical golden apples. Romans called North America *Hyperborea*—signifying a paradise of orchards beyond the North Wind. *Mag Mel*, *Avalon*, and *Hy-Breasail* were Celtic names for the Golden Kingdom across the seas. Medieval European cartographers situated this Earthly Paradise across the ocean.

Invariably, foreigners contributed to the rich fabric of New World culture. Old World voyagers introduced metal-casting technology, stone carving, monumental architecture, domesticated plants, animals and diseases. Cultural diffusion went both directions: New World resources fueled the rise of Old World civilizations.

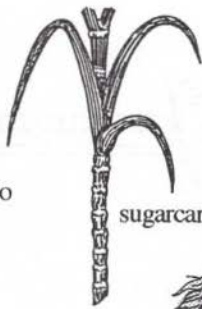
Foreigners also contributed to the rich ethnic heritage of America's Native Peoples. Norse sagas reported Celtic inhabitants living on the Eastern Seaboard alongside Iroquois and Beothuk tribes. During the early 1500's, Spanish and French explorers reported numerous clusters of Black Africans from Venezuela to Virginia. In the Northeast, English settlers encountered “natives” who had blond hair and blue eyes—traits which are commonly associated with Northern Europeans.

During the late 1800's, a group of amateur archeologists called “antiquarians” concluded that abandoned forts along the Ohio river were





potato



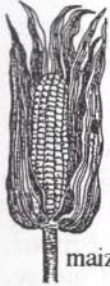
sugarcane

Seeds of Change?

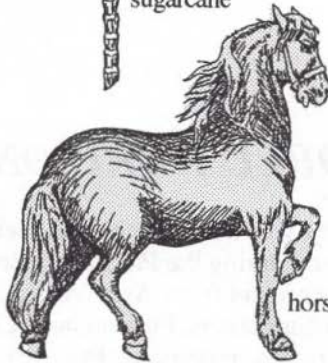
### THE BACKWARDS EXPOSITION

after Smithsonian Inst. 1992

### The Seeds



maize



horse

disease



remains of an ancient European civilization. However, antiquarian theories about ancient voyagers were swamped by a tidal wave of propaganda proclaiming Columbus as the hero of New World discovery.

### Columbus Quincentennial: Education or Propaganda?

The political dominance of Columbus supporters was demonstrated in 1992 when America witnessed a year-long gala of testimonials, movies, television specials, and museum exhibits featuring the European champion of conquest. Leading the spectacle was the Smithsonian National Museum which featured an exhibit called "Seeds of Change." In this exhibit, Columbus was proclaimed as the quintessential hero of exploration for the presumed achievement of uniting two previously isolated world cultures: The Old World and The New World. He was also credited with bringing the first domesticated plants, animals, and diseases across the oceans. This exhibit was correct in assessing the importance of horses, potatoes, corn, sugarcane, and diseases to the world's peoples. However, the assumption that Columbus was responsible for the first significant transoceanic contact is grossly inaccurate.

None of the five "seeds" featured in the Smithsonian exhibit are of Columbian origin. University of Oregon geographer Carl Johannessen has established that corn was a major crop in India by the 12th century. Archeologists have confirmed that Polynesians and Africans brought sugarcane to America prior to Spanish explorations in the Caribbean. Old English sources attribute the first importation of potatoes to a pre-Columbian colony called Norumbega. Chinese texts, Norwegian sagas, artifacts, and native testimonials confirm the use of horses in North America prior to the Spanish Conquest. Transoceanic pandemics have been with us for several thousand years. Respected epidemiologists have

# Seeds of Change?

## or Columbian Propaganda?

A Smithsonian Institution exhibit called "Seeds of Change" promoted Columbus as the champion of New World discovery. According to the exhibit, Columbus was the first to spread crops, horses, diseases, and civilization across the seas. Actually, all of these preceded the Spanish mariner by many centuries.



*The Explorer???*  
*not—Chris Colon*

---

identified evidence of smallpox and typhus in pre-Columbian Mexico, while Spanish expeditionary reports confirmed malarial infestations throughout the Caribbean.

Why was this evidence ignored by Smithsonian scholars?

The reasons are academic nepotism and ethnocentric bias. Most historians and anthropologists are loyal to a doctrine of cultural isolation that was originally promulgated by a Medieval religious fraternity. During the 1800's, the Columbian Order promoted the ethnocentric belief that Columbus was chosen by God to bring *the first* Christian civilization to America. Although modern scholars abandoned the religious premise of American discovery, they adhered to the belief that *no* significant voyagers preceded Columbus to the New World. This belief is often referred to as "The Monroe Doctrine of Cultural Isolation." Because of this doctrine, establishment scholars automatically dismiss evidence of pre-Columbian cultural diffusion as *heresy*.

The resulting academic myopia is a clear indictment of scholars who claim that their beliefs are based on scientific principles. Indeed, the practice of science demands an open mind and examination of all the evidence no matter how unorthodox it might seem. The fact that America's institutions of higher learning have promoted blind obedience to a Medieval religious doctrine raises serious concerns about the insidious role of religious propaganda in American education.

### The Oceans—Barriers or Conveyors?

The myth of American discovery in 1492 is a fairly recent concoction of modern historians. Arm-chair scholars insist that the oceans prevented travel between New World and Old World continents—until Columbus, showed everyone a pathway across the Atlantic. Historians

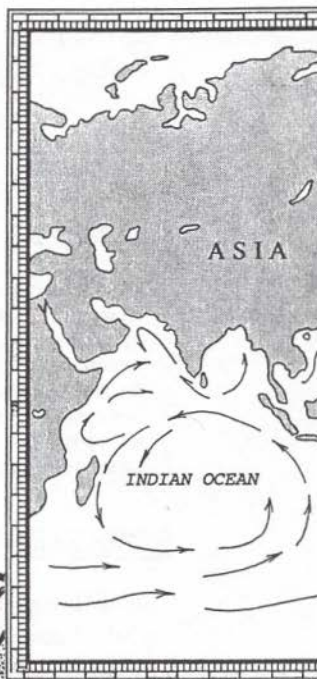


## OCEAN CURRENTS — PATHWAYS TO AMERICA

Ancient voyagers sailed on moving seas to distant lands. Many ships were caught by storms or currents and swept away in "drift" voyages. The lucky ones survived as agents of cultural diffusion.



1. Kuro Shio (Black Stream)
2. North Equatorial Current
3. Equatorial Counter-current
4. South Equatorial Current
5. Antarctic Drift
6. Humboldt Current
7. West Wind Drift
8. Gulf Stream
9. North Atlantic Current
10. North Equatorial Current
11. South Equatorial Current



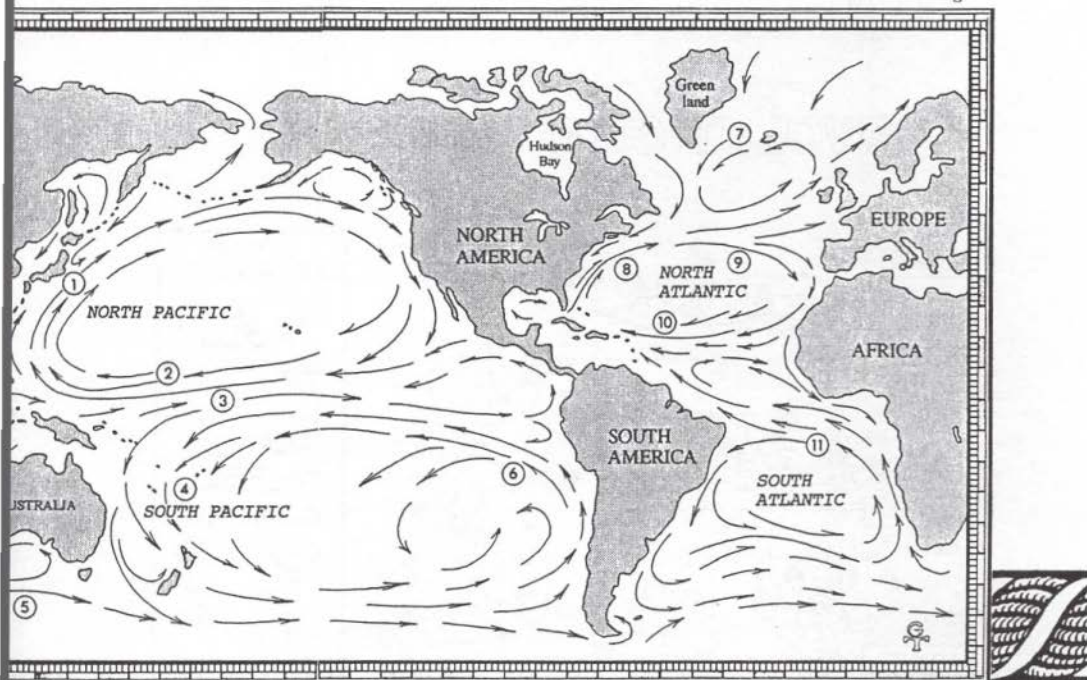
often characterize the ancients as fearful of sailing "beyond sight of land" or they assume primitive ships weren't capable of ocean travel.

Nonsense! Sailors know from experience that the oceans are actually *conveyor belts* between continents. Even the smallest vessels are capable of ocean crossings. In 1852, a lone Chinaman named George Hew crossed the Pacific from Hong Kong to San Francisco in a *sampan*—the Chinese version of a rowboat. The journey took Hew less than three months. A Norwegian named Samuelson crossed the Atlantic in a rowboat in 1896; and modern adventurer John Bombard crossed the Atlantic from Casablanca to Barbados in a rubber raft in 1951.<sup>1</sup> The same year, Anne Davidson sailed alone from Africa to the Caribbean in a twenty-foot sloop, *Felicity Anne*. In 1982, British adventurer Peter Bird rowed from San Francisco to Australia. And a Frenchman, rowed from Japan to Washington State in 1991.

Ancient vessels were no less seaworthy. In 1970, Norwegian explorer Thor Heyerdahl proved that primitive Egyptian reed boats could manage the crossing from Africa to the Caribbean. In 1977, British author Tim Severin sailed a replica of an ancient skin boat from Ireland to Newfoundland. These voyages contradict academic notions that the oceans were barriers to migration and cultural diffusion.

### Evolution of Ships and The Human Quest

The earliest evidence of maritime travel comes from Southeast Asia where natives called *Australoids* crossed a 90-mile sea between Malaya



and Australia about 100,000 years ago. Archeologists confirmed the crossing after uncovering remains of bones and campfires in Australia.<sup>2</sup> Primitive rafts or bamboo logs were the most likely means of transit.

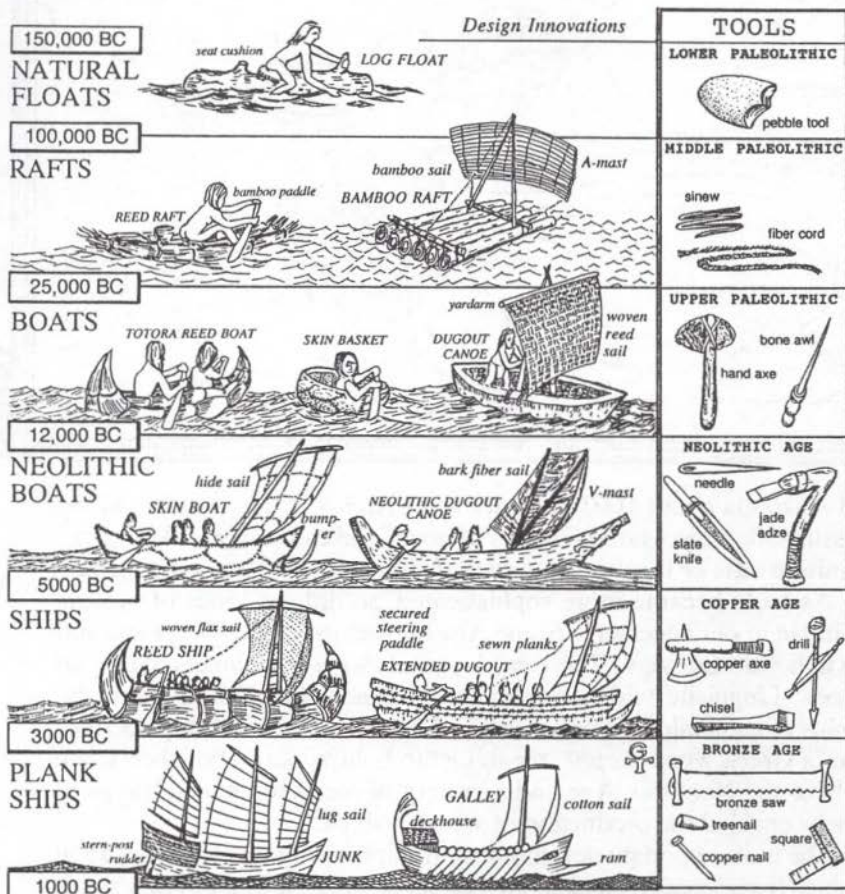
As tools became more sophisticated, so did the kinds of vessels available to our ancestors. Stone Age hunters used chopping tools and fire to hollow out logs. These crude vessels were forerunners of dugout canoes. Linguistic evidence reveals the primacy of dugout canoes in the origins of shipbuilding traditions: the Anglo-Saxon word “ship” derives from a Greek word *skaphe*, meaning “to hollow out.” Polished stone tools of the Neolithic Age and a variety of metal tools in subsequent epochs enabled the production of wooden ships.

The most important development in shipbuilding was the fabrication of ships from wooden planks. This achievement followed improvements in metal-casting technology and mass production of saws, chisels, and gouges. By 1000 BC, plank-built ships sailed on all the world’s oceans.

Ships enabled our ancestors to explore the Earth. So fruitful was the bond between emerging civilizations and maritime travel that ships gained mythical importance. Egyptians believed a papyrus ship carried the sun across the sky; the ship of the Moon Goddess transported souls to an earthly paradise. Scandinavians and Saxons believed ships carried fallen warriors to a similar paradise called *Valhalla*. The Old Norse word for ship (*skop*) was synonymous with “destiny”—because a Norseman’s fate was determined by what happened to his ship and shipmates.<sup>3</sup> Romans and Norwegians believed churches served as the “vessels” of



# EVOLUTION OF SHIPS



## Progress in Marine Technology

Throughout the world, boat designs have kept pace with advances in tool-making technology. The earliest humans used simple floats made from reeds and logs. Invention of rope led to rafts; skin boats followed. Creation of awls and thread. Metal-casting led to plank construction. Each innovation eased travel to distant lands—including America. By 3000 BC, all the world's leading civilizations had vessels capable of transoceanic travel.

P.2

congregations. The Latin word for ship, *nave*, also stands for the main room in a church. Several religions recognize the role of ships in the salvation of humanity: in the Babylonian *Epic of Gilgamesh*, a great ship saved humans from a world Deluge. Jews and Christians share a similar heritage in the biblical story of Noah's Ark.

Since ancient times, ships have served mankind in the perennial search for knowledge of distant horizons. The Greek hero Jason sailed on an epic voyage in search of a mythical Golden Fleece. Poets praise Jason's maritime exploits as an allegory of the universal quest for meaning in life. The "Quest" continues as modern astronauts venture beyond Earth's atmosphere. Space shuttles bear such names as *Enterprise*, *Discovery*, and *Atlantis* to commemorate the continuing search for knowledge of the universe.

### Maps: Evidence in The Wake of Exploration

Ancient mariners left behind a record of their quest for knowledge of the Earth. The record is in the form of ancient sea charts and maps. Basically, there are three kinds of maps: a) traveler's maps or mariner's charts; b) cosmological maps; and c) scientific maps. The earliest maps were simple drawings representing landmarks, hazards, and directions of travel. Eventually, maps included wind directions, water currents, and compass bearings. Major religious organizations used cosmological maps mainly to portray the relationship of Earth to the heavens.

During the Middle Ages, European monks assumed that the *Bible* was the ultimate geographical reference. Their "biblical geography" was a farce: they produced maps with Jerusalem at the center—thereby promoting a culture-centric view of Earth. These monastic monstrosities inspired secular debates, but they were useless for terrestrial travel or navigation. Monks originated the misconception that Earth was a flat rectangle: in their world, the oceans fell off into an abyss. This "biblical" phantasm caused great consternation among sailors who feared falling off the "edge." Biblical geographers also determined that an Earthly Paradise (The Garden of Eden) was located east of China; however, loyal Christians were forbidden to go there due to the sins of Adam and Eve.

Scientific cartography was practiced in Egypt, Babylon, India, and China as early as 3000 BC. The technology reached Europe during the 15th century—after a hiatus from Roman times. Scientific maps were based on compass bearings, mathematical computations, surveying, and celestial observations. Because these maps were continuously revised, they often exposed religious misconceptions of biblical geographers.

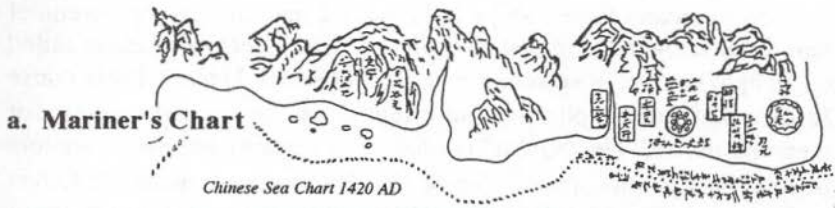
Many ancient maps portray American lands across the seas from the Old World. Such lands are shown on Greco-Roman maps, Chinese world maps, Hindu maps, Arabic maps, and even Medieval maps.



# ANCIENT MAPS

## Mapping The Earth

Ancient peoples had three kinds of maps: (a) Route Maps or Mariner's Charts, (b) Cosmological Maps, and (c) Scientific Maps. Route maps were useful for travelers but often useless for geographers; "maps" produced by monks were of little value to travelers; scientific maps improved commerce but threatened theological fantasies.



Roman maps referred to America as the *Antipodes*; Chinese mapmakers called the eastern continent *Fu-Sang*; Arabs called the land *el Qaf*, and Medieval maps mentioned *Vinland*, *Brasil*, and *Albania*. All these lands were eventually identified as American territories.

Establishment scholars consistently ignore evidence of pre-Columbian voyages on ancient maps. In accordance with the Doctrine of Cultural Isolation, they assume overseas lands are simply "fantasy islands" or pure "mythology." Thus, they tragically miss vital clues.

## The Columbus Myth as Institutionalized Racism

The Myth that Columbus discovered *America* is a fairly recent phenomenon. In his own time, Columbus was lauded for finding a shortcut to India—a presumed achievement which was exposed as a fraud before his death. The Florentine Amerigo Vespucci established the existence of a "New World," and it was for this achievement that the continents were named in his honor. Modern historians often pretend that the naming of America was an "accident" or a "travesty." But the fact remains: Vespucci revealed the existence of a continent which biblical geographers (and Columbus) claimed couldn't possibly exist.

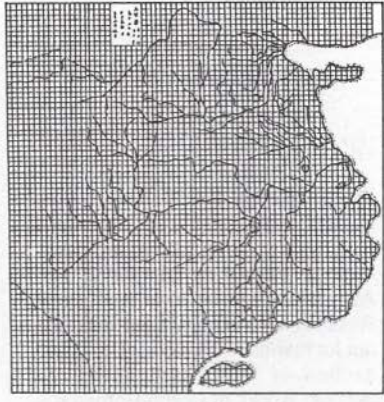
For a short time, the British promoted John Cabot's glory for "discoveries" in the North Atlantic. But the party ended when scholars realized the territory Cabot called "New-Found-Land" had been known for ages as a Portuguese fishing colony. A few loyal Scandinavians praised Leif Ericson for "discovering" *Vinland* (near Cape Cod), but their own sagas acknowledged *prior* Old World settlers: it seems wherever the Norse went, they found ruins left by the ubiquitous Irish.

It is tragic that many historians became inadvertent supporters of a myth that was initiated by a Medieval religious sect. The early 1500's witnessed the disintegration of centralized Church authority in Europe as Protestant reformers sought independence from Rome. Amidst the



**b. Cosmological Map**

*Bishop Isidore of Seville  
World Map 570 AD*



**c. Scientific Map**

*Map of China 1137 AD*

tribulation, Church leaders sought a heroic example of loyalty inspired by faith: Columbus seemed like the ideal candidate. Subsequently, devout European historians accepted Columbus as the divine instrument of American discovery. Thus, a religious dogma was established in 19th-century academia that Columbus was the God-inspired “savior” of the Western Hemisphere—and coincidentally the ultimate explorer.

Ethnocentric bias in anthropology and history have produced the worst kind of institutionalized racism: religious doctrine and bigotry have been cloaked in the presumed respectability of science. Although 20th-century historians abandoned the rationale that Columbus was God-inspired, the dogma of New World cultural isolation endured. This dogma has been advanced by major encyclopedias, history books, and movies. Museum curators and educators follow the Smithsonian lead in proclaiming Columbus responsible for introducing the Old World and the New World in a cathartic cultural event called “the Great Columbian Exchange.” Consequently, a brutal period of native genocide was concealed behind euphemistic slogans of “manifest destiny.”

The Columbus Myth is the principle bastion of White racism in American academia. Many generations have been trained through the tutelage of public schools to regard White European Christians (particularly Columbus) as the *only* important agents of civilization. From the halls of learning, the spectre of the mythical Columbus has spread to infest government, public education, and the national culture. This bias has led to the denial of funding for pre-Columbian research and denial of minority participation in museums, textbooks, memorials, and public events. Colleges and professional journals consistently use their influence to stifle unorthodox studies or “wayward scholarship.”

National institutions also deny minorities equal representation: “Columbus Day” is the only national holiday honoring discovery—and it celebrates a racist fraud.



## “Other World”

This 1485 copy of a 5th-century map by the Roman geographer Macrobius portrays the globe as two terrestrial regions divided by climatic zones. Across the Equator flows the “Ocean River” in a zone presumed to be too hot for human habitation. The upper section of land represented the “Known World” of Greco-Roman tradition; the lower portion included the *Antipodes*—an unknown land across the sea. Ancient geographers often called this place “The Other World.” Most Roman scholars believed the overseas continent was inhabited. PM.5



after a map in the Huntington Library  
San Marino, California

### Through the Eyes of a Child

As native of Washington State, I grew up surrounded by the rich art and culture of Northwest Coast tribes. The legacy of Chief Sealth continues to haunt this frontier city that was named in his honor. His image still adorns decorative facades on Third Avenue, and his bronze statue gazes across Pioneer Square. Sealth was a leader of the Duamish League during the 1850's when settlers stormed into the Northwest. His negotiating skills helped ensure the survival of Northwest Coast tribes.

Native culture enriched my life as a youth. I admired the deep spirituality that I witnessed in native dances, traditions, and communal feasts. However, school left me very disappointed. History books presented a very superficial and biased view of America. European males were praised as “champions,” while natives were called “obstacles to progress.” This racial bias was evident from the so-called “beginning” of American history which teachers and textbooks attributed to Columbus in 1492. I was sharply rebuked by my 4th-grade teacher when I insisted Indians discovered America because they arrived before Columbus. Thus, I failed at an early age to absorb the approved Anglo mythology.

Dissatisfaction with public education inspired me to become a detective of American history. My search for truth took me to the public library where I found several clues to America's real past in unorthodox manuscripts. One was a story about a Nordic hero, “Leif the Lucky,” who traveled to America circa 1000 AD. Another book was about Phoenician artifacts in America that were nearly 3,000 years old. A third book told the story of an ancient Chinese voyager named Hui Shen who traveled to America during the 5th century AD. These books revealed

that a lot of so-called “facts” I learned in school were actually lies.

In spite of growing skepticism, I earned a fellowship in anthropology at the University of Wisconsin. It was at Wisconsin that I discovered the severity of institutionalized racism in academia: those who questioned the Doctrine of Cultural Isolation were summarily dismissed from the program—and I was among them. In later years, I found out that my experience was by no means unique. However, most students adopted the biases promoted by their professors. These “successful” students earned Ph.D.'s and took up positions in universities where they inadvertently passed on the ethnic prejudice of their mentors.

Although our society claims to promote ethnic diversity, many of our institutions have been built on foundations of White European supremacy. Unfortunately, that legacy of racial and cultural bias is still at the core of our social, economic, educational, and political institutions. Knowing the truth about the origins of our society will force us to reexamine public institutions that must be made impartial and all-inclusive if all citizens are to have access to the American Promise of freedom, justice, equality, and opportunity.

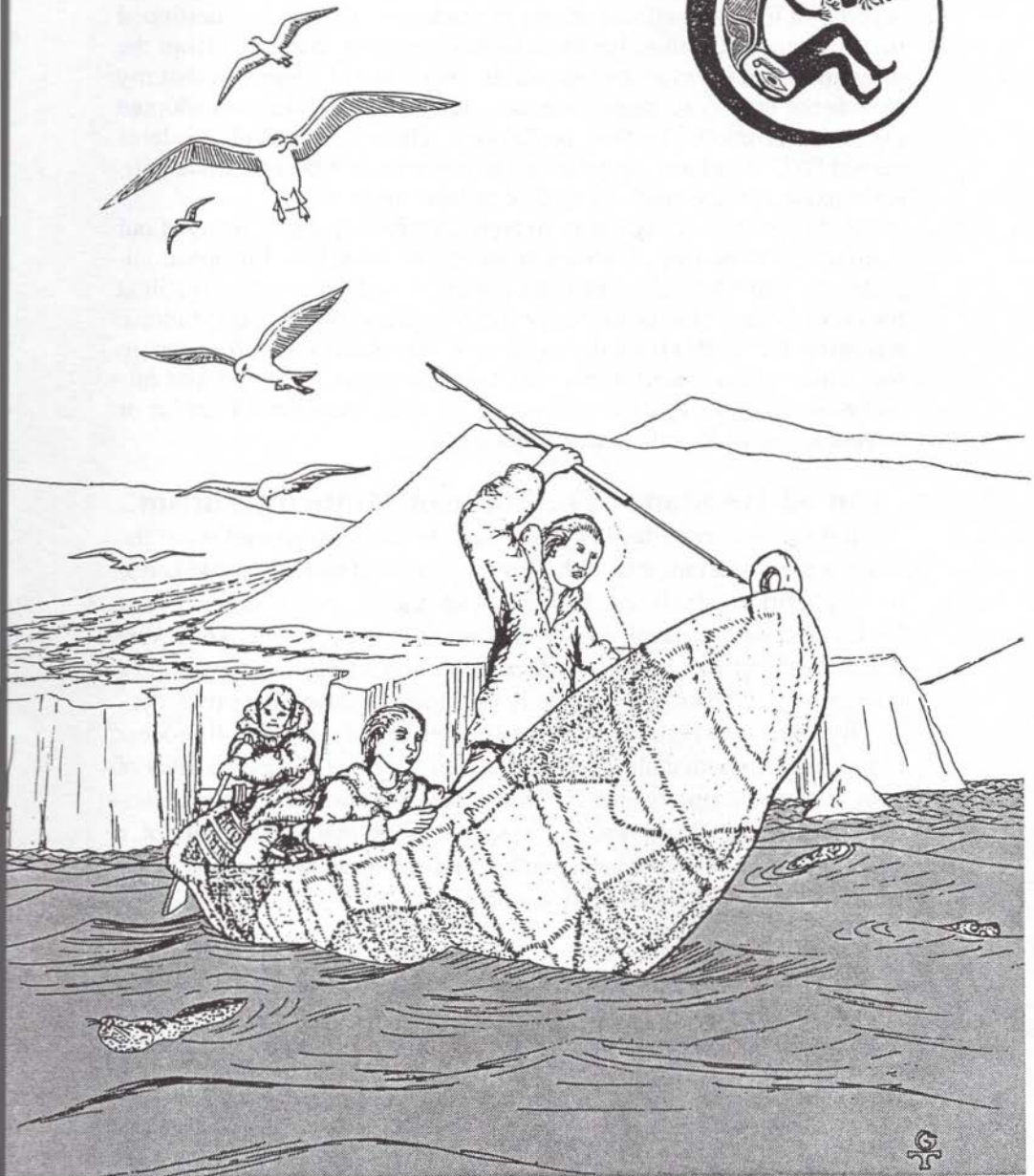
### **United We Stand: The Forge of Multiculturalism**

It was America's destiny to become the meeting ground of all the world's races and cultures. Whether they traveled by raft, kayak, canoe or ship, curious explorers ventured into the unknown seeking new lands—and they eventually made their way to a New World. They were joined by merchants and wanderers, pioneers and refugees. They found a boundless wilderness; they made it a paradise of farms and orchards.

By coming to America, diverse peoples began the difficult process of forging a unified, multi-ethnic community. Long before the arrival of 16th-century Europeans, the Native Peoples were world's most cosmopolitan society. Their sacrifices and achievements were part of a continuing epic of transoceanic exploration and migration that can justly be called “The Cavalcade of American Discovery.”







**Asian Nomads**

Seal hunters in a skin boat pass Alaskan glaciers on their way to North America, circa 12,000 BC.





## ***NATIVE DISCOVERERS*** (500,000 BC—1500 AD)

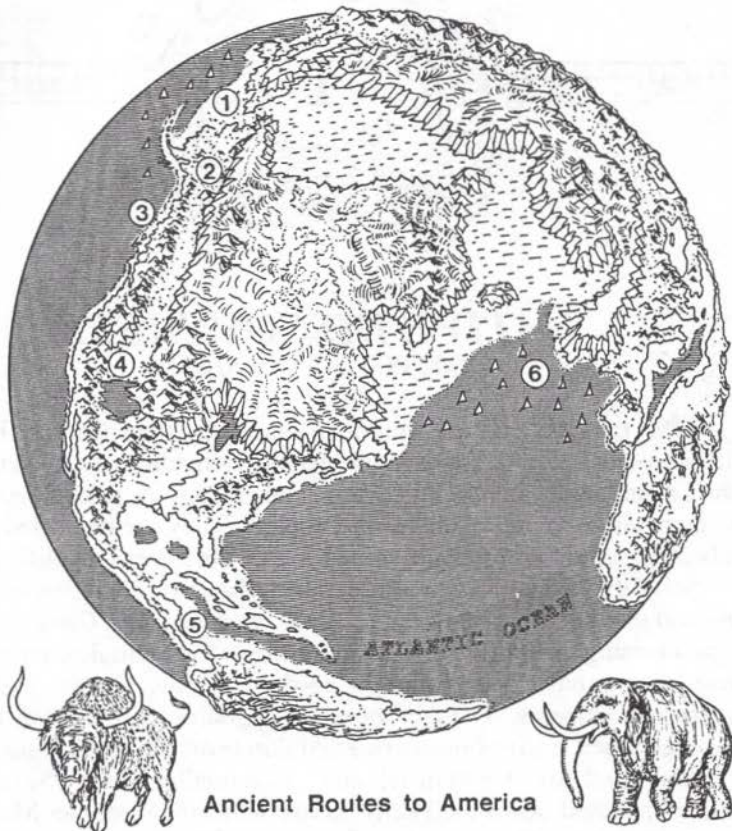
**The cavalcade** of American discovery began nearly half-a-million years ago. At the dawn of history, nomadic Asians wandered across a land bridge connecting Siberia and Alaska. Anthropologists call these primitive savages “the Early People.” They are identified in the archeological record by crude stone tools of the lower Paleolithic Age.

Scholars distinguish two subsequent phases of migration—one by land and the other by sea. Nearly 25,000 years ago, Big Game Hunters began crossing the trans-Siberian land bridge. Archeological remains of these hunters have been found in northern China, Siberia, and both American continents. The third phase of migration started about 13,000 years ago when marine hunters paddled skin boats along the Kamchatka peninsula and the Aleutian islands. Eventually, these “Skin Boat People” paddled down the Pacific coast of North America. Maritime hunters thrived in the coastal environment. Their success at fishing, hunting, and harvesting wild plants made them the most populous of ancient immigrants. Accordingly, their descendants comprise most of the people we refer to as “Native Americans.”

Between 3000 BC and 1400 AD, descendants of the ancient immigrants developed civilizations in North, Central, and South America. These “calico” civilizations were not entirely indigenous creations: indeed, native tribes adopted numerous innovations from Old World travelers from Asia, Africa, and Europe. The mightiest indigenous nations were the Mayans, Mexicans, Incas, and Iroquois, but there were many others. Some of these nations occupied huge cities with monumental stone pyramids and temples. They had books made from leather and paper; they made tools from molten copper or bronze. Some tribes even developed an iron-working industry. Natives cultivated rice, amaranth, potatoes, *maize*, beans, and squash. By the 15th century, the native population numbered in the tens of millions.

In every respect except one, American tribes were as advanced as any Old World society. The quintessential distinction was that the indigenous people didn't have guns.





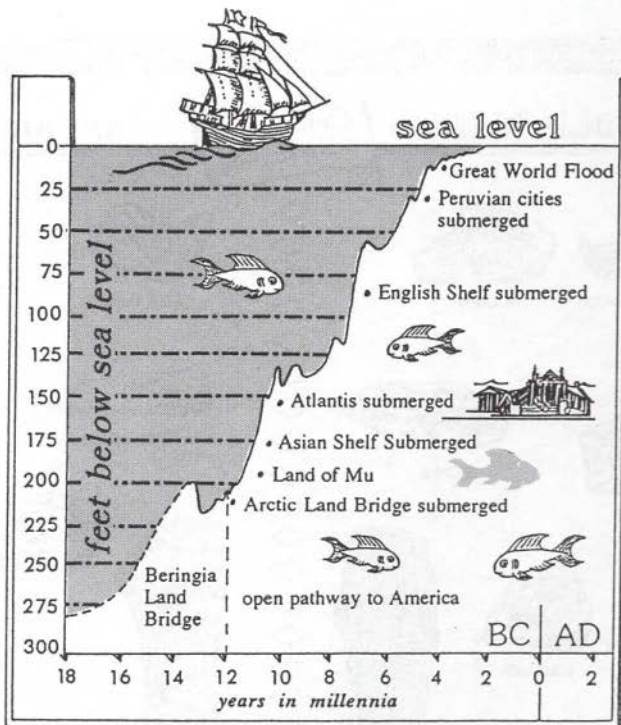
**Ancient Routes to America**

1. 150,000 to 100,000 years ago--Paleolithic nomads crossed the Beringia land bridge from Siberia to Alaska.
2. 12,000 to 5000 BC--big-game hunters crossed the land bridge.
3. 12,000 BC to 3000 BC-- maritime hunters sailed from Asia to America.
4. Lake Havasu formed in the Southwest from melting Ice Age glaciers.
5. 60,000 BC--nomadic hunters reached South America.
6. 10,000 to 7000 BC--Northern Europeans, called "Red Paint People," followed migratory sea birds across the North Atlantic to America.

### **Siberia's Arctic Nomads (500,000 BC to 20,000 BC)**

The first people to reach America came across a land bridge in the far north. Between the shores of Siberia and Alaska lies a narrow passage called the Bering Strait. Located on the Arctic circle, this strait was an effective barrier to migration for most of antiquity. However, the barrier is not a permanent geological feature. During cyclical temperature extremes called "Ice Ages," the sea level drops by hundreds of feet, and the bottom of the Bering Strait lies exposed.

At maximum glaciation, the sea level can drop nearly 400-feet;



## Rising Waters--World Floods

### Hydrostatic Chart 18,000 BC to Present

Remains of ancient voyagers to America are concealed by the oceans. Seas have risen nearly 300-feet during the past 20,000 years as the last Ice Age has given way to warmer climates. Passing centuries witnessed the rise of civilizations which were principally located along coastal areas. Thus rising seas engulfed such legendary cultures as Mu in Asia and Atlantis in Europe. Less renowned but equally important archeological sites lie hidden beneath the waves.

(data after N.A. Morner, *Geology*, 3: 109-110, 1975)

simultaneously, polar glaciers rise more than a mile above the Arctic landscape.<sup>1</sup> When this happens, retreating seas expose enormous areas of the continental shelf, including a land bridge of habitable territory between Siberia and Alaska. Geographers call this trans-continental passageway "Beringia." It was across Beringia that nomads reached the previously uninhabited Western hemisphere perhaps 500,000 years ago.

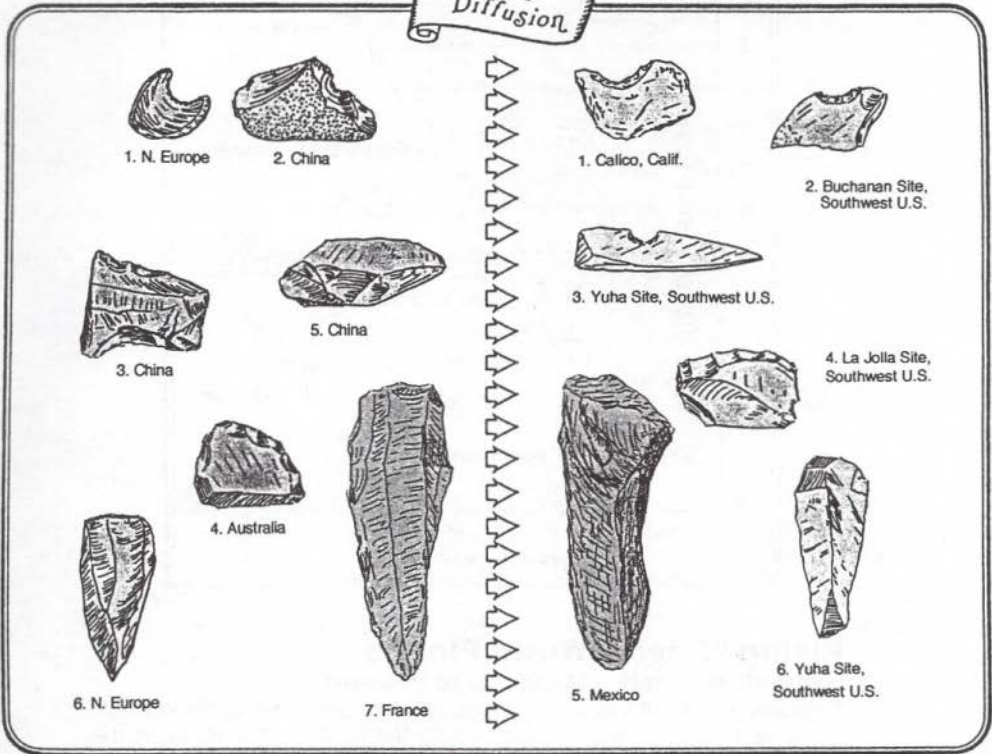
The first people to reach America subsisted on small animals such as rabbits, marmots, and birds. These "Early People" lived in rock shelters or primitive huts made from boughs, grass, and mud. Their weapons included wooden clubs, spears, and throwing stones. These primitive



OLD WORLD

Cultural Diffusion

AMERICA



**Earliest Artifacts in America (100,000 to 15,000 BC)**

Siberian nomads brought primitive tool-making traditions from Asia to America. Concave scrapers (1-3) were used to scrape sticks and bones. Blade tools (lower row) were used for knives. See Appendix for sources. 1.1

weapons were adequate for killing small game, but they were virtually useless against the real beasts of the wilderness—saber-toothed tigers, grizzly bears, dire wolves. Thus, life for our early ancestors was a precarious ordeal.

Early People often traveled beyond familiar territory because their survival depended on finding new food sources. Whenever glaciers receded, new territories opened up for plants and animals. Opportunistic natives naturally followed small game along migratory paths which led deep into North America. They reached South America by 50,000 BC.

### Evidence of Early People in America

During the 1920's, most scholars believed nomads reached America no earlier than 5000 BC.<sup>2</sup> That belief was shattered in 1925, when John Figgins, chief archeologist of the Denver Museum of Natural History, produced evidence of big-horned bison that had been killed with man-made spears almost 9,000 years ago. Recently, archeologists have pushed back the confirmed date of human entry into North America by tens of thousands of years.

The oldest remains of nomadic occupation consist of crude stone implements called "pebble tools." These "tools" were actually hand-sized rocks chipped on one end to produce a sharp edge. The sharp edge enabled Paleolithic nomads to cut animal skins, fiber cords, and saplings. Pebble tools have been found in geological strata ranging in age from 120,000 years ago to 500,000 years ago. The strata were formed as "alluvial deposits" when rivers at the base of retreating glaciers deposited layers of sand and stones. Sometimes crude stone implements are found with remains of campfires or bones from extinct mammals. Controversy surrounds such ancient sites as the Anza-Borrego State Park in Southern California (circa 500,000 years-old), the Puebla site in Mexico (up to 300,000 years-old), the Calico site (circa 200,000 years-old), California's Texas Street site (circa 120,000 years-old), and the Sheguiandah rock shelter in Canada dating to 150,000 years-old.<sup>3</sup>

Most American archeologists cling dogmatically to an entrenched belief that North America was totally unknown to humans until the Wisconsin glacial advance of approximately 20,000 years ago. These stalwart academicians view any report of Early People in the Americas with great skepticism. Nevertheless, the eminent British archeologist L.S.B. Leakey (discoverer of *Homo habilis* in Kenya, Africa) confirmed the extreme age of pebble tools at California's Calico site. He examined the site in 1963 at the invitation of Ruth Simpson, Calico's chief archeologist.<sup>4</sup>

Further confirmation of ancient pebble tools in America comes from Texas A & M University geographer George Carter, author of *Earlier Than You Think* (1980). Carter compared Old World pebble tools with artifacts from sites near La Jolla and San Diego, California. He demonstrated that American artifacts were virtually identical to those found overseas. Carter showed how man-made tools have identifiable shapes, striking surfaces, and microscopic wear patterns which serve to differentiate them from *pseudo*-artifacts produced by natural phenomena such as avalanches, surf battering, or thermal fracturing.<sup>5</sup>

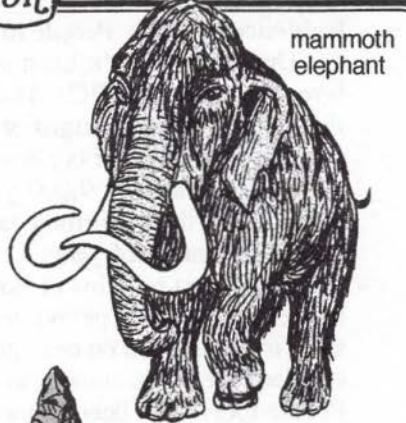
Archeologists continue to report evidence of Early People in the Americas. Stone tools found at the el Bosque site in Nicaragua came from geological deposits nearly 70,000 years-old. Archeologist Niede



OLD WORLD

Cultural Diffusion

to AMERICA



mammoth elephant



1. NE China



2. NE China



1. Tennessee



2. Tennessee



3. Siberia



4. NE China



5. NE China



3. Folsom, New Mexico



4. Eden, New Mexico



5. Fraser Canyon, B.C.



Artifacts of Big-Game Hunters (12,000 to 5000 BC)

Similar artifacts found in Siberia, northern China, and America confirm Asian origins for stone-working technology, including "flint-knapping," transverse chipping (Old World specimen 4), and "fluting" (Old World specimen 5). The spear was the hunter's principle weapon against such beasts as the woolly mammoth (shown above).



## *Native Discoverers*

Guidon of the Institute of Advanced Social Science Studies (Paris) reported ash-filled hearths dating to 45,000 BC at Pedra Furada, Brazil. University of Kentucky archeologist Tom Dillehay found a hearth and stone tools in Chile; he estimated human occupation by 30,000 BC.<sup>6</sup>

Conclusive evidence of Early People in America has been found at Orogrande Cave, New Mexico. Richard MacNeish of the Andover Foundation for Archeological Research announced discovery of human habitations in 1991. Radio-carbon tests showed that native hunters used Orogrande Cave between 36,000 and 42,000 years ago. A roasting pit at the cave contained bones from an extinct horse and a ceramic fragment with the impression of a human finger. MacNeish estimates that habitation of the cave began nearly 70,000 years ago.<sup>7</sup>

## **Big-Game Hunters** (25,000 to 5,000 BC)



A new breed of nomad came to the New World about 25,000 years ago. Big Game Hunters carrying spears with slender stone points crossed the land bridge to Alaska and headed down the Great Basin territory between the Cascade range and the Rocky Mountains.<sup>8</sup> They followed migratory animals such as caribou and horses on their trek south.

The earliest evidence of big-game hunters was found at the Mexican site of Valsequillo. After excavating nearly one hundred feet of alluvial deposits, paleontologist Juan Camacho uncovered crude stone artifacts along with bones of a mastodon. The beast had been butchered at the site nearly 22,000 years ago.<sup>9</sup> Archeologist James Adovasio of Mercyhurst College dated remains at the Meadowcroft Rock Shelter in Pennsylvania at nearly 20,000 years-old. A mastodon kill site at Taima-taima, Venezuela, yielded stone tools and bones more than 13,000 years-old. Other evidence of Big Game Hunters has been found throughout the Great Basin at sites in Washington, Idaho, Utah, and Arizona.

Advanced stone-chipping technology called "flint-knapping" gave big-game hunters a competitive edge over more primitive societies and the beasts of America's wilderness. By "knapping," or striking, a stone blade along the edge with an antler, stone-age craftsman removed very tiny flakes. The resulting blade had smooth sides, a laurel-leaf shape, and a very sharp edge. Craftsmen also removed longitudinal pieces from blades—creating a narrow or "fluted" appearance. Although the technology originated in Asia, natives in the Great Basin perfected knapping and fluting crafts to a high art form after the 10th century BC. The Asian origin of this technology has been confirmed by archeologists Paul Shao and Thomas Canby. They have identified Asiatic artifacts with fluting and knapping that were in use prior to the time hunters crossed the land bridge to America.<sup>10</sup>





Aleutian Natives



### Skin-boat People

Aleutian natives of Alaska posed for Smithsonian artists in the 1890's. Their Inuit ancestors traveled across the Bering Strait from Siberia to Alaska about 3,000 years ago and settled across Northern Canada as far as Labrador and Greenland. Residents on both sides of the Bering Strait maintained contact by frequent trips across the sea in skin boats called *umiaks*, or "family boats." The man in the upper left wears bone ornaments, or *labrets*, in his chin. (From Nordenskiöld (1881) and Annual Reports from the Bureau of American Ethnology, Smithsonian Institution (1892-1899).

1.3

The manufacture of fluted blades was a major breakthrough in the long march towards civilization. These slender cutting tools were much more effective than the bulky chopping tools of previous centuries. When combined with more highly evolved hunting societies, stone tools gave natives an advantage in the struggle for survival. Crafty hunters built wooden barricades near cliffs and used torches to drive herds of bison over the edge. Animals killed in the plunge provided a surplus of food and hides. Natives used hides for portable shelters called *urangas* in Siberia or *wigwams* in North America. Such shelters are still common in sub-Arctic climates from Lapland to Canada; they were ancient prototypes of *tepees* used on the Great Plains.

Hunters tamed semi-wild wolves which were the ancestors of huskies and malamutes. The Arctic hound was the only breed native to North America. Lone dogs were used to pull a *travois* or baggage rig consisting of two poles and a platform. Dogs were hunting companions, guardians, and potential sources of food. They ensured the survival of Asian immigrants: hunters accompanied by packs of trained dogs were more than a match for the grizzlies and mastodons.

From the Upper Paleolithic onward, native hunters became masters of their environment. No longer were they walking a tightrope between survival and disaster. The fluted-point spear enabled Big Game Hunters to conquer the beasts of the wilderness. New sears also had an impact on the ecosystem: some scientists attribute extinction of mastodons, mammoths, big-horned bison, and other Pleistocene animals to excessive hunting.<sup>11</sup> Other factors accelerated the decline of the giant mammals: warming climates, increased rainfall, and rising seas significantly altered natural habitats.

### **Skin Boat People** (11000 BC to present)

Maritime migrations to the Americas began nearly 13,000 years ago. Asia's maritime nomads are called "Skin Boat People" because they traveled in vessels made from sealskins lashed to pole frames. They followed migratory seals from the temperate regions of Asia to Siberia, Alaska, and the coast of British Columbia.

Those who settled in North America found a habitat of abundant food sources: men hunted marine mammals or fished according to the season; women gathered mollusks along the shore and picked berries, grains and nuts. Because of their advanced Neolithic technology and the generosity of the land, coastal societies prospered. Descendants of coastal hunters followed major rivers like the Fraser in Canada and the Columbia in Washington as they paddled across the continent.

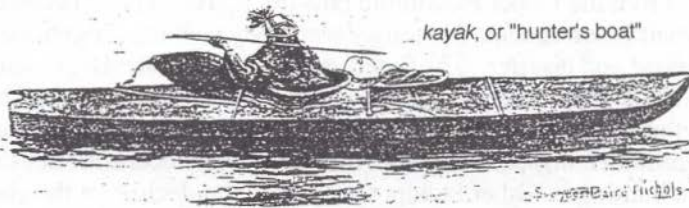
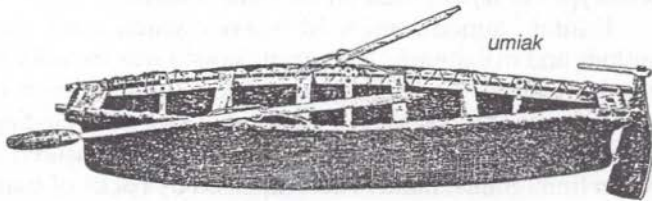
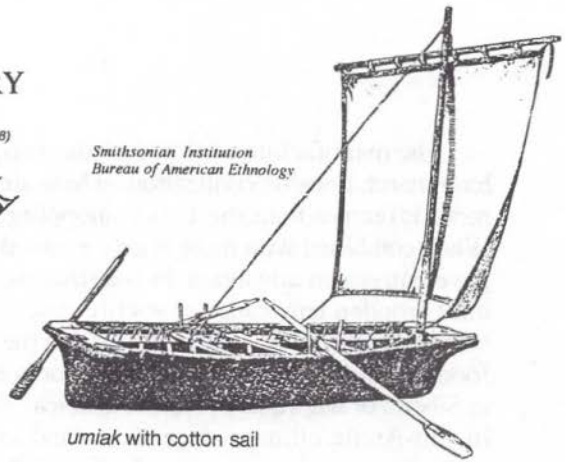
Archeologists have uncovered evidence of ancient marine hunters



## AMERICAN DISCOVERY



Smithsonian Institution  
Bureau of American Ethnology



### Skin Boats

Inuit tribes from Siberia to Alaska, Canada, and Greenland used skin boats for coastal travel and long-distance journeys. Shown above is an Aleutian native in a *kayak* holding a bird spear with a throwing stick, or *attlatl*. 1.4

along the North Pacific Rim from Japan to Siberia, Alaska, and Oregon. Russian archeologist Ruslan Vasilevskii reported similar stone and bone tools at several North Pacific sites on Japan's Hokkaido Island, Sakhalin Island, the Kamchatka Peninsula, the Aleutian Islands, and coastal Alaska.<sup>12</sup> The sites have been radio-carbon dated between 10,000 and 8000 BC.<sup>13</sup> Vasilevskii regards the similarity of artifacts between Asia's archaic marine culture and Alaska's marine culture as evidence of nomadic hunter-fisher societies moving into previously unoccupied territory in North America. Vasilevskii's theory has been confirmed by American scholars. Portland State University anthropologist Allison

Stengar found ceramic decorations on pottery fragments near the Columbia river that are very similar to decorative motifs used on Japanese ceramics during the 6th millennium BC.<sup>14</sup> University of California archeologist Nigel Davies reported similar microliths (or “miniature stone tools”) in Siberia’s Chukchi Peninsula and coastal Alaska dating to the 5th millennium BC.<sup>15</sup>

OLD WORLD  
PLANTS  
in AMERICA



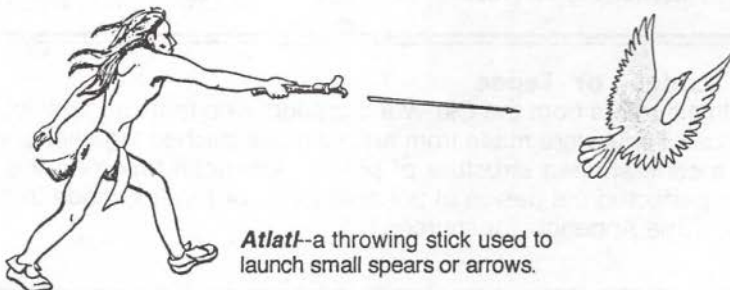
bottle gourd & flask

Skin Boat People carried bottle gourds on trans-Pacific voyages. The gourd (*Lagenaria siceraria*) originated in Asia. It was a common water container used by ancient travelers. When carefully heated, the skin became hard and durable; the hollow gourd was a perfect container for fluids. Gourds were also used as floats for fishing nets and as percussion instruments. Old World specimens from the 10th millennium BC were found during excavations at Spirit Cave in Thailand. Remains from China and India date to

7000 BC. The oldest remains from American sites were found at Ayacucho, Peru, with radio-carbon dates circa 11,000 BC. Remains from Mexican caves date between 7500 and 6000 BC. These remains are evidence of ancient maritime migrations from Asia to Mexico.<sup>16</sup>

Skin Boat People brought a new weapon called the *atlatl*, or “spear thrower.” The device was a hand-held stick with a hook designed to hold a small spear or “dart.” Because the device increased the speed of projectiles, hunters were able to kill small animals that were otherwise too fast for conventional spears. The weapon enabled Skin Boat People to defeat spear-wielding big-game hunters. *Atlatls* proved their value in combat as new tribes overwhelmed more ancient inhabitants along the Pacific Coast. The importance of *atlatls* was so ingrained in Mexican tradition that artists continued to portray warriors with these primitive weapons long after introduction of the more-advanced bow-and-arrow.

By the 1st millennium BC, descendants of Skin Boat People spread eastward across northern Canada to Hudson's Bay, Labrador, and

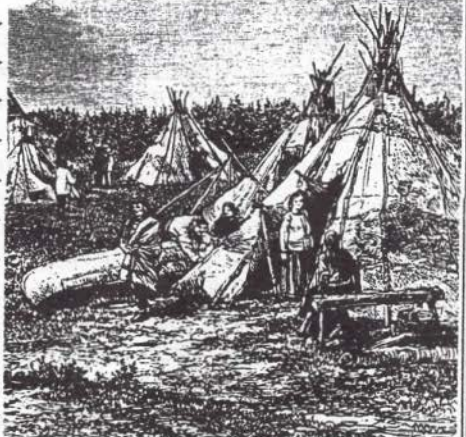


**Atlatl**--a throwing stick used to launch small spears or arrows.





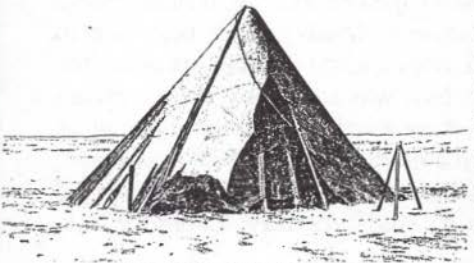
1. Lapp lodge, N. Europe (1883)



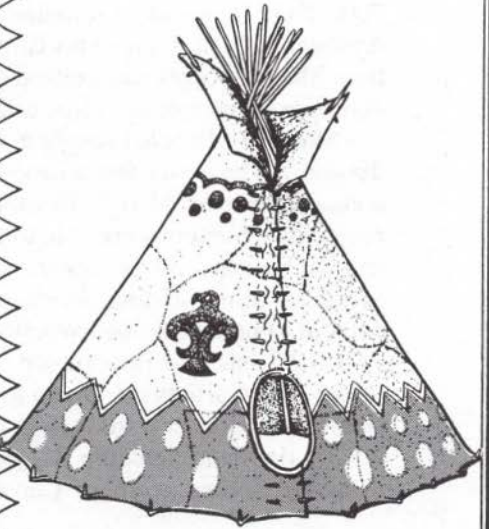
1. Cree Tepees near Hudson Bay (1899)



2. Finnish Camp (1881)



3. Utkiawin, Siberia (1892)



2. Ojibwa Plains Tepee (1880)

**Skin Lodge, or Tepee**

Neolithic hunters from the Old World brought skin tents on their journeys to America. Tents were made from animal hides stitched together and draped over a cone-shaped structure of poles. American tribes on the western Plains perfected the design of portable tents, or *tepees*, made from buffalo hides. (See Appendix for sources.)

1.5

Greenland. Arctic dwellers call themselves the "Inuit" which is preferable to the Algonkian term *eskimo*—meaning "eaters of raw meat."<sup>17</sup>

### **Pipeline of Old World Diffusion**

For more than 2,000 years, Inuit tribes along Siberia's east coast and Alaska's west coast maintained contact by voyaging back-and-forth across the Bering Strait. During summertime, a mere 90-miles of calm seas lie between eastern Siberia and western Alaska. Natives still make the journey in *umiaks*, or "family boats." Light-weight *umiaks* are about forty-feet long; they carry extended families of nearly twenty people. *Umiaks* are probably very similar to the skin boats of ancient nomads.

Commercial voyages across the Bering Strait served as a conduit for supplies and new ideas which spread in both directions between the continents. When European explorers first visited Alaska in the 1800's, they found an ample supply of tobacco in native villages. But it wasn't coming from North American sources where the plant was first cultivated; instead, Inuits imported tobacco from China.<sup>18</sup> Another Chinese import, iron, was used for carving ivory. Archeologist Hans-Georg Bandi noted the spread of iron to Alaska in ancient times:

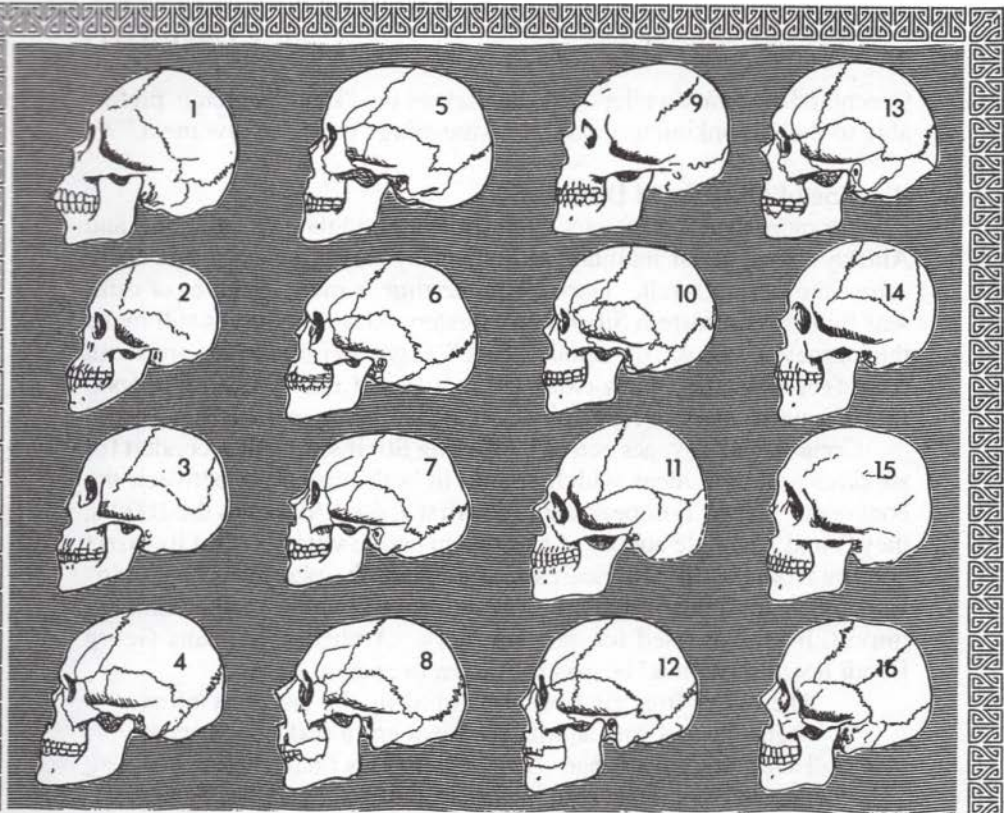
The use of iron has been established by the discovery of an engraving tool with an iron point in a grave at the cemetery at Uelen on Cape Dezhnev (East Cape). This find is not only of importance in regard to the ornamental style of the Old Bering Sea culture, but also shows that metal became known relatively early in the extreme northeast of Siberia. This tallies with the reference in Chinese sources to the working of iron on the northern Pacific coast as early as the 3rd century BC.<sup>19</sup>

Bandi believes that Alaskan natives imported iron tools by the 1st century BC, because at that time, Alaska's Okvik people produced ivory carvings with precision engravings that require use of iron tools. Bandi's research supports theories of ongoing commerce and cultural diffusion across the Bering Strait long after the Beringian land bridge was inundated by rising seas (about 12,000 years ago).

### **Native Diversity**

The physical evidence of skeletons found at archeological sites attests to the great diversity of races that came to America. Physical anthropologists have identified individuals from all the world's major races in ancient burials. Most skeletons are strongly Asian in character, however some are within the range of European and West African physical types. The range of physical variation far surpasses the possible variations that could have resulted from genetic variation and adaptation





### Physical Diversity in Ancient America

Skeletal evidence confirms the great ethnic diversity of ancient Americans. Table above shows native skulls found in ancient burials. Items are arranged with those having Mongolian or Asian features toward the left and those with more European features toward the right. Anthropologists have identified three distinct Asian physical types in America.<sup>23</sup> Item 16 is a European skull included for comparison. The last row, items 13 to 15, are within the range of European physical types. Some skeletons having European features (item 14) were buried with native pottery. Scholars identified Phoenician artifacts buried with a West Virginia skeleton (item 11). Tennessee archeologists found pygmy skeletons (item 2) and skeletons with European features (item 15) in the same native burial mound.

During the 16th century, European settlers reported black natives and blond-haired natives with white skin. These reports coupled with skeletal remains confirm theories that America's Native Peoples were the world's most cosmopolitan "race."<sup>29</sup>

1. Mayan, Honduras; 2. Pygmy, Ten.; 3. Wis.; 4. Ill.; 5. Alaska; 6. Woodland, Il.; 7. Mex.; 8. Lakota, S.D.; 9. Anasazi, Ut.; 10. Woodlands, Ky.; 11. Phoenician (?), W. Va.; 12. Apache, Ut.; 13. Ohio; 14. Hales Mound, Ten.; 15. Holliston Mills, Ten. 1.9 (see appendix for sources)

of a single Siberian racial stock. Presence of varied Asian types and European and African skeletons support theories that transoceanic voyagers reached America in ancient times.

Broad ethnic diversity of America's Native Peoples is evident from the study of linguistics. There are hundreds of native languages that linguists have categorized into major language families. Stanford University linguist Joseph Greenberg identified three distinct periods of migration from Asia to America based on aboriginal language families including: the *Amerind* of South, Central, and eastern North America; the *Na-Dene* of Northwest Coast tribes, Apache and Navajo; and the *Eskimo-Aleut* of Arctic tribes.<sup>20</sup>

Other researchers have identified an abundance of foreign words in native languages. These clues to ancient contact with foreign travelers are called "loan-words." Native languages were first recorded by early missionaries, and subsequent examination of missionary records has revealed use of words from African, Greek, Roman, Norse, Arabic, Chinese, Japanese, Gaelic, Hebrew, and Hindu languages.

### **Naming The Land**

Ancestors of native tribes regarded Earth as a spiritual being, and tribal homelands were viewed as sacred trusts. Earth and sky formed the realm of the All Father—called *Gitche Manitou* in the northern Woodlands; forests and mountains were the temples of *Maka-Ina*, the Earth Goddess. Salish tribes called their Northwest Coast territory *Swah-twif-ted*, meaning "sacred homeland."<sup>21</sup> Muskogian tribes in the Mississippi valley identified their land as *Nanih-waiya*, meaning "place of emergence" from the womb of Mother Earth.

Some tribes named their land in honor of *totems* or sacred animals. Several North American tribes believed the continent formed the back of a mythical turtle that stayed above water during the world flood—so they called the continent "Turtle Island." The Shinnecock tribe of Long Island called their territory *Sea-wan-hac-hee*, meaning "Heaven of Shells."<sup>22</sup> Mayans of Guatemala called their land *Hua-te-mala*, meaning "Land of The Eagle." Other Mayans referred to their homeland as *Mer-ica*, meaning "lands between oceans."<sup>23</sup> Some places deserved special reverence: an ancient metropolis in the Valley of Mexico was called *Teo-ti-hua-can*, meaning "Abode of The Gods."

Belief in the sacredness of the land infused native cultures with traditions of responsibility towards Mother Earth. All aspects of existence had spiritual importance. Plants, animals, even the passing of time required respect, prayers, and sacrifices. Private ownership of land by individuals was impossible, because natives believed all things belonged to the Great Spirit. Tribal lands involved a sacred bond of stewardship





1. Aleutian, Alaska



2. Lakota  
Great Plains



3. Creek chief Menewa,  
Southeast Woodlands



4. Tumacac, Brazil



5. Pueblo, Southwest



6. Haida chief, Northwest Coast

### Native Portraits

Native Americans posed for artists and photographers in the 1800's. Their faces reflect the great diversity of ancient voyagers to the New World. Natives of the Eastern Woodlands, such as Creek Chief Menewa (3), had European features; those of the far West had more Asian traits; Northwest Coast natives, such as the Haida (6) had beards and mustaches. However, facial hair was rare among most native tribes. Portraits are from Kronau (1892) and the Smithsonian Institution, Bureau of American Ethnology (3).

with Mother Earth that could not be broken. In a very real sense, the people *belonged* to the land.

Native beliefs about the holiness of Earth were challenged by European colonists during the 16th and 17th centuries. Europeans did not regard the land as holy; to these refugees from post-Medieval Europe, land was a spiritless commodity to be bought and sold like merchandise. But native lands were not for sale: indeed, native culture provided no option for "selling" land. The native position was confirmed by Shawnee Chief Tecumseh in 1804: "The Land is sacred; it can not be sold."

So-called "transactions" of Native land for European trinkets are lingering misconceptions of Anglo folklore: what Colonists regarded as "purchases," natives regarded as payment of *rent* for the convenience of short-term access. Natives were generally willing to *share* land with new arrivals who were peaceful. Europeans initially seemed trustworthy because they engaged in profuse religious rituals and claimed to believe that all things belonged to the Great Spirit. However, repeated treaty violations exposed the superficiality of foreign religious beliefs and their true intentions of stealing tribal homelands. Greedy Europeans had a new name for the sacred land: they called it "Real Estate."

### **Principle Native Civilizations** (3000 BC to 1500 AD)

During the 16th and 17th centuries, European explorers were amazed by the magnitude and prosperity of native cities. In Peru, Spanish adventurers passed fortress-cities surrounded by towering megalithic walls. In the Northeast, British and French colonists found stockades surrounding Iroquois villages. Longhouses inside the stockades were similar to buildings of northern Europe. Mexican cities had towering stone pyramids. Natives lived in adobe buildings several stories high and shopped at huge markets filled with produce. The crown jewel of Mexico was the 15th-century Aztec metropolis *Tenochtitlan*. This city was located on an island in the midst of Lake Texcoco and surrounded by majestic mountains. Spaniards who saw the gleaming buildings and pyramids thought they were dreaming. It was a paragon of urban planning with private dwellings and arcades arranged along boulevards. Public buildings, aqueducts, gardens, the zoo and central market were equal in splendor to those of Europe's most advanced cities. It was home to several hundred thousand natives.

When Europeans penetrated Mexican jungles, they discovered remains of a "lost" civilization that once dominated Central America. Hidden beneath tangled vines in Belize, Honduras, Mexico, and Guatemala were the crumbling ruins of thousands of pyramids, palaces, and temples. These were the remains of the Mayan Confederacy—a union



Greenland



- Native Civilizations**
1. Inuit Territory
  2. Northwest Coast
  3. Plains Tribes
  4. Old Copper Culture
  5. Northeast Woodlands & Iroquois Confederacy
  6. Mississippian
  7. SE Woodlands
  8. Pueblo, Southwest
  9. Mexican & Aztec
  10. Teotihuacan
  11. LaVenta, Olmec
  12. Mayan Confederacy
  13. Toltec-Maya
  14. Valdivia
  15. Chavin, Moche
  16. Paraiso, Inca
  17. Upper Amazon
  18. Machu Picchu
  19. Tiahuanaco





of sovereign states whose population exceeded had 13 million people. Mayan achievements in writing, architecture, astronomy, and commerce rivaled those of ancient Egypt.

The oldest native civilizations arose in coastal Ecuador and Peru. Ceramics, mud-brick buildings, and pyramids date to the 4th millennium BC at Valdivia, Ecuador, and at El Paraiso, Peru. Between 1000 and 300 BC, the Chavin people built stone temples and carved religious motifs in stone. Extensive construction of mud-brick palaces, grain storage buildings, and pyramids occurred along coastal Peru between 1000 BC and 1000 AD. Natives of the Andes and Brazil developed bronze-casting technology by 1000 BC. During the early 1st millennium AD, the Moche civilization established cities of mud-brick buildings. They were followed by the Chimu civilization which built extensive irrigation systems and huge pyramids beginning in 900 AD. The Chimu capital at Chan Chan, Peru, covered several square miles and was the most powerful city until the rise of the Incas in about 1200 AD. By the mid-1400's, Inca rulers united coastal territories from southern Ecuador to Chile. Distant cities of the empire were connected with an extensive system of roads and bridges. Their enduring stone cities were built using mortarless masonry. Inca artisans were renowned for cotton weaving, bronze casting, and gold jewelry.

Central American civilizations also originated along the Pacific coast, where the earliest temple pyramids were built between 3000 and 2000 BC. Mexicans domesticated many native plants including *maize* or corn, amaranth, and squash. By 1000 BC, the Olmec civilization was in full bloom at the Gulf Coast ceremonial center of LaVenta. Between 100 BC and 500 AD, Mexican culture was dominated by Teotihuacan—a huge metropolis that covered several square miles. The Pyramid of The Sun at Teotihuacan reached 240-foot high. The Mayan Confederacy of city-states in southern Mexico, Guatemala, Honduras, El Salvador and Belize dominated Central America from about 500 BC to 900 AD. One of the city-states at Tikal, Guatemala, occupied 25 square-miles. The city had over 10,000 stone buildings including a pyramid reaching 212-foot high. Stone carvers using metal tools decorated the facades with intricate, three-dimensional carvings of priests, deities, and elephants. Aztecs dominated Mexico from their capital at Tenochtitlan (Mexico City) from 1300 AD until 1521 AD. Mayans and Mexicans amassed huge libraries of historical and astronomical texts. Tragically, the Spanish burned most of these books during the conquest.

North American civilizations emerged after 3000 BC. One of the earliest was the maritime Northwest Coast culture. Although coastal

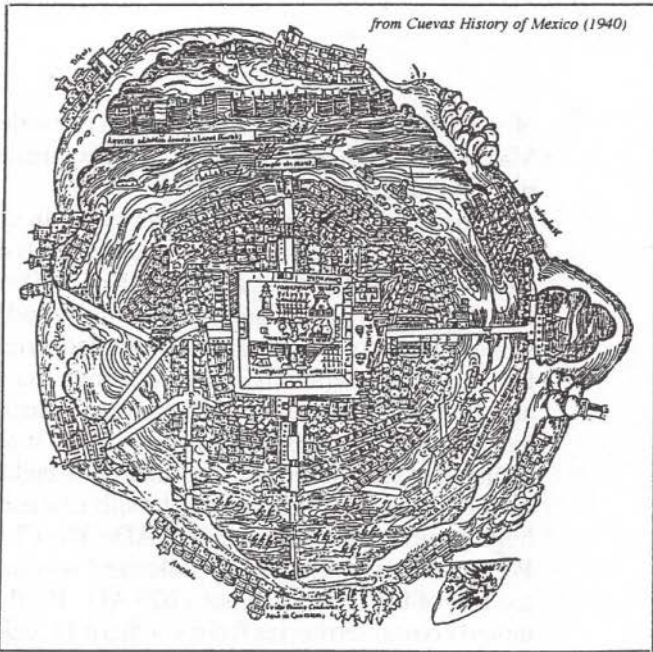


Mexican carving 1400 AD



## Map of Tenochtitlan (Mexico City) 1522 AD

Hernando Cortes ordered this map of the native city during the short period of peaceful relations before it was destroyed. The city was built on a huge island in Lake Texcoco in the beautiful Valley of Mexico. It was approached *via* causeways. Floating gardens called *chinampas* supplemented the food supply provided by tributary states. An aqueduct brought in fresh water from distant mountains.



tribes lacked writing, metal-casting technology, and ceramics, they had other trappings of civilization including complex social organizations, houses made from wood-plank buildings, and sophisticated artistry. They produced some of the world's finest wood carvings. Craftsmen obtained metal tools from Chinese and Japanese traders and manufactured their own polished-stone carving tools. Southwestern tribes developed the Pueblo civilization of *maize* farming and cliff dwellings by 800 AD. The city of Pueblo Bonito, New Mexico, had a population of 1200 during the 10th century. Pueblo tribes were renowned for ceramics, weaving, and agriculture. Hopewell tribes of the Southeast Woodlands had huge villages and temple pyramids. *Maize*, bean, and squash farming supported cities along major rivers such as the Mississippi and Alabama. During the 12th century, the ceremonial center of the Mississippian culture at Cahokia, Illinois, covered 11 square-miles and was surrounded by wooden palisades. By the 15th century, the Iroquois Confederacy of the Northeast included five nations that cooperated under a representative form of government. Iroquois natives lived in two-story wooden longhouses surrounded by palisades. They had a trade language and writing system.

Native tribes were civilized; they treated foreign explorers and refugees with generosity. However, relations between natives and foreigners changed abruptly with arrival of 16th-century conquistadores who treated natives in a savage manner. Estimates of the lives lost during the European conquest of the New World number in the tens of millions.

### Origins of Native Civilization

How the native civilizations came into being is a subject that has embroiled anthropologists, historians, geographers, botanists, and theologians for at least a century. Writers often use the words "mysterious rise" when referring to the florescence of advanced civilizations in the jungles of Central America. The ornate architecture and stone sculptures of the Mayans are particularly impressive in light of dogmatic beliefs among establishment scholars that natives lacked metal tools. Historian William Brandon called Mayan cultural achievements "the most profound enigma in American history."<sup>24</sup>

During the late 19th century, a group of ancient history enthusiasts called "antiquarians" proposed that the natives obtained some of their inspirations from abroad. Antiquarians identified numerous cultural similarities between native civilizations and those of the Old World, including worship of the sun god, construction of stone pyramids, and use of bronze tools. By the 20th century, "diffusionist" scholars reported a host of additional cultural parallels between ancient America and Old World cultures, including use of wheeled toys, similar sculptural styles, pre-Columbian dispersal of domesticated plants across the oceans, and similar traditions, such as the World Deluge reported in the *Bible*. Strong similarities in symbolism and mythology led folklore scholar Joseph Campbell to declare that America's native civilizations were derived substantially from Old World sources:

We can reasonably suggest that the mythologies underlying and represented in the art forms of the high cultures of Middle America were finally not merely similar to those of ancient Greece and the Orient, but actually of one piece with them—a remote provincial extension of the one historic heritage and universal history of mankind.<sup>25</sup>

Campbell's bold conclusion did not suit most academicians. Many American scholars were already committed to an "isolationist" doctrine that assumed native civilizations arose without Old World influence.

### Cultural Isolation versus Diffusion

Two alternative theories or models of cultural change offer opposing explanations for the origins of Native American civilizations. These theoretical constructs are: a) the "isolationist" model; and b) the "diffusionist" model.

The "isolationist" model is based on the premise that the Old World and New World continents were isolated from one another by vast oceans. Isolationists believe Native American cultures evolved independently—starting with Siberian nomads who wandered into Alaska about



## AMERICAN DISCOVERY

15,000 years ago. Isolationists regard Columbus as the first Old World explorer to have significant impact on native cultures. They credit Columbus with introducing Old World civilization to America as well as initiating the spread of New World plants across the globe.

The “diffusionist” model explains similar cultures and customs found in America and the Old World as the result of ancient contacts between Native Americans and Old World voyagers. Strong evidence supports the conclusion that numerous voyagers from a variety of ethnic origins *significantly* influenced the course of Native American cultural development in pre-Columbian times. Thus, diffusionists regard Columbus as a “late-comer” in the cavalcade of American discovery.

Belief in pre-Columbian contact and cultural diffusion is as old as the Spanish conquest. The great diversity of races in ancient America was the first clue that previous contact had occurred with Old World travelers. Both Columbus and Balboa reported Black Africans in Central America.<sup>26</sup> Settlers in New England reported blond-haired natives who spoke Welsh. And Catholic priests in Mexico believed they were preceded by earlier missionaries, because they encountered many native rituals and beliefs *identical* to Catholicism. In 1607, Father Gregorio Garcia discussed the surprising racial diversity of native inhabitants which he reported in *The Origin of The Indians of The New World*:

The *Indios* come from many nations of the Old World. Some are probably descended from Carthaginians; some are descendants of the Ten Lost Tribes of Israel; others came from Atlantis, Greece, Phoenicia and China.<sup>27</sup>

### Legacy of The Discoverers

Ancestors of native tribes established settlements, blazed trails of commerce, located sources of fresh water, and harvested edible plants. The foundation of knowledge they acquired and the villages they established made it possible for later voyagers to survive in the wilderness. Their efforts enabled civilization to emerge in the New World.

Natives eagerly shared their knowledge and resources with later visitors—often welcoming them with special kindness. English colonists initially referred to the indigenous people as *salvages* or “saviors” because they rescued shipwrecked sailors. Indeed, Anglo traditions of “Thanksgiving” commemorate tribal generosity. However, such holidays also conceal Anglo treachery towards native benefactors: generous chiefs who fed starving colonists were captured and sold into slavery.

Native guides led foreign explorers across the continents, although Europeans later claimed credit for “discovering” what the guides had shown them. The most famous pioneer route from Missouri to Oregon was “The Lewis & Clark Trail”—named after frontier surveyors

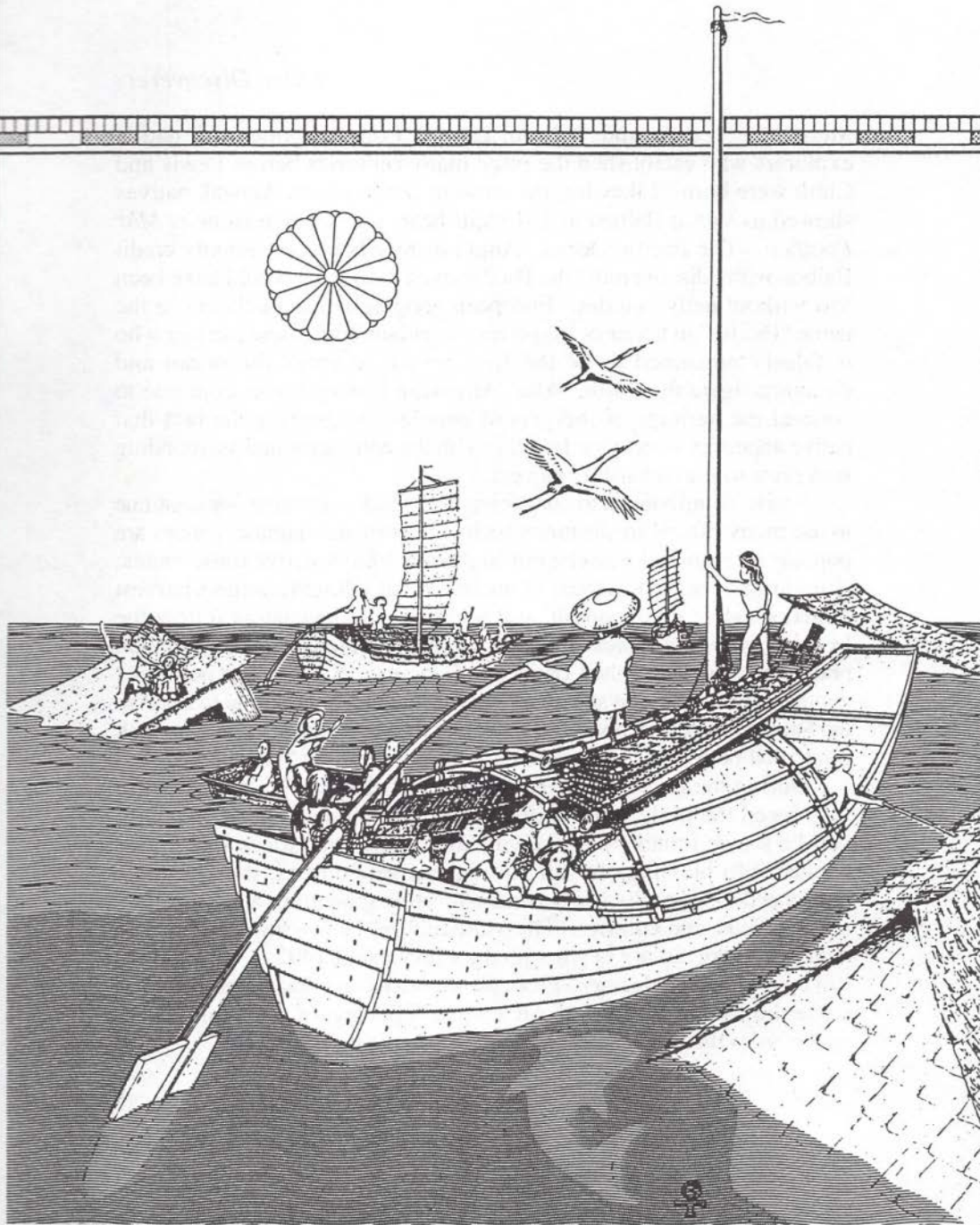
Meriwether Lewis and William Clark. Long forgotten are native explorers who established the route many centuries before Lewis and Clark were born. Likewise, the western ocean which Arawak natives showed to Vasco Balboa in 1513 still bears the Spanish name *el Mar Pacifico*—The Pacific Ocean. Anglo history books commonly credit Balboa with “discovering” the Pacific even though he would have been lost without native guides. European geographers actually chose the name “Pacific” in honor of Magellan—a gallant Portuguese mariner who is falsely presumed to be the first person to cross the ocean and circumnavigate the Earth. Alas, American history books continue to conceal the heritage of indigenous peoples by ignoring the fact that native ancestors were quite familiar with the continents and surrounding seas prior to the Spanish Conquest.

Native contributions to our society have enduring value: we continue to use many natural medications such as aspirin and quinine; canoes are popular recreational vessels; our highways follow native trade routes; cities arise over the locations of ancient tribal villages; farmers harvest fields of native corn, squash, and potatoes; and legislators follow the Iroquois system of representative government which Benjamin Franklin praised as a model for the Continental Congress. But the most important contributions are in the spiritual realm: tribal elders continue to nourish the Sacred Circle of Universal Peace, and they encourage those who seek a spiritual path to follow a native tradition called the “vision quest.”

During the many centuries that native tribes cultivated the lands, they faced the trials and sacrifices which all pioneers must endure to build a secure foundation for civilization. Their sacrifices were transformed into blessings for all subsequent generations: the land they introduced to humanity has become a meeting ground for all the world’s races, creeds, and cultures. The Multicultural Fellowship emerging in America today did not begin with the Conquest of 1492; it began in the lost eons of ancient history. From the sacrifices and dreams of many has come the United Nations of All Tribes. This legacy from our Native ancestors is the world’s best hope for a promising future.







### ***Jomon Exodus***

*Forced by floods to leave their homes, Japanese Islanders depart for America, circa 4000 BC.*



## **JAPANESE VOYAGERS**

(5000 BC—1800 AD)

Following the Pleistocene Age, coastal habitats along Asia's Pacific rim underwent considerable change. Melting glaciers in the polar regions of Earth caused the oceans to rise continuously. Villages were often flooded—forcing occupants to move towards higher ground or sail in search of unoccupied territories across the seas. Some of these refugees from the shrinking Japanese islands reached North America at the dawn of history—nearly 7,000 years ago.

### **The Flood of Ten Thousand Years**

Geologists believe the oceans rose between 300 and 400-feet from the lowest level reached during maximal polar glaciation. Earth's continents looked much different in those days: vast areas of *continental shelf* were above water. All along the Asian coast, from Japan to Malaya, thousands of square miles of continental shelf were exposed to wind, rain and sun. The modern Sea of Japan was a basin of exposed land linking Japan's Honshu Mountain range to the mainland.

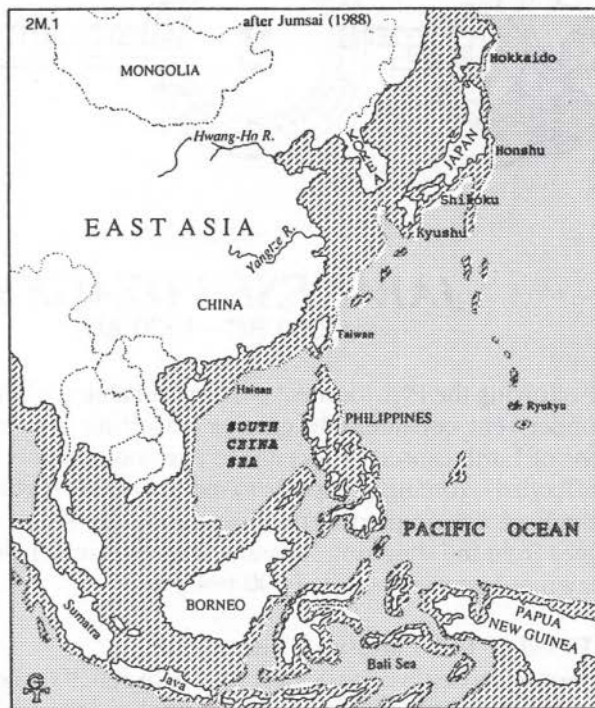
Asia's continental shelf was the most fertile region on Earth. Abundant rainfall and a temperate climate created a land of forests and grassy plains. Barley and millet grew on the plains; marshes supported rice; and tropical fruits, including bananas, coconuts, and breadfruit grew in the Equatorial regions. Seafoods, shellfish, and marine mammals were prolific; so were humans. Geographers believe the ancient continental shelf from Japan to Indonesia was the world's most densely populated area for several thousand years. Displaced tribes remembered their vanished homelands as the "Lost Continent of Mu."

Between 12,000 BC and 3000 BC, Pacific seas inundated the shelf territories. Coastal villagers of northern Asia fled towards the Honshu Mountains of Japan. Eventually, this mountain range became a string of islands: Kyushu, Shikoku, Honshu, and Hokkaido.

The same fate overcame much of Southeast Asia: rising seas transformed Indonesia from an enormous tropical paradise into an archipelago of a thousand islands. Buckminster Fuller, inventor of the geodesic

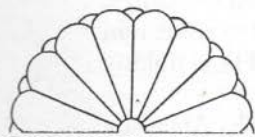


Key:  
ancient lands  
engulfed by  
rising seas



**Flood of Ten Thousand Years 13,000 BC to 3000 BC**

As the last Ice Age receded, melting glaciers in Arctic and mountain regions added considerable volume to the oceans. Rising seas engulfed continental shelf areas. Several thousand square miles of fertile land in Southeast Asia were flooded. Folk cultures remembered the lost homelands as the *Sunken Land of Mu*.



dome, believed the most massive migrations of antiquity were caused by flooding of coastal Asia. Fuller theorized that major population movements began shortly after the glacial maximum circa 20,000 years ago and continued for thousands of years.

The impact of Asian migrations was profound: they set into motion a chain of world-wide migrations. Norwegian anthropologist Thor Heyerdahl identified major transoceanic migrations between 5000 and 4000 BC.<sup>1</sup> Marine migrations also occurred following the world-wide Deluge of 3100 BC. Besides accounts of the Deluge in the *Bible* and the Babylonian *Epic of Gilgamesh*, Native American tribes including the Haida, Maya, and Aztec had legends of a flood that nearly destroyed mankind. The Haida version tells the story of a supernatural raven who carried three survivors on his back until he was too tired to fly. Then a frog the size of an island cared for the survivors until the flood subsided.

## Japanese Civilization

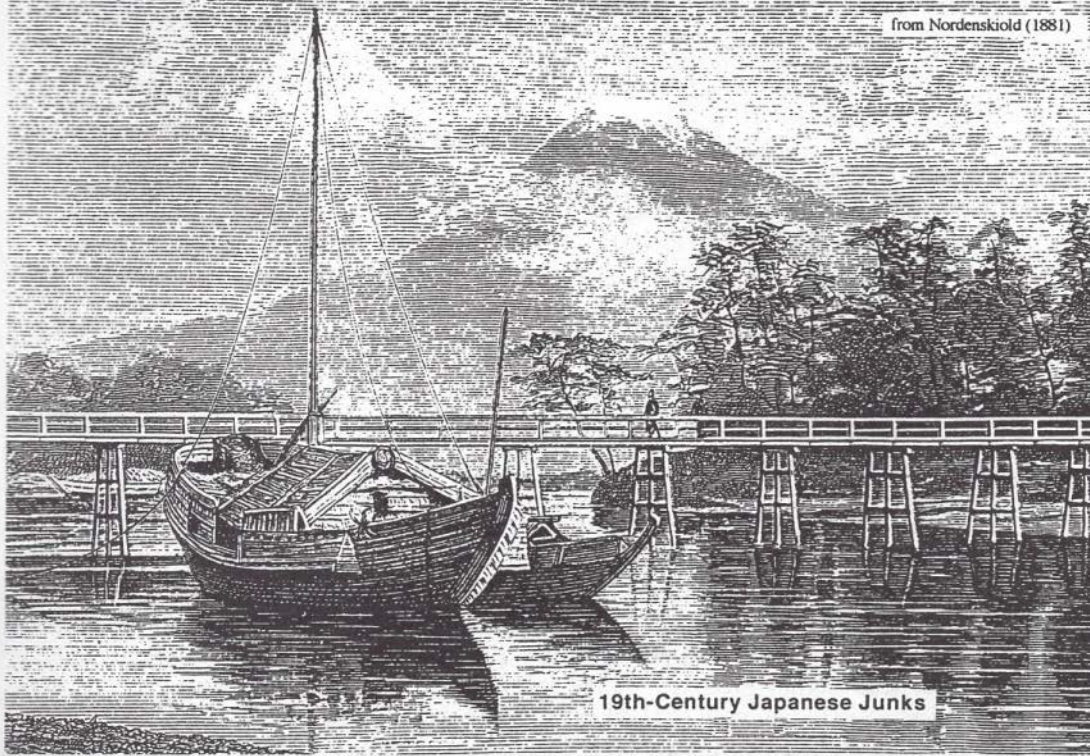
According to Japanese legend, the island peoples were descended from the sun goddess *Amaterasu* of Kyushu and her Korean brother *Susanoo*. The legend identifies two of the predominant racial strains in Japan: native Kyushu inhabitants and Korean-Mongolian immigrants. Descendants of the Mongolian race often have a characteristic birthmark called the "Mongolian Spot" which is a dark patch of skin at the base of the spine. The "spot" gradually vanishes by adolescence. This physical trait, found among some American tribes, is one of several genetic characteristics that confirm transoceanic migrations.

Other races were present in ancient Japan. The mountainous region of Neolithic Japan (circa 10,000 BC) was occupied by a Caucasian race—the Ainu. They presently reside in the northern island of Hokkaido. Ethnologists believe the Ainu once lived farther south, because several ancient towns on the southern island of Kyushu have Ainu names. The Ainu may have occupied all of the Honshu mountain region before the continental shelf was flooded and people from the lowlands were forced to seek higher ground. As the migrations continued, the Ainu were forced to move north to Hokkaido. Some were forced to sail off into the North Pacific in search of new homelands.

Rising seas have concealed the oldest remains of villages which now lie hidden beneath the Sea of Japan. Few archeological sites on dry land have produced dates earlier than 5000 BC—corresponding to the last stages of coastal flooding. Neolithic artifacts from this period include polished greenstone celts, stone wedges, and polished slate knife blades.<sup>2</sup> Oxford University anthropologist L.H. Dudley Buxton noted that Neolithic tools enabled fabrication of ships, houses, and public buildings from wooden planks.<sup>3</sup> This period marks the "accepted" emergence of civilization in Japan. Celts were used as blades with elbow-shaped handles in a device known as an *adze*. This was the primary tool for carving totem poles, cutting down trees for wooden houses, and building dugout canoes.

During the Neolithic, many of Japan's inhabitants lived in semi-subterranean "pithouses" with roofs made from wooden poles and bark. Archeologists have excavated pithouses from the Jomon culture of Kyushu dating to 4000 BC. The Jomon were primarily coastal dwellers who subsisted on fish, shrimp, oysters, marine mammals, rice, and seaweed. They developed Japan's earliest ceramic industry which included distinctive pots with incised scrolls and chevron designs. Some inhabitants manufactured cast-metal tools, including the bronze axe-adze, by 3600 BC. However, metal use was rare: most people used Neolithic tools until the 1st millennium BC. Then metal use became common and people moved into wooden houses above the ground.<sup>4</sup>





19th-Century Japanese Junks

### **Ships & Seafaring: Canoes & Junks**

Crude dugout canoes, rafts, and skin boats served Asian transportation needs until the Neolithic Age (beginning about 15,000 BC). As rising seas pushed coastal dwellers towards inland forests, craftsmen gained skills in wooden house construction using polished stone wedges and axes. Woodworking skills were invariably applied to the needs of hunters and traders for durable, light-weight boats.

Boat improvements occurred in three phases. The first phase saw the creation of streamlined vessels. Next came the use of steam and struts to bend the sides outward—creating wider, steadier vessels. The third phase witnessed the addition of planks to the top of the dugout. These planks, which were stitched to the dugout in the same manner that skins were stitched together, gave the vessel higher “freeboard”—or height above the water. This type of vessel is known as an “extended dugout.” Elongated prows made some of these vessels suitable for whale hunting on the high seas. Finally, canoes were decorated with spiritual symbols and coated with resins to discourage barnacles and seaworms.

Eventually, builders experimented with vessels having several planks attached to the top of a canoe. These vessels became prototypes of Asian vessels known as “junks.” Boatbuilders attached planks in clinker fashion by overlapping the sides and stitching them together with cord. Cracks between planks were filled with caulking material consisting of dried plant fiber and bitumen—a kind of tar. A tomb mural at Midorikawa,

Japan, dating to the 5th century BC, shows junks with fan-like *lug sails* and rudders. “Lug” or “lugging” refers to the practice of mounting sails alongside the mast. Battens or reinforcing slats inserted into the matting or canvas gave lug sails added strength and a fan-like appearance.

During the 1st millennium BC, builders constructed vessels using wooden planks and bulkheads. They used dowels, or “treenails,” to fasten planks to the bulkhead frame. Dowels were baked to make them shrink, then pounded into holes connecting planks and bulkheads. Applications of resin caused the dowels to absorb fluid and expand; the result was a bond similar in strength to a rivet. Oceangoing junks had plank-built deckhouses; their bows and sterns curved up sharply to fend off waves.

During the 7th century BC, the legendary first emperor, Jimmu Tenno, began the overseas conquest of Honshu from bases in Kyushu. Seagoing vessels were essential for his expanding empire. According to the ancient *Nihon-shoki* chronicles of 81 BC, Tenno’s successor ordered all the prefects (or provinces) to build oceangoing ships to facilitate inter-island commerce. Some of these vessels reached 200-feet in length. Within decades, thousands of heavy commercial vessels and naval ships augmented fishing fleets numbering in the tens of thousands.

By the first millennium BC, thousands of vessels set out upon the high seas each season to catch fish and mammals. Some of the junks were lost in typhoons or sucked into the *Kuro Shio*—the “Black Stream” current that surges past the Japanese islands and into the North Pacific. Vessels caught in the current drifted helplessly for about two months before crashing onto American shores on the opposite side of the ocean.

Historical accounts verify that during the 18th and 19th centuries, scores of Japanese vessels were shipwrecked along the shores of British Columbia and Washington. Archeologist George Quimby of the Washington State Museum estimates that thousands of disabled junks washed ashore on the Northwest coast between 100 AD and 1800 AD.<sup>5</sup> The fate of ships and survivors is well known from accounts of 18th-century explorers: coastal natives scoured the wreckage for valuable pieces of iron; survivors of the trans-Pacific drift became slaves of the local chief.

### Evidence of Contact

Native America’s vast Asian heritage is evident from the earliest Neolithic tools, symbolism, ceramics, traditions, and physical characteristics of native peoples living along the Pacific coast. Language similarities and tribal names reveal ancestral origins in lands near Japan and Korea that are now submerged beneath the seas.





### Neolithic Diffusion

Northwest Coast natives perfected Asian woodworking traditions and bark-cloth weaving. Above, a Haida chief dressed in a bark robe stands before his village. Left, an Aleut native wears polished stone *labrets*, or lip ornaments.

2.6

stone *labret*



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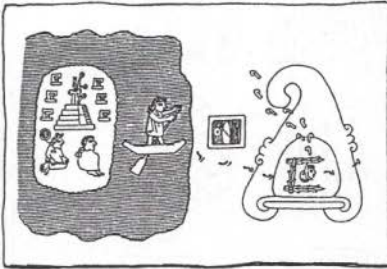
2.6

stone *labret*



## Legends

Several tribes have legends telling of ancestral voyages from East Asia. The Northwest Coast Haida tribe has a legend that their ancestors came in boats from islands in the Northern Pacific.<sup>6</sup> Although their place of origin is speculative, physical and cultural clues suggest they came from the region of northern Japan—possibly from the “Hida Prefect.” Not only are the names Hida and Haida similar, anthropologists have noted obvious physical similarities between the Haida and the Japanese.



Mexica Map of Aztalan  
in the Western Pacific  
Boturini Codex (after Selser)  
16th century

Mexican tribal legends tell of an ancestral voyage from an island in the western Pacific called *Aztalan*—a place of mountains and cranes. This description evokes images of Japan—a land also noted for its mountains and cranes. A Mexican artist portrayed the ancestral homeland on a schematic map in the *Borbonico Codex*. The map shows an island across the Pacific from Mexico.



## Artifacts

Japan was one of the sources of ancient America's advanced ceramic industries. In 1965, the Smithsonian Institution published a controversial report on the fieldwork of Betty Meggers, Clifford Evans, and Emilio Estrada. Meggers and her associates found ceramic fragments at the Ecuadorian site of Valdivia that were very similar to Japanese ceramics of the Jomon culture.<sup>8</sup> Both ceramic industries have identical surface decorations—including chevrons, “bone” motifs, and stipples. These were sufficient to confirm that Jomon voyagers made Valdivia pottery.

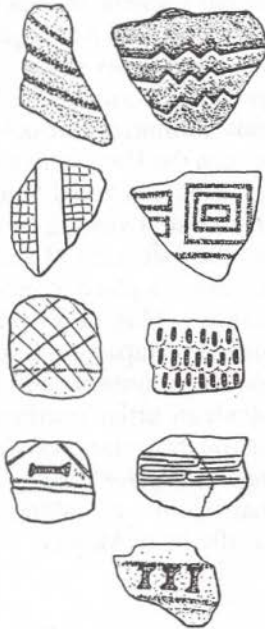
Isolationist scholars question the importance of the Valdivia site because there is evidence of earlier ceramic industries. For example, Mexico's “Chalco-style” pottery has a radio-carbon date of 4500 BC, and pottery from Puerto Hormiga in Colombia dates to 4000 BC.<sup>9</sup> Archeologists recently found a more-primitive ceramic tradition at Valdivia, confirming that natives were already making crude pots when Japanese voyagers arrived. However, “significant” cultural impact is evident, because Japanese ceramic traditions survived in Ecuador for two thousand years: radio-carbon dates for Valdivia ceramics span the centuries from 3800 to 1800 BC.

Presence of the Jomon ceramic tradition in Ecuador is evidence of a migration consisting of several ships or a whole village. We are assured that women were along on the voyage, because they were the traditional



after photographs by Meggers, Evans, & Estrada (1965)

JOMON CERAMICS  
from Kyushu, Japan

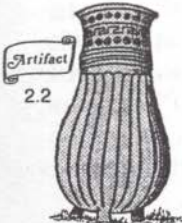


VALDIVIA CERAMICS  
from Valdivia, Ecuador



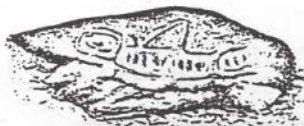
potters in ancient Japan. Betty Meggers points out that Jomon voyagers brought far more than advanced ceramics. Excavations also uncovered toy houses, panpipes, and headrests—all made from ceramics. Meggers believes the headrests, which date to the 6th century BC, are evidence of ongoing Asian contact; they are similar to Asian ceramic headrests of the same era. Archeologist James Griffin agrees: "There is reason to think that colonizing voyages were not only intentional, but that they were repeated and that contact continued."<sup>10</sup>

Japanese voyagers left evidence of their passage along Pacific shores. Nobuhiro Yoshida, president of the Japanese Petroglyph Society, reports close similarities between Northwest Coast petroglyphs and ancient Japanese carvings of mythical sea creatures.<sup>11</sup> In 1828, Mexican workers in Vera Cruz found several marble vases at a depth of six-feet. Archeologists identified the vases as Japanese—dating to the 1st millennium AD.<sup>12</sup> At the Ozette site in Washington State, archeologists found Oriental bamboo shafts and smelted-iron blades dating to the 15th century.



Artifact  
2.2

Japanese Artifact  
Marble vase found in  
1828 near Vera Cruz,  
Mexico.



In 1990, Archeologist Grant Keddie reported evidence of distinctive lip ornaments called *labrets* which were brought by maritime travelers from coastal Siberia to Alaska. *Labrets* are polished stone ornaments which are inserted through holes in the lower lip. The oldest *labrets* have been found along Asia's Kamchatka peninsula dating to 4000 BC. Subsequently, use of *labrets* spread to Alaska by 3000 BC and to coastal Mexico by 1600 BC. Use of *labrets* reached Ecuador by 500 BC.<sup>13</sup>

Neolithic artifacts found along America's Pacific Coast are evidence of Asian immigration and trade. Asian implements include mortars, pestles, jade knives, and axes. The eastward spread of Asia's island culture is also evident in the symbolism of native arts and crafts.

### Symbols: Chevrons and U-Shaped Motifs

The most characteristic symbols of Neolithic Asia included chevrons and U-shaped symbols denoting supernatural power. These ubiquitous motifs were once common in Asia's coastal villages and the Japanese Islands. They have survived into modern times as decorative motifs on robes and talismans of Japan's Ainu folk culture. Another feature of Ainu symbolism was the cleft-headed god or supreme being. Similar deities and symbols are found in New World cultures along the Pacific coast from Alaska to Peru. They were a common feature of Mexico's Olmec culture about 3,000 years ago; they are also prominent in Northwest Coast carvings and totems.

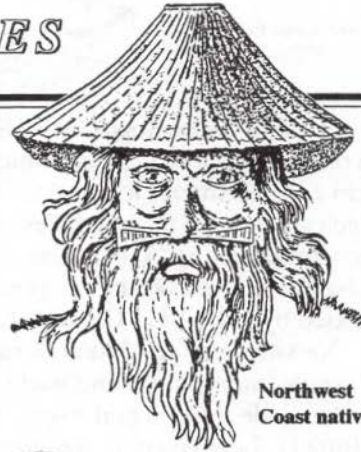
Northwest Coast tribes employ U-shaped motifs to represent a multitude of supernatural powers—including flight, sight, magical power, thunder, and lightning. U-motifs were also used to decorate the bodies of supernatural beings and totemic animals. The U-motif took the place of eyes, teeth, feathers, the fins of whales, the rays of the sun, and many other features of totemic animals. They were often placed above the heads of shamans and totemic animals to represent a "crown" of supernatural power. U-shaped motifs were also used to represent magical powers of the *sisiutl*, or Cosmic Serpent of Northwest Coast legend. The earliest Haida designs are also similar to the archaic symbolism of Olmec Mexico. U-motifs (or "bracket motifs") were common in Olmec territories until the 5th century AD when Chinese scroll symbolism was adopted throughout Central America.

Asian artifacts employ U-shaped motifs to represent scales or feathers of the cosmic serpent. Most Asian cultures replaced U-motifs with scrolls and dragons during the 1st millennium BC; however, archaic designs endured in Hokkaido, Japan, and along America's Northwest Coast. In the Northwest, ancient symbols bear a strong resemblance to crafts produced by living artisans—attesting to the durability of native art traditions.



# OLD WORLD FACES

Japanese fisherman  
19th cent.  
sculpture



Northwest  
Coast native

after a drawing by  
Tomas de Suria 1791  
(Yale U. Library)



Ainu elder,  
Hokkaido, Japan, 1910



Olmec native  
Mexico, 800 BC  
after Bazin (1968)



Japanese sage,  
19th century netsuke

Peruvian  
Chimu jar

Culture Hero  
100 to 500 AD



IN ANCIENT AMERICA

2.8

## Linguistic Evidence

Researchers have identified linguistic similarities between native Americans and East Asians. These similarities attest to migrations across the North Pacific over a span of several thousand years. Stanford University linguist Joseph Greenberg identifies several tribes in the last major Asian migration including the Northwest Coast tribes, the Apache, and the Navajo which he places in the *NaDene* Mega-Language Family.<sup>14</sup> University of Washington anthropologist George Quimby reports Japanese loan-words and grammar in the native Haida language; and Asian historian R.J. Pearson identifies numerous Japanese loan-words in



# Foreign WORDS

# Japanese & Zuni

—after Davis, NEARA Journal 27 (1993) and Yoshida (1993)

west	<i>nishi</i>	<i>kal-ishi</i>	supernat.	<i>koko</i>	<i>koko</i>
east	<i>tema</i>	<i>tema-koha</i>	man	<i>osu</i>	<i>osu</i>
pithouse	<i>kiva</i>	<i>kiva</i>	inside	<i>uchi</i>	<i>uchi</i>
clown	<i>niwa</i>	<i>newe</i>	woman	<i>oka-</i>	<i>oka-</i>
mean	<i>sami</i>	<i>samu</i>	meeting	<i>kwai</i>	<i>kwe</i>



the Penutian dialect of Oregon's Kalamath tribe.<sup>15</sup> Bolivia's ambassador to Japan reported more than 150 words with the same meaning in Japanese and Quechua—the native tongue of Bolivia and Peru.<sup>16</sup>

Don Smithana, author of *America: Land of The Rising Sun* (1990), believes many of America's native people used a language derived from Archaic Japanese. During the Second World War, Smithana noticed that Native American soldiers were able to communicate with Japanese prisoners. He found out this was possible because they understood many common Japanese terms. This led Smithana to utilize ancient Japanese dictionaries for the translation of many Native American words. He believes the Southwestern *kiva* (or sacred pit-house) was derived from an Archaic Japanese term—*kiva* (meaning “place of meditation”). According to his theory, the Native American *maize* (i.e., corn) was derived from the Archaic Japanese *meshi*—meaning “corn porridge.” A Great Lakes tribe of Michigan, the Menominee, gathered wild rice—called *manoomin*. Smithana believes the tribal name originally came from an Archaic Japanese word *menominee*—meaning “rice gatherers.”

## Physical Characteristics

Several anthropologists, including George Quimby of the University of Washington, have commented about the close physical similarity of the Northwest Coast's Haida tribe and the northern Japanese. The similarity is not surprising, considering that their common ancestors once lived in regions of coastal Asia that were flooded during the past 6,000 years. Also, crews from Japanese vessels blown eastward by storms over a span of several thousand years contributed to the genetic stock of Northwest Coast peoples.

Similarities include high stature, facial hair, and facial shapes. Both groups typically have *epicanthic* eyefolds, or an extra-large upper eyelid that helps protect the eye from sunlight and wind. The epicanthic eyefold is an Asian trait that is present among certain American tribes and absent in others. Another Asian trait common among Northwest

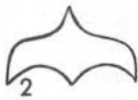


Neolithic Asia

Neolithic Northwest Coast



1 serpent feather



2 bird motif



1 power sign



2 bird motif



feathered serpent



3 Longshan, China



3 feathered serpent



4 Aleut, Alaska



5 NW Coast, Salish



19th cent. Ainu staffs Hokkaido, Japan



5

Siberia



6

7 Shang, China



8 China



9 Ainu



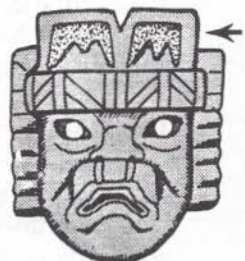
6



7



8



9 Olmec, Mexico circa 1000 BC



Serpent Feather & Bird Symbols

Northwest Coast art includes Neolithic Asian serpent-feather and bird motifs. The coiled serpent with embossed feathers (figure OW-3) is from a Longshan Chinese Neolithic plate circa 4000 BC. Northwest Coast examples are from the 19th century. Serpent-feather bird motifs on figure A-9 from Olmec Mexico derive from NW Coast or Japanese contact.



Haida Chief (Kronau, 1892)

Coast natives is the temporary birthmark known as the “Mongolian spot.” This birthmark is also a characteristic of Japanese babies.<sup>17</sup>

In 1791, Spanish artist Tomas DeSuria with the Alejandro Malaspina expedition to the Northwest Coast sketched a bearded Haida native wearing a traditional woven reed hat. The native’s facial characteristics and full beard are similar to those of a northern Japanese ethnic group called the Ainu. Late 19th-century photographs taken of Northwest Coast natives also reveal many similarities to the Japanese.

#### **Purpechan—Japanese Ties**

Hispanic Professor Cecilio Orozco identifies the Purpecha tribe

of Western Mexico as probable descendants of Japanese islanders. Orozco says that Spanish colonists identified Purpechans as a distinct “race” from their Mexican neighbors. Purpechans are physically similar to Japanese in stature and skin color; Mexicans call them the “tall whites” because they tend to have lighter complexions and higher stature than people of the Mexica tribe. Purpechans have at least one linguistic similarity with modern Japanese—the “silent R.”<sup>18</sup> Japanese and Purpechans often substitute “l” sounds for words spelled with “r” in other languages. Orozco also reports similar Purpechan and Japanese folk tales: according to traditions popular in both Japanese and Purpechan villages, foxes and coyotes have weddings during storms, and for that reason, mothers admonish their children to stay indoors.<sup>19</sup> Orozco believes the uniqueness of the tale points to a common origin for Purpechan and Japanese folk cultures.

#### **Zuni Origins**

A number of physical and cultural similarities link the Zuni tribe of the American Southwest to Japanese migrations sometime between the 5th and 13th centuries AD. Similarities include: specific oral traditions, tooth shapes, religious practices, common vocabularies, a similar type-B blood frequency (11% Japanese; 13% Zuni), a high incidence of a genetic kidney disease (known as the “Zuni disease”), similar pit dwellings called *kivas*, and the use of chrysanthemums in art. Among the Zuni



East Asia

Northwest Coast



Alaska 500 BC to 500 AD



Serpent Power Horns

Head ornaments representing serpent power, or wisdom, originated in Neolithic Asia. Asian examples (OW-1) sometimes have the shape of dragons or serpents. Usually, they have scroll shapes or the inverted u-shape of the serpent feather. Old World examples are from China 3500 to 1500 BC; all Northwest Coast examples are from the 19th century. Alaskan example (A-2) dates between 500 BC and 500 AD.



Neolithic dugout canoe  
Northwest Coast, circa 1850 AD  
from Kronau (1892)

legends is a story that some of the ancestors came from the Western ocean. Stanford University researcher Nancy Yaw Davis believes these similarities are indicative of an ancient mixture of Japanese immigrants with Native Americans in the Southwest.<sup>20</sup>

Japanese epigrapher Nobuhiro Yoshida identified the exodus of a maritime tribe, the A-zumi, from Kyushu, Japan, between the 8th and 13th centuries. He believes the tribe sailed to America and migrated to the Southwest where they became ancestors of the Zuni.<sup>21</sup>

### Impact: The Asian Heritage of Native Culture

Northwest Coast civilization represents a synthesis of indigenous marine cultures with Japanese Neolithic migrations that occurred several thousand years ago. During the passing millennia, the Northwest Coast culture has evolved into a rich and vibrant civilization. Natives lived in cedar longhouses; they carved ornate totem poles; and they engaged in long-distance maritime commerce from Alaska to southern California.

The most important Japanese contributions to Northwest Coast culture include Neolithic tools and woodworking skills. Dugout canoes which Haida ancestors used to reach the Aleutian islands and the Northwest Coast were built using Asia's Neolithic technology. Archaeologists have recovered polished stone wedges in the Northwest Coast region dating to the 2nd millennium BC.<sup>22</sup> Wedges were used to manufacture planks for boats and houses. Haida craftsmen used the elbow-shaped *adze* with a polished jadeite blade or "celt" as the primary tool for shaping wooden boats. Wedges and celts used in Northwest Coast woodworking are similar to those of Neolithic Asia.

Japanese technology in native America included use of steam to spread the sides of the hull, insertion of struts between the sides, pounding stone wedges into cedar trunks to make planks, stitching planks to the sides of hulls, and filling the cracks with bitumen and fiber caulking. Although Northwest Coast vessels were built using Asian technology, native craftsmen developed unique hull designs which were suited to the Northwest habitat. A characteristic feature of native boats was a sharply protruding bow which served to break the waves. Vessels of the Haida and Kwakiutl tribes reached 100-feet in length and were capable of carrying up to 80 warriors.

Totem poles also reflect an Asian heritage, although Northwest Coast artisans developed the art of pole carving to the highest degree of aesthetic perfection. Northwest Coast totem poles served as clan



Japanese totem pole  
19th-century memorial

Northwest Coast totem pole  
19th century



from Smithsonian Institution BAE



OLD WORLD

Cultural Diffusion

to AMERICA

jime bead  
ivory



Engraved Beads



jade bead  
Mexico



graduated pipe organ  
Japan

Dual  
Graduated Flutes



graduated flute  
after Meggers (1971)  
Ecuador, 500 BC

Whale-bone Comb  
Japan, 3000 BC  
Hawks (1976)



Wood &  
Bone  
Combs

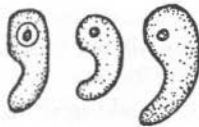


Comb  
NW Coast  
Rakai (1894)

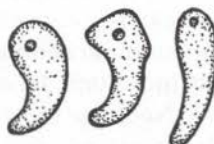


Neolithic  
dragon glyph

Dragon Pendants

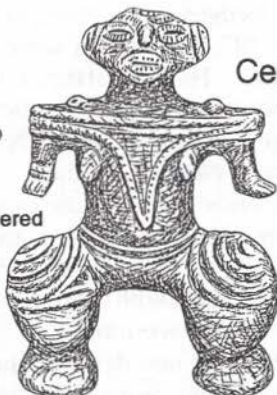


kokok & magatamas  
Korea & Japan, 1000 BC



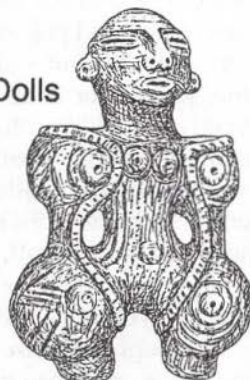
jade pendants  
Olmec & Mayan  
1000 BC to 500 AD

ceramic doll  
Jomon, 400 BC  
after Kidder (1965)



square-shouldered  
bulbous hips

Ceramic Dolls

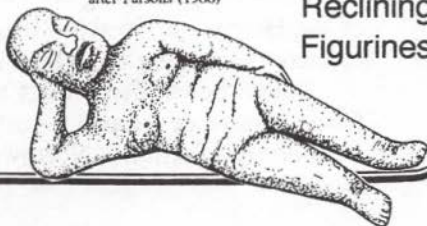


ceramic doll  
Venezuela, ancient  
after Anton (1973)

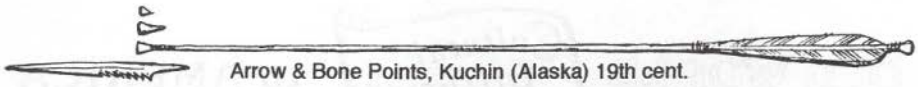
reclining figurine  
Japan, 1800 AD in the British Museum



reclining figurine  
Olmec, Mexico, 1000 BC  
after Parsons (1988)



Reclining  
Figurines



memorials, burial markers, and as the main supports for longhouses. Ancient Japanese and Korean artists carved miniature totem poles which were set beside graves to honor souls of the ancestors.

Clothing styles also reflect transoceanic cultural relationships. Northwest Coast natives wore reed hats which are common to peoples along the Pacific rim, and they manufactured bark cloth using grooved beater stones and mallets which are variations of tools originally designed in Southeast Asia.<sup>23</sup> Ainu bark robes are distinguishable from those of Haida chiefs primarily by differences in symbolic decorations. Northwest Coast warriors often used wooden helmets and body armor made from slats. The equipment was similar to armor worn by early Japanese warriors.<sup>24</sup>

Although Northwest Coast natives produced excellent Neolithic tools, they preferred iron when it was available. Iron tools and cast bronze bells spread *via* coastal commerce across the North Pacific.<sup>25</sup> The earliest Anglo explorers to reach the Pacific Northwest reported that Haida wood carvers were already familiar with iron tools.

Trade and migration brought Asian plants, animals, and traditions to America. Cultural diffusion included the composite bow (or laminated bow), dogs, chickens, pigs, rats, beans, bottle gourds, jade talismans, loom weaving, spindle whorls, and wood-plank building technology. Natives in Venezuela produced ceramic dolls that were very similar to Jomon dolls of Japan.



Olmec jaguar fang

Kokok dragon charm



Claw-shaped talismans which the Japanese call *magatamas* and Koreans call *kokoks* were usually made from jade. They have been found both in Asia and in Mexico. They are common artifacts at Olmec and Mayan archeological sites—where they are usually identified as “jaguar fangs” or “tooth pendants.” Asian specimens represented the magical power of dragons.

The transoceanic cultural transfer included fishing and hunting technology. Both Japanese marine hunters and Northwest Coast natives used aconite to poison tips of harpoons.<sup>26</sup> The poison sapped the strength of seals and whales making them easier to capture. And Peruvian fishermen adopted an innovative Japanese technique of using specially trained cormorants to catch fish.<sup>27</sup> Peru's Moche ceramics are decorated with designs of cormorants tethered to their masters' vessels.

East Asia's Neolithic culture spread rapidly across North and South America. More primitive inhabitants gave way to the relentless tide of warriors with superior technology. By the 1st millennium BC, Asian immigrants had established a cultural foundation that made possible the emergence of native civilizations throughout the New World.





basketry hat sculpture, 1989

Basketry Hats

basketry hats Northwest Coast from Bureau of American Ethnology BAE 31 (1910)



motif of the cleft-headed god

cleft-headed god



bark cloth robe Aniu culture Hokkaido, 1890

Bark Robes

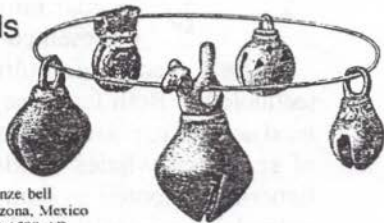


bark cloth robe Northwest Coast from BAE 10 (1893)

Copper & Bronze Bells



bronze bell

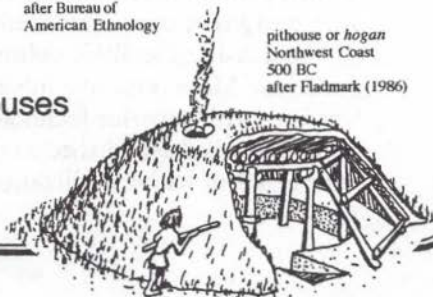
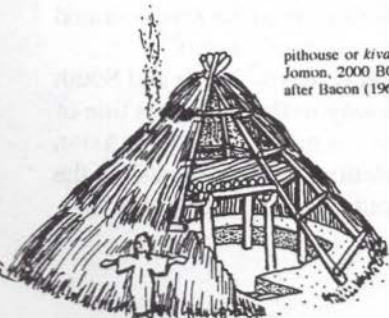


bronze bell Arizona, Mexico 500-1500 AD after Bureau of American Ethnology

pithouse or *kiva*, Jomon, 2000 BC after Bacon (1963)

pithouse or *hogan* Northwest Coast 500 BC after Fladmark (1986)

Pithouses



### Old World Impact: America—The Land of Rice

Although the predominant flow of culture followed the *Kuro Shio* current eastward, some Japanese travelers returned home with New World products. The most important of these was rice.

Wild rice was common in North America for several thousand years and served as the primary food crop until cultivation of millet, amaranth, and *maize* during the 1st millennium BC. According to botanist Thomas Vennum, author of *Wild Rice and The Ojibway People* (1988), archeological evidence shows that wild rice was an important American food plant by 7000 BC. Cool, marshy habitats suitable for rice growing stretched from Canada to Mexico.<sup>28</sup> Abundant rainfall and melting glaciers created an inland sea called “Lake Havasu” that covered much of Utah and Nevada. Utah's Salt Lake is a remnant of the once gigantic sea. Rice-bearing marshes that surrounded Lake Havasu were a major food source for primitive bands.

During the “Formative Phase” of cultural growth, in which societies evolved from nomadic to sedentary existence, rice was a primary food source. This Phase lasted from about 3000 BC to 500 BC. In Central America, Mayan rice farmers built extensive canals in the midst of the jungle. These canals were necessary to control the flow and temperature of water—two vital aspects of rice cultivation. However, farming practices were altered drastically after 500 AD when Mayans switched from rice to *maize* cultivation. After the shift, canals were no longer necessary because *maize* grows easily in jungle environments without irrigation.

The Mayan agricultural transformation has left modern archeologists with an enigma: why did the ancients use canals? According to orthodox doctrine, Mayans were primarily *maize* farmers, and canals were unnecessary for *maize* cultivation in jungle environs that have plenty of rain. Archeologists were baffled when aerial photographs revealed extensive canal systems in Mayan jungle villages. It was not until maverick scholars explained the use of canals for rice cultivation that the enigma was resolved.

Japanese voyagers sailing to North America between 5,000 and 2,000 years ago found a land of abundant rice—so they called the land *Bei-Koku*, meaning “Land of Rice.”<sup>29</sup> Merchant voyagers who reached the Northwest Coast traveled along coastal waters of Siberia, the Aleutian Islands and Alaska. The round-trip journey was feasible in both directions and could be completed in less than two years. Traders bartered Asian ivory and iron for New World furs, jade, and gold. Common knowledge of the overseas *Bei-Koku* enticed both merchants and desperate tribes to sail across the North Pacific. The risks were enormous; but so were the rewards.



Cultural Diffusion

Samurai, Japan  
1000 AD  
after GunYuki

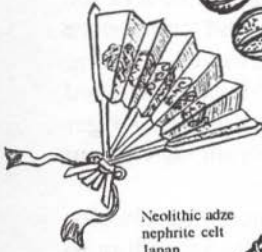


Peru  
Moche warrior  
900 AD  
ceramic painting



Wood-Slat Bib & Body Armor

folding fan  
Japan  
700 AD



throwing stones  
4000 BC  
Bonpa Museum, China

Bolas

bolas  
Peruvian plaque  
Tiahuanaco  
1000 AD



Northwest Coast  
Tlingit warrior  
from Niblack (1888)



Folding Fan

Neolithic adze  
nephrite celt  
Japan  
3000 BC



Adze with  
Nephrite  
Celt

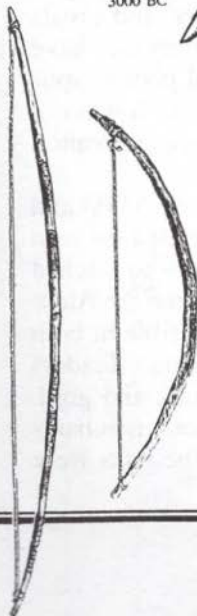
folding fan  
Bonampak, Mx.  
800 AD



Neolithic adze  
jade celt  
Northwest Coast  
1000 BC



Bow &  
Arrow



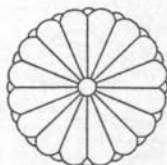
Ainu  
Bows &  
Arrows  
Rakai (1894)



Mexican Warrior  
Bow & Arrow  
15th cent. codex  
from Seler (1902)

Japan, like many other Old World nations, benefited from the importation of native American food plants: in deep antiquity, an unknown merchant brought American wild rice back to the Orient. Japanese botanist, J. Matsumura, has identified identical varieties of wild rice plants growing in America, Japan, Taiwan, and eastern China. He believes Asian merchants brought the American plant back to the Orient on a return voyage nearly 1,000 years ago.<sup>30</sup> Although Asians had a "warm-climate" rice by 4000 BC, the American "cool-climate" rice became a vital food source in Japan where the climate is substantially cooler now than it was 2000 years ago.<sup>31</sup>

Cross-ocean voyages from Japan to America have continued from the depths of the past until the present time. Both Japan and Native American cultures benefited from commerce and migrations, although orthodox Anglo historians have claimed that contacts never occurred. According to anti-diffusionist propaganda, the Japanese lacked suitable vessels for crossing the great ocean barrier.



Japanese  
Chrysanthemum



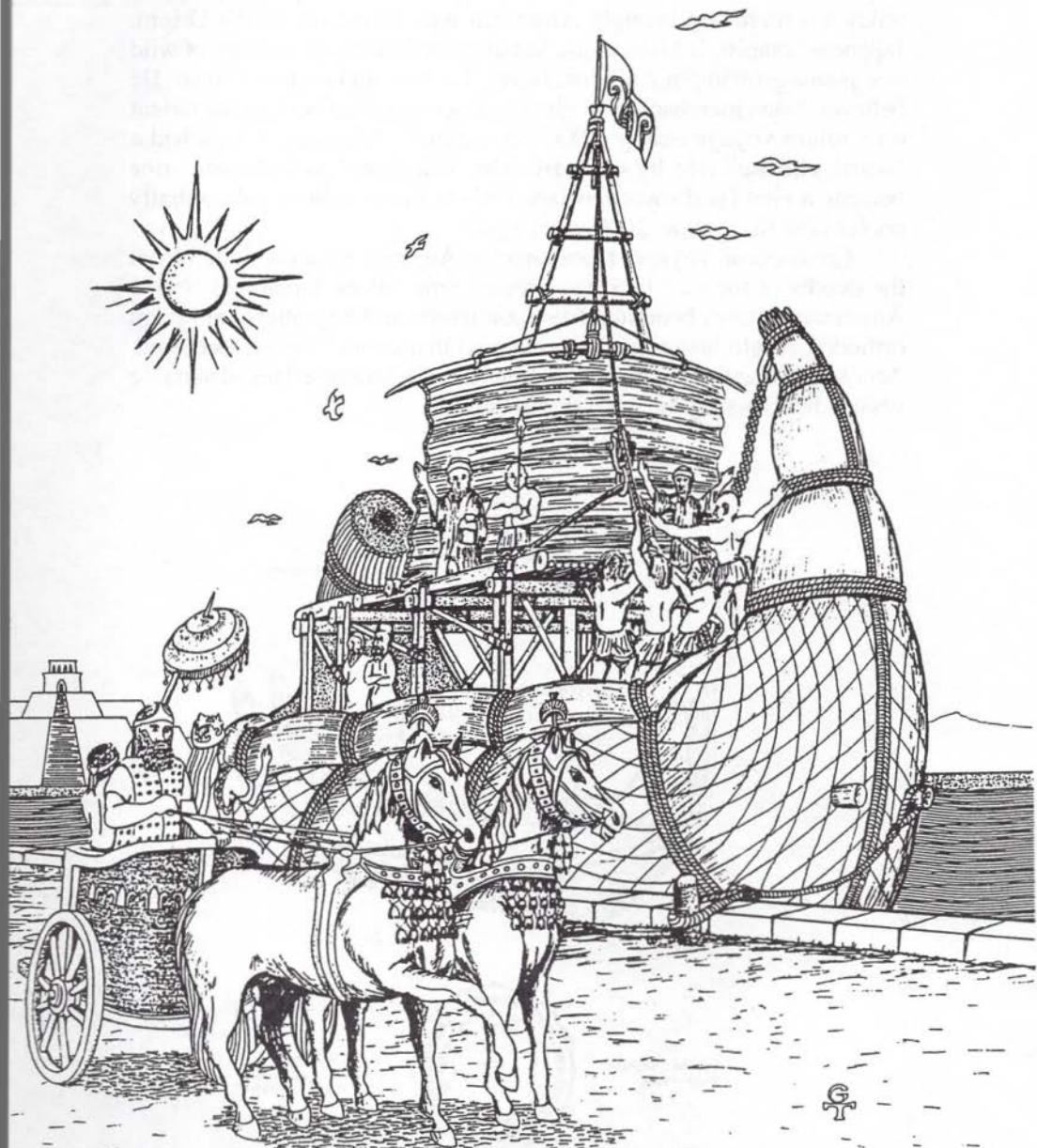
**Japanese junk**  
ceramic model, 400 AD  
National Museum, Tokyo



Sacred Rosette  
Zuni Tribe

chrysanthemum  
Japanese royal symbol  
after N. Davis (1992)





### *To The Ends of The Earth*

*Tara, queen of the Indus valley, orders her vassals to sail a reed ship beyond the Eastern Sea, circa 4000 BC.*



## ***ANCIENT MARINERS***

(10,000 BC – 1,000 BC)

During the late 1800's, tales of "lost civilizations" and "sunken cities" tantalized American readers. Reputable scholars including many historians and anthropologists ridiculed these tales as "pure fantasies," but there was no stopping dedicated adventurers who searched the jungles and oceans for evidence. Meanwhile, antiquarians and novelists entertained the public with romantic stories and fantastic theories. Much of their attention focussed on a legendary civilization called *Atlantis*.

### **The Atlantean Enigma**

Tales of "lost" civilizations stem from the ancient writings of a Greek philosopher named Plato. During the 4th century BC, Plato recorded an Egyptian legend about a wondrous maritime nation someplace in the Atlantic Ocean. Plato's *Dialogues* became popular among Greek citizens. The story survived through the Middle Ages and was a serious concern of Renaissance writers. Although skeptics once theorized that Plato invented the story, Egyptian scholars found a similar account on papyrus scrolls dating to the 2nd millennium BC.<sup>1</sup> Clearly, Plato's role in the affair was as he claimed: to record for posterity the wonder of an ancient legend.

The most incredible claim of the legend was the age of Atlantean civilization. Plato says that Atlantis was founded by the god-king Poseidon sometime before 10,000 BC. According to the legend, Atlantis was an island about the same size as England (80,000 square miles), became the center of a great empire with tributary states in Europe and North Africa.<sup>2</sup> Atlantis had all the features which distinguish a great society, including large cities, written laws, forged metals, extensive commerce, athletic games, a huge army, marble buildings, public baths, orchards, gardens, farms, and temples. Elephants roamed the streets, while citizens refreshed themselves at fountains of hot and cold running water. This idyllic civilization ended in 9600 BC, when a "cataclysm" caused the island to sink beneath the sea.



## AMERICAN DISCOVERY

### Where Was Atlantis?

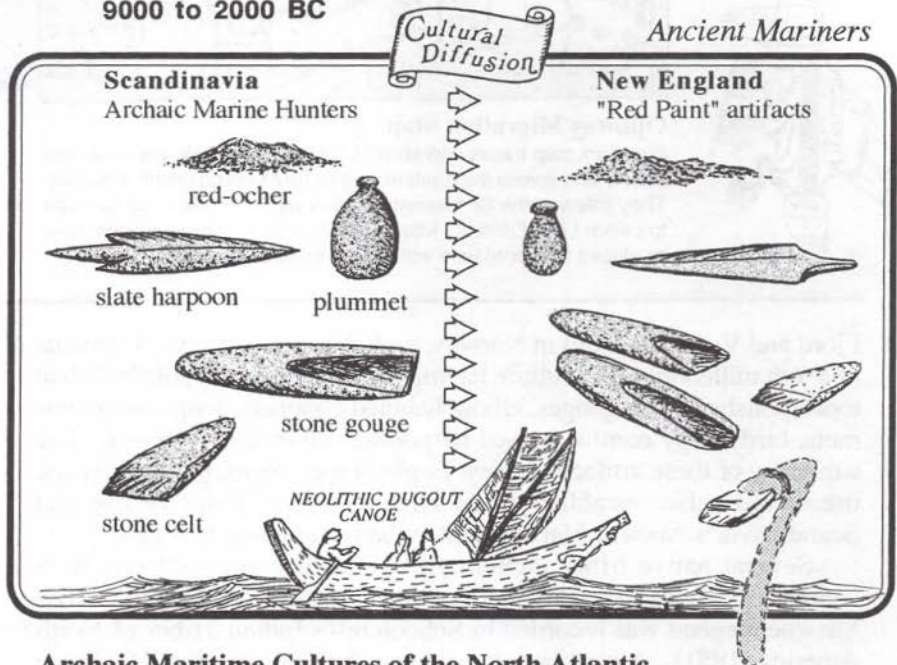
Scholars and romantics have searched for Atlantis without success. Plato noted that the island was located in the Atlantic beyond the *Pillars of Heracles*—which was a Phoenician name for the Straits of Gibraltar. Plato's description led 19th-century theorists to propose the existence of a huge *continent* beneath the Atlantic Ocean. This theory offered a fanciful explanation for cultural similarities between the Old World and America. Romantic diffusionists claimed that Atlantis was the common source of civilizations in Egypt and Central America.

Before the invention of radio-carbon dating and sonar mapping, romantic theories of Atlantean cultural diffusion were very popular. However, radio-carbon dating and decipherment of Egyptian hieroglyphs established that Nile pyramids were built more than 7,000 years *after* the demise of Atlantis. And theories of a huge continent sinking in the mid-Atlantic were refuted by sonar mapping. The entire ocean bottom has been examined by oceanographers, geological surveyors, several navies, and mining companies without revealing any trace of a sunken continent.

Atlantean enthusiasts proposed alternative locations for the lost civilization including the Aegean island of Santorini, the Bahamas, the Canary Islands, and the Azores. Santorini was an attractive candidate for Atlantean status due to its fame as an ancient civilization that was destroyed in a cataclysm—the eruption of Mt. Thera. However, Mt. Thera did not explode until 1500 BC—long *after* the demise of Plato's Atlantis. The principle argument against the Bahamas is their location: according to Plato, Atlantis was close enough to the Mediterranean for its armies to attack Egypt. The Canary Islands and the Azores are disqualified due to size: they are only a fraction of the huge territory Plato attributed to Atlantis.

There is another possibility: northern Europe. Archeologist Jean Hunt believes Atlantis was located near the British Isles. Her book, *Tracking The Flood Survivors* (1991), identifies an area comparable in size to Plato's Atlantis that was engulfed by the rising waters of the English Channel. Geologists have determined that habitable land in the Channel area was flooded by 6500 BC—forcing residents to move inland.<sup>3</sup> Several characteristics of the North European continental shelf support Hunt's theory: 1) the shelf area submerged by rising seas is about the same as Plato described; 2) near the mouth of the Thames river are a series of under-water glacial moraines corresponding to Plato's account of the Atlantean capital surrounded by concentric islands; and 3) the region had elephants or mastodons which were common to northern Europe. An enormous crater called "Devils Hole" is situated in the continental shelf east of Scotland. This crater, if caused by an asteroid, could account for the cataclysmic demise of Atlantean civilization.

## Archaic Marine Artifacts 9000 to 2000 BC



### Archaic Maritime Cultures of the North Atlantic

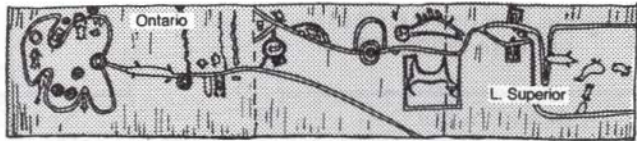
Channel residents who survived the cataclysm had a Neolithic culture. Hunt believes Atlantean survivors sailed to New England, where they erected *megalithic* monuments (large stones) which are similar to monuments in northern Europe. Hunt's theory might explain one of the lingering enigmas of New England archeology: the peculiar "standing stones" of an ancient culture known as the "Red Paint People."

During the early 1900's, New England farmers uncovered graves of natives buried under layers of red ocher—a hematite (iron) pigment. They named these mysterious aboriginals the "Red Paint People." Archeologists called them the "Marine Archaic Culture."

Scholars were amazed by the sophistication of native artifacts which were dated to the 6th millennium BC. Woodworking tools included polished stone gouges and adzes which were suitable for making extended dugout canoes. The importance of marine hunting and deep-sea fishing was evident from swordfish bones, harpoons, polished slate knives, stone plummets, and whale effigies found at grave sites. Long-distance travel on the ocean was confirmed by a trade artifact called "Rama Bay chert" which natives imported over a distance of 1500 miles from Labrador to Maine. Upright stones found near habitation sites also confirmed long-distance travel. Modern natives call these navigational aids *anook-shits*, or "travel markers."

Discovery of a similar culture of "Ancient Marine Hunters" in the sub-arctic region of Europe has led to speculation about migrations between the British Isles, Scandinavia, and North America.<sup>4</sup> At Borango





### Ojibway Migration Map

Birchbark map traces migration path of Southern Ojibway ancestors from a land across the Eastern Sea to Turtle Island (North America). They followed the St. Lawrence valley westward via Lake Superior to Leech Lake Ontario. Map is an old copy of a more ancient map produced in accordance with native traditions.

Fjord and Varanger Fjord in Norway, archeologists uncovered remains of a 6th millennium BC culture having red-ocher burials, polished slate tools, polished stone gouges, elbow-handled choppers, soapstone plumets, bird effigy combs, barbed harpoons, and inscribed bones. The similarity of these artifacts to New England specimens, particularly the use of red-ocher, establishes that America's Red Paint People and Scandinavia's Ancient Marine Hunters had a common heritage.

Several native tribes including the Shawnee and Ojibway have legends of origins in continental lands across the North Atlantic. The Shawnee legend was recorded in Schoolcraft's *Indian Tribes of North America* (1851). A birchbark map shows the route Southern Ojibway ancestors took in ancient times across the Eastern Sea (Atlantic) and up the St. Lawrence river to their new homeland in Ontario.

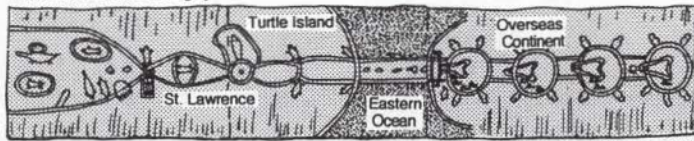
Ancient trans-Atlantic voyages are confirmed by Plato's *Dialogues*. Plato's account says that Atlantis was a "way-station" for voyagers heading to the Western Continent as early as 10,000 BC. Migrating herds of seals and ocean birds called "Great Auks" provided ample food supplies for travelers heading west. Seasonal voyages of marine hunters on both sides of the North Atlantic to the Arctic Circle resulted in transoceanic cultural diffusion throughout the Neolithic Age.

### Beyond Atlantis: A Legend of Continental Land

Plato clearly indicated that Atlantians and Egyptians knew about a vast western continent by 10,000 BC. His description in the *Dialogues* indicated that the continent was so large it encompassed the ocean:

Atlantis was the way to other islands, and from these you might pass to the opposite continent which surrounded the true ocean. For the Mediterranean which lies within the Straits of Heracles is only a harbor having a narrow entrance, but the other sea is a *real* sea, and the surrounding land may truly be called a boundless continent.<sup>5</sup>

Plato's statement that Atlantis was located "on the way to other islands" referred to the North Atlantic passage to America *via* the Faeroes, Iceland, Greenland, Baffin Island, and Newfoundland. Phoenicians,



## EUROPE

Ojibway Map  
birkbark scroll  
Translation by Red Sky  
Ontario, 1966

after U. Toronto Press & Map Collector (Lewis, 1979)

Irish, and Norwegians used this route in later centuries. Plato's claim that the western continent "surrounds the ocean" implies knowledge of the vast extent of New World continents. This was the source of enduring Greek legends about a "ring continent" that surrounded *Oceanus*.

Atlanteans were not the only mariners on the high seas. From Egypt to Indonesia, agrarian rulers dispatched explorers across the oceans in hopes of gaining a better understanding of their world.

### Lilith's People

Old World civilizations emerged by the 10th millennium BC. Over a period of several thousand years, tribal societies relinquished their nomadic hunting way of life: they became sedentary villagers and began harvesting wild grains, such as rice, wheat, and barley. Archeologists have determined that ancient peoples gathered *wild* cereal grains in Africa, Mesopotamia, India, and Asia nearly 10,000 years ago. As a result of human cultivation, wild cereals became "domesticated." The process of domestication began when farmers selected seeds from the best food-producing plants for use in sowing fields the following year. Over a period of centuries, this selection resulted in plants that produced enlarged grains or fruit. More highly evolved plants also had associated genetic changes. Botanists are usually able to determine the original habitat of domesticated plants by finding the place where the most primitive varieties are still growing. This identification process often reveals pathways of plant diffusion across the Earth.

Scholars once believed that agriculture began in a region called the "Fertile Crescent"—which is part of Mesopotamia between the Tigris and Euphrates rivers. Archeologist Robert Braidwood found ruins of a city made from sun-dried bricks dating to 8000 BC at Cayonu, Turkey, just north of Iraq,<sup>6</sup> and botanist Charles Heiser found remains of ancient sickles used for harvesting grain in Iraq circa 8000 BC.<sup>7</sup> Although these discoveries confirm the deep antiquity of farming in Mesopotamia, the Fertile Crescent was only one of many "birthplaces" of agriculture.

Earlier evidence of plant cultivation has been found in Southeast Asia. Archeologist Wilhelm Solheim II of the University of Hawaii discovered remains of cultivated plants having radio-carbon dates from the 10th millennium BC in Thailand. At a site called Spirit Cave, he found cucumbers, beans, peas, Chinese water chestnuts, peppers, and bottle gourds.<sup>8</sup> Solheim estimates that beans were cultivated by 15,000 BC. Ceramic remains found at the cave confirm that Asians were well on their way towards civilization.





1. Priestess with seed bag, Egyptian mural 2000 BC



2. Assyrian genius 1000 BC



3. Genius with seed bag Khorsabad, Assyria 1000 BC



1. Pachacamac textile design Peru 700 AD



seed bag



2. Priest with seed bag, Teotihuacan Mexico 500 AD

3. Olmec priest La Venta, Mexico 900 BC



Smithsonian Institution BAE

**Sacred Bag Symbol**

Indo-Sumerian voyagers brought the sacred bag symbol to America. Ancient New World artists adopted the practice of portraying a priest holding the sacred seed bag to represent fertility. Mayan and Mexican artists used the symbol to represent a container for copal incense which was used in rituals.



Lilith

Agriculture was essential for human progress. Farming and the resulting abundance of food transformed small villages of hunting societies into populous city-states. A stable food supply provided security against declining herds of game animals, while the social organization required for farming led to specialized labor. Surplus time, institutionalized goals, sedentary existence, and bureaucratic organizations molded citizens into a broad array of specialized occupations we recognize as being characteristic of highly-developed societies or "civilizations."

The importance of agriculture is apparent from religious practices and symbols which came into existence about 7,000 years ago. For most agrarian people, God wore a feminine face. Whether appearing as Lilith, Astarte, Athena, Ishtar, Isis, Tien-hou, Tara, Pele, or Tanith, the Mother Earth Goddess was at the center of fertility cults that spanned the Old World from the Atlantic to the Pacific. Agrarian societies regarded Earth as a sacred maternal being—hence the name "Mother Earth." Her symbol was the three-lobed lotus, or water lily, which represented the eternal cycle of fertility and rebirth. The outer lobes of Lilith's symbol often took the form of scrolls, or serpents, representing the feminine-masculine duality. A triangular-motif between the scrolls represented the germinating seed or cosmic power. In East Asia, India, Egypt, and ancient America, the lily represented rebirth or immortality.



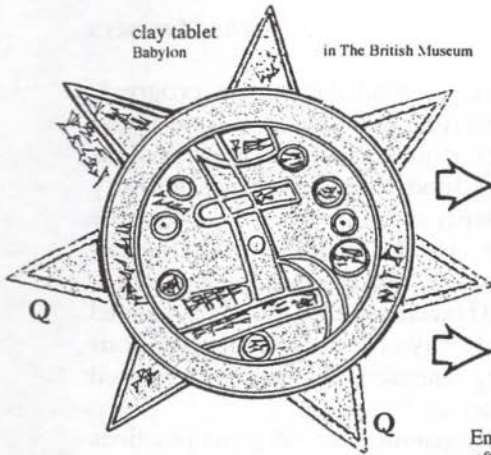
fleur-de-lis

As an emblem of supreme natural power and fertility, Lilith's symbol was the forerunner of the "fleur-de-lis" which has embellished the crowns of royalty for centuries. Lilith's symbol has been found wherever the Mother Earth cult spread—from the Old World to America.

For several thousand years, women were the most powerful rulers. The feminine gender was commonly regarded as superior to males due to numerous natural phenomena. The moon was regarded as a feminine entity due to its monthly cycles. The terms "month" and "menstruation" are both derivatives of the Hindu-Sanskrit *mas*, or "moon." Solar eclipses confirmed that the moon and Earth were more powerful; the Earth's role in fertility established its feminine gender.

The concept of Earth as a square having four quarters emerged from agrarian-based religions. They were the source of square-shaped symbols representing Earth, and they inspired square-shaped swastikas denoting eternity and good luck. The importance of the number *four* derived from the four phases of the moon and the apparent correlation of the moon's cycles with menstruation. Religious artists portrayed the sky as a canopy held aloft by *four* pillars, and priests conducted ceremonies





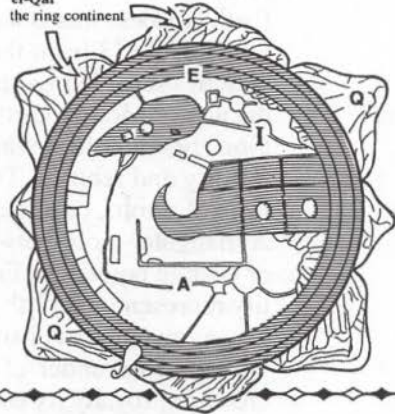
English translation  
after *Imago Mundi* 1936

Medieval Arabic World Map  
after al Qazwini (1250 AD) in *Munis* 1987

### Babylonian World Map

This 600 BC map inscribed on clay shows Babylon surrounded by the "Bitter River" or ocean. Translation by Eckhard Unger (*Imago Mundi*, 1936) describes 7 isles numbered on the map above right. Text is missing for 1 & 2. Isle 3 is a large land (or continent) where birds fly long distances; 4 is a land of twilight; 5 is the northern region of darkness; 6 is the land of the bull; and 7 is the land of sunrise. Knowledge that Earth was round with lands across the seas is evident from 13th-century Persian maps (right) which show the ocean bordered by mountains (the ring continent) which Arabic scholars called the Mountain of el-Qaf.

el-Qaf  
the ring continent



Key: A = Africa; E = Europe; I = India & Asia; Q = el Qaf the ring continent

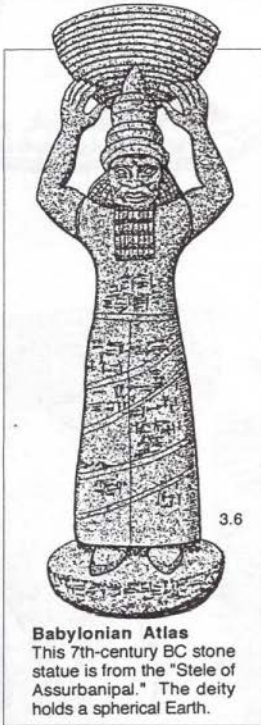
on *four-sided* pyramids representing the "*four quarters*" of the Earth. These quarters were associated with the "*four winds*," the "*four cardinal directions*," and the "*four quarters*" of a city. There were even "*four seasons*" corresponding to the agrarian sequence of ploughing, planting, flowering, and harvesting. Likewise, "*quarts*" and "*quarters*" served as units of measure.

### Motivation for Travel: Commerce and Religion

The growth of urban centers and their associated commercial, military and religious roles invariably led to intercontinental travel and discovery of foreign lands. Traders responded to demands for exotic goods by traveling further-and-further from home. In distant ports, they heard wondrous stories of lands beyond the seas. These stories inspired merchants and sovereigns alike; agrarian queens had sufficient resources to send expeditions in search of fabled lands.

Cuneiform inscriptions and artifacts of the 4th millennium reveal that Sumerian civilizations of the Tigris and Euphrates region of Iraq traded with distant lands known as *Dilmun*, *Magan*, and *Meluhha*. Scholars have identified these lands as Bahrain, Jiddah Island, and the Indus valley.<sup>9</sup> Historians call these ancient lands "Indo-Sumeria."

One of the principle items of Indo-Sumerian trade was red earth. According to agrarian religions, red earth symbolized menstruation and rebirth. The practice of "planting" the deceased in a tomb surrounded by red earth expressed the belief that the soul would be reborn in the same manner that seeds bring forth new life in Spring. Hematite (a red iron ore) and cinnabar (a red mercury ore) were vital to agrarian religions. Rulers sent mining expeditions to distant lands seeking the red-colored earth for rituals and grave offerings.



### Babylonian Maps and Traditions

Sumerian tablets of the 3rd millennium BC tell of voyages "beyond the western sea" (the Atlantic) and establishment of colonies in the distant land (America).<sup>10</sup> The tablets were made using an alphabet of triangular hatch marks called "cuneiform" writing. These voyages helped change archaic beliefs about the Earth's shape. By the 1st millennium BC, Babylonians portrayed the world as a sphere held aloft on the shoulders of a giant genii. This Earth genii was the Middle Eastern equivalent of the Greco-Roman *Atlas*.

A Babylonian world map from the 5th century BC shows the "Known World" surrounded by the ocean or "Bitter River" and seven "islands" representing lands across the seas. One of these represents the polar regions where the sky is dark for six months each year. A western land is said to be so large that birds fly continuously without landing, and an eastern land is said to be the dwelling place of a bull. This map is an ancient version of later Arabic maps which portrayed the Known World surrounded by a ring of ocean and a second ring of islands or "ring continent" representing North and South America.

### Seagoing Capability: Reed Ships

Ancient maritime exploration of the Americas was a direct consequence of the flowering of Old World civilizations and the simultaneous



# Old World Reed Ships

1. Sumerian seal, Uruk

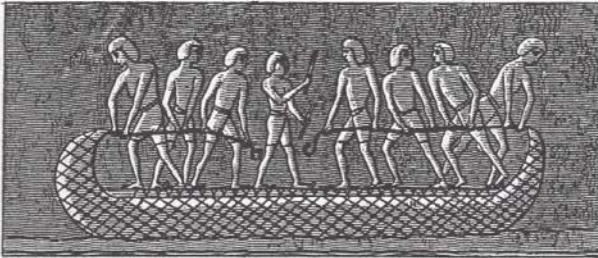
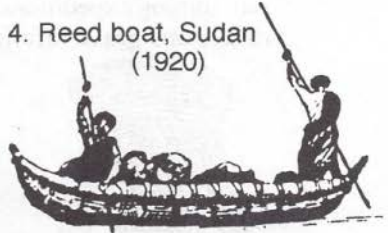


2. Akkadian seal, Persia



3. Mesopotamian reed boat (1920)

4. Reed boat, Sudan (1920)



5. Egyptian builders wrap netting around a reed ship 2000 BC.



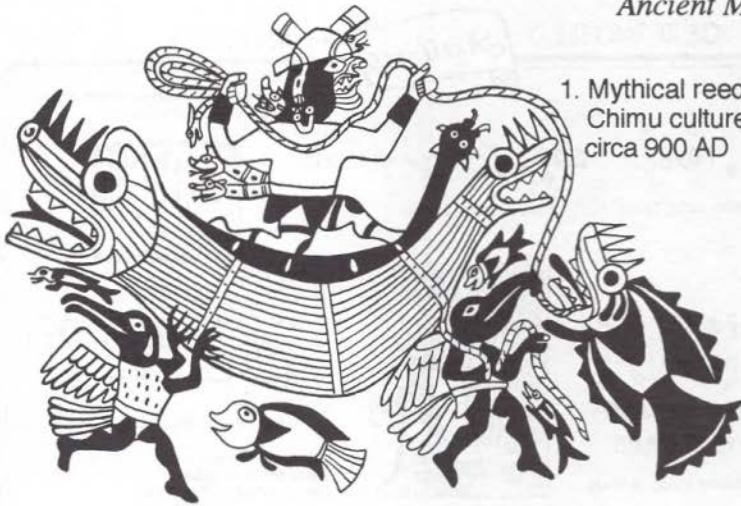
Egyptian reed builders



6. Assyrian reed ships 1000 BC

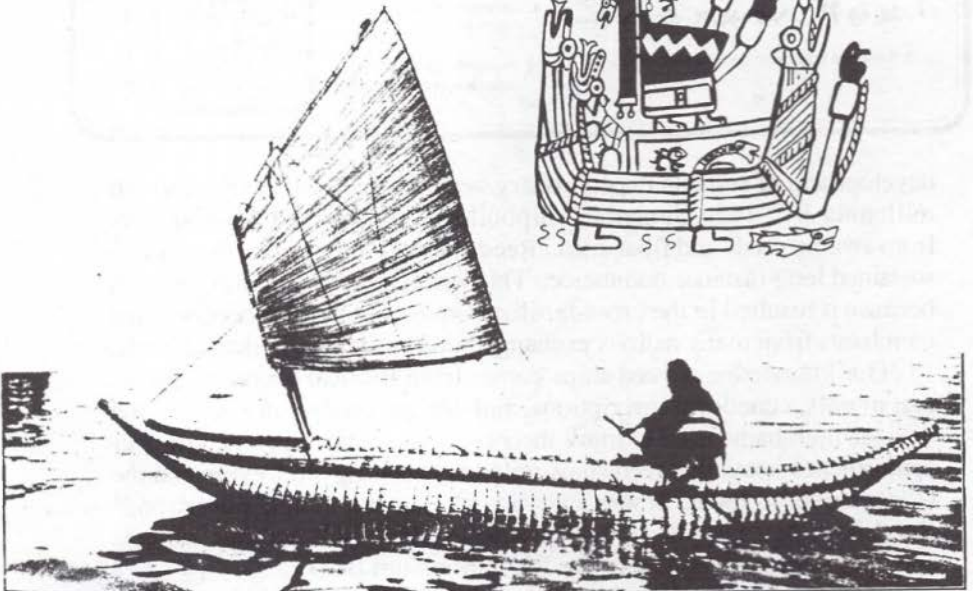
## Old World Reed Ships

Reed ships were common in tropical climates from Africa to Asia due to abundance of reeds and ease of construction. Reed ships were replaced by wooden ships after 3000 BC, although marsh inhabitants continue to make reed boats.



1. Mythical reed ship, Chimu culture, Peru circa 900 AD

2. Mythical reed ship, Mochica culture, Peru circa 500 AD



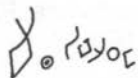
3. Bolivian reed boat, Lake Titicaca (1910)

### Reed Ships in Ancient Peru

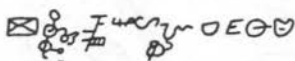
Huge reed ships were often portrayed on ancient Peruvian ceramics, although 16th-century explorers found the natives sailing only small reed boats and log rafts. Mythical reed ships in Peruvian art are a legacy of ancient transoceanic voyagers from Indo-Sumerian civilization.

3.3



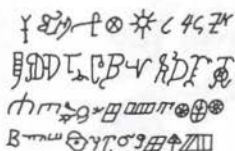


1. Indus Valley script, Brazil



2. Indus script, Brazil

3. Hearn Tablet with cuneiform writing, Ga. (1000 to 2000 BC)

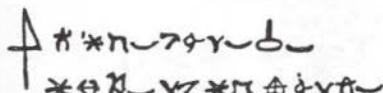


4. Indus and Brahmi scripts in Brazil

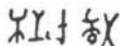


5. Sumerian script, Bolivia, 2000 BC

6. Babylonian Genius Santa Maria, Ecuador Crespi collection (Fell, 1980)



7. Sumerian script from Sachuaques, Peru



8. Sumerian script, Argentina

9. Sumerian tablet, 2042 BC collection of Chief Joseph

West Point Museum



After Fell (1980)

development of suitable expeditionary vessels. Between the 8th and 5th millennia BC, Indo-Sumerian shipbuilders constructed huge vessels from swamp reeds and fiber cord. Reed shipbuilding opened the door to sustained long-distance commerce. This was a boon for cultural progress because it resulted in the cross-fertilization of cultures that occurs when merchants from many nations exchange goods and ideas in distant lands.

Our knowledge of reed ships comes from Biblical accounts, Egyptian murals, cuneiform inscriptions, and designs on *cylinder seals*—the devices merchants used to mark their property. The Greek geographer Eratosthenes noted that reed ships sailed between Egypt, Ceylon and the Ganges river in India. It was a voyage of almost a month's duration.<sup>11</sup> Reed boat petroglyphs in Egypt date to 3050 BC; ceramic objects showing reed vessels date to the 5th millennium BC.

During the 3rd millennium BC, Babylonians engaged in extensive overseas trade with East Africans and Hindus. This trade network is verified from cuneiform inscriptions and the distribution of trade goods found at archeological sites. Cuneiform inscriptions tell of vessels large enough to carry 28 tons of cargo. Norwegian explorer Thor Heyerdahl's *Tigris* expedition in 1978 found archeological evidence confirming that Sumerian merchants from the Middle East traveled to the Indus valley by

the 3rd millennium BC. It was a voyage of several thousand miles.

Merchant vessels reached lengths of more than 100-feet. The hull was made of reed bundles wrapped with hemp ropes and covered with petroleum. Bamboo poles and palm trees were used as framework in larger vessels; wooden runners along the bottom protected hulls from rocky shores. Small ships were launched on rollers from dry land. Larger vessels were built on deltas during the winter; they floated when Spring rains flooded the rivers. Reed ships were a big improvement over dugouts and rafts. Although bulky shapes made reed boats sluggish, they stayed upright in a gale and had ample room for large cargoes.

In May of 1969, Thor Heyerdahl and a crew of five set sail from northern Africa on a reed ship—the *Ra*. Their objective was to determine if reed ships could cross the Atlantic ocean. Heyerdahl knew from personal study that reed boats were once a world-wide phenomenon. Small craft of totora reeds are still used on Lake Titicaca in Peru and along the rivers of Mesopotamia, East Africa, and New Zealand.<sup>12</sup> Mochica ceramics from Peru depict anthropomorphic deities on reed ships dating to the 5th century AD. Heyerdahl reasoned that Mochica reed ships and legends of a pale-skinned god from the East might correspond to Old World voyagers sailing reed ships to South America.

After *Ra* sank in stormy seas just 500 miles short of the Caribbean, Heyerdahl decided to make a second attempt: *Ra II* was launched from Morocco in 1970. Heyerdahl's crew sailed for 57 days across 3,000 miles of the Atlantic for a successful landing in Barbados. The voyage of *Ra II* proved that the most primitive reed ships of the 5th millennium BC were capable of crossing the oceans.

This was a major scientific breakthrough, considering that most scholars previously assumed ancient vessels were incapable of crossing the oceans. Although Heyerdahl's achievement was a popular success, anti-diffusionists branded his ship a "floating haystack;" they dismissed the captain as "an adventurer."

### **Evidence of Contact**

In addition to reed ship motifs on Peruvian ceramics, evidence of Indo-Sumerian voyagers in the New World includes clay and bronze artifacts, numerous Indo-Sumerian religious symbols adopted by Native Peoples, and Old World domesticated plants that were brought to America in ancient times.

### **Artifacts of Old World Commerce**

In spite of the great antiquity of the ancient mariners, a few Indo-Sumerian artifacts have been found in the Americas. During the late 1800's, a Sumerian tablet with cuneiform writing was found beside



# OLD WORLD

## Cultural Diffusion

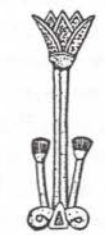
# to AMERICA

4000 BC to 300 BC

1000 BC to 1500 AD



1 & 2. Goddess Ishtar, Assyria



3. Nimrud



1. Olmec



2. Mexican



3. Mexican



4. Rhodes



5. Cyprus



6. Nimrud



4. Mayan



5. Mayan



6. Mayan



7. Assyria



8. Romania



9. India



7. Mayan

5A—rising sun from incense burner Mexico, 550 AD



10. Phoenicia



8. Nasca



9. Nasca, Peru



10. Teotihuacan, Mexico

### The Lotus Symbol

Ancient mariners brought the lotus--symbol of fertility and rebirth, to America. Old World symbols show life force, humans and plants arising from the lotus. Oldest American examples are item 2 circa 1000 BC, item 5 circa 800 BC, and 9 & 10 circa 300 BC. Item 7 shows the sun arising from a lotus; 10 shows spiritual animals drinking from the lotus fountain.

ancient stone projectile points near Lexington, Georgia. The tablet is from Ur-Nammuk, Iraq, and dates to 2040 BC. A similar Sumerian tablet, once in the possession of Chief Joseph of the Nez Perce tribe, is in the West Point Museum collection.<sup>13</sup> Ecuadorian farmers found two Babylonian sculptures featuring a genii and a sphinx; and, a Sumerian inscription found in Bolivia has been dated to the 2nd millennium BC.

### Symbols

Lilith's symbol has been found on ancient artifacts throughout the Americas. It was inscribed on Olmec ceramics dating to the 1st millennium BC and was painted on Nasca pottery from Peru. The symbol was also a common feature in Mayan religious art.



The stepped pyramid, or "Earth Mountain" symbol, gained widespread use among Native Americans as a symbol for the holy mountain where the sun rested at night. The symbol was used frequently in Mesopotamia to decorate the facades of holy buildings and altars—a practice that was also common among the Aztecs of Mexico. It was a common feature of Peruvian textiles and was later combined with the Asian scroll motif to produce a hybrid symbol called the "stepped fret." The stepped fret became one of the most popular motifs of Central America.



Another symbol associated with Middle Eastern agrarian cults is the Sacred Seed Bag motif. Native artists portrayed priests carrying the Sacred Bag in Olmec sculptures, Peruvian textiles, and Mexican murals at Teotihuacan. The bag of seeds represented fertility and the sacred power of life-giving plants. Indo-Sumerian travelers carried a similar bag of sacred seeds consisting of the hardiest plants from their homelands. Seed bags were assurance that if stranded on remote isles, travelers would be able to grow food within a few months of arrival. The Sacred Bag motif along with ancient Peruvian and Mexican murals featuring flower pots for growing plants are evidence that ancient horticulturists were selectively breeding plants.



James Bailey, author of *God Kings & The Titans* (1976), noted that the Indo-Sumerian concept of the Earth's four quarters reached Peru: Babylonian rulers, as well as Peruvian chiefs, were both referred to as "Lords of The Four Quarters."<sup>14</sup> The Inca empire was known as *Ta-huan-tin-suyu*, or "The Four Quarters of The World." Peruvians portrayed the sky in Mesopotamian fashion as a canopy held aloft by four Y-shaped pillars; Mayans used 4 bearded midgits, or *chacs*, for the same purpose. Mayan *chacs* are copies of bearded Mesopotamian genies who supported the sky. The traditional four-sided swastika of Indo-Sumerian origin became a common emblem throughout ancient America.



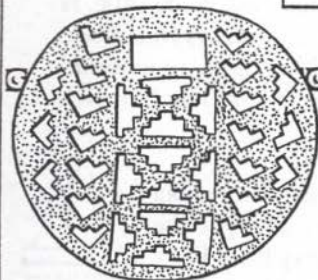
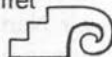


Earth Mountain



sun in Earth Mountain

stepped fret



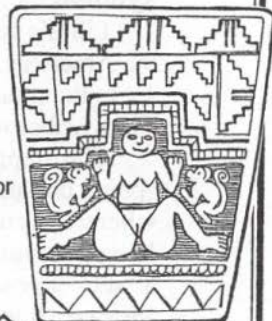
1. Bronze Medallion Iran 2000 BC

1. Sun in the Earth Mountain, Codex Bodley, 1400 AD



2. Samash the sun Akkad, 2350 BC Persia

2A. Mother Earth Goddess stone plaque Manibi, Ecuador



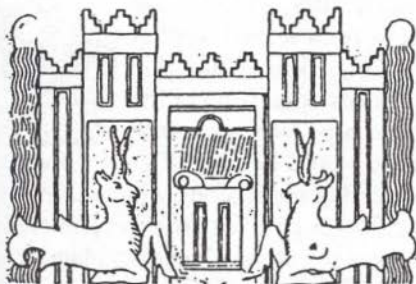
2B. Mochica Deity Peru Ceramic 700 AD



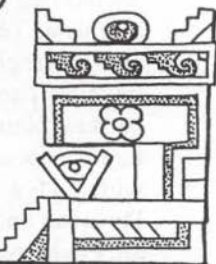
3. Isis



3. Peruvian temple



4. Ishtar's Temple, Assyria 800 BC



4. Mexican temple

**Earth Mountain Symbol**

Pyramids and the stepped-pyramid symbol derived from an agrarian belief that the sun rested each night in the Earth Mountain and was born again the following day. Mesopotamian Akkadians portrayed the sun ascending the steps of the Earth Mountain (OW- 2. Mexicans portrayed the sun as a disk inside the stepped pyramid, or Earth Mountain (A-1). The Earth Mountain symbol was sometimes placed above the goddess' head--a practice reflected in Peruvian art (A-2). The Earth Mountain symbol was used on Ishtar's temple and on temples in Peru and Mexico (OW-4 & A-4).

### Language & Customs

Barbara Walker, author of *Women's Encyclopedia of Myths And Secrets* (1983), noted that Sumerian and Peruvian cultures shared similar beliefs concerning the Earth goddess and the sun. In both places, the Goddess was referred to by the name "Mama." Both Sumerians and Peruvians believed in the existence of a holy mountain with twin peaks where the sun rested during the night.<sup>15</sup> Sumerians called their twin peaks *Mashu*; among the Inca it was known as *Macchu Picchu*.

Joseph Campbell, author of *The Masks of God* (1959), believed several complex myths reached ancient America as a consequence of diffusion. He noted that a Chaldean myth about the end of the world had spread to India, Egypt, Persia, China, North Europe, and Central America in deep antiquity. All the myths had one specific feature that Campbell insisted could not have resulted from independent invention: they all predicted the end of the world would occur when all the planets lined up in the constellation of the crab.<sup>16</sup>

### Plant Diffusion:

#### Bottle Gourds, Amaranth, Henna, & Cotton

With few exceptions, the oceans were effective barriers to dispersal of domesticated plants—until humans in ships brought plants along on transoceanic voyages. There is no evidence of any Old World domesticated food plants floating across the ocean. Historian admiral Samuel Morison reported a single American plant which has crossed the North Atlantic independently: this is the horse-bean (*Entada gigas*), which the Gulf Stream continuously brings to the island of Madeira.<sup>17</sup>

Many ancient voyagers brought Old World plants across the Pacific. Peruvian myths about light-skinned culture bearers, ceramic jars showing ancient immortals on reed ships, and Mexican murals showing immortals spreading seeds are testimony to the influence that ancient mariners had on American agriculture. Sacred Bags carried by Indo-Sumerian travelers contained wheat, barley, millet, rice, beans, gourds, cotton, dates, amaranth, and henna.

Some Indo-Sumerian plants were suitable for habitats where explorers landed; others were not. Bottle gourds were common on ancient ships and were repeatedly introduced with the landings of every voyager. Old World bottle gourds found in Peruvian sites dating to the 3rd millennium BC provide evidence of transoceanic voyages.

Amaranth was a Middle-Eastern domesticate used initially as a leafy vegetable. Botanists believe the plant reached



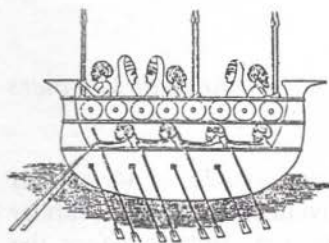
grain  
amaranth

after Mathedi, Venice, 1571



cotton



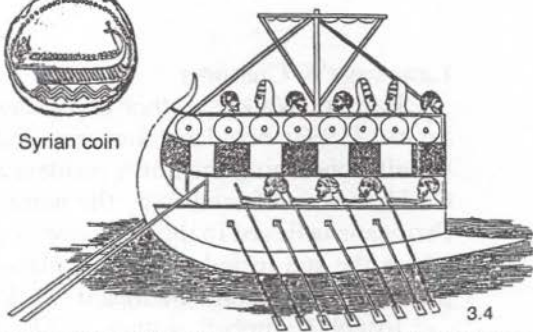


### Mesopotamian Plank-built Galley

Assyrian relief carving circa  
800 BC shows sea-going  
vessel. 3.4



Syrian coin



3.4

America and was domesticated into a grain—although when and how this occurred are unknown. The New World grain amaranth (*A. hypochondriacus*) was grown as a food plant in ancient Mexico and Peru. Remains of grain amaranth seeds have been found in the ruins of Arizona's cliff dwellings. Europeans traveling in the Orient saw the grain plant being grown in remote villages, and they assumed it was an Asian domesticate. However, botanists later determined that the Asian grain is actually a sub-variety of Mexican derivation. It seems ancient voyagers brought amaranth seeds across the oceans in both directions. In India, the grain amaranth is regarded as a sacred plant of the ancestors.

Botanists do not know when *henna* arrived in the Americas. Colonial settlers reported that the plant was *already* a common part of the native cosmetic kit by the 17th century. French botanist Alphonse DeCandolle specified a Babylonian or Persian source for the plant whose Arabian name was *henneh*, or *Al Khanna*. Hindus called it *hina*, and the Greeks referred to it as *Kinna*. It spread in ancient times to Nubia and India. Egyptians used the dye to color fingernails; Mediterranean tribes and Indians used it as a ritual coloring for hands and feet. It was found in the West Indies during the 17th century. In the absence of a better explanation, DeCandolle assumed European colonists took it everywhere they went and gave it to the natives.<sup>18</sup> He called it: "distribution in the wake of civilization." Native Americans used it to color cloth as well as their own skin—believing red was the color of the sun's rebirth at dawn. This was one source of the term "Red Man."

Old World cotton reached Central Mexico by the 4th millennium BC, although botanists are at a loss to explain how it crossed the ocean.<sup>19</sup> Remains of fully-domesticated cotton plants have been found at the Indus valley site of Mohenjo Daro—dating to 3000 BC. Indian cotton spread throughout the Old World by the 1st millennium BC. Botanists have established that seeds from Old World cotton reached ancient America. They have identified the genetic material of Old World cotton in seeds found at Mexican and Peruvian archeological sites. It is apparent from these genetic studies that some unknown horticulturist in ancient

American grew Old World cotton plants together with native American cotton plants allowing them to cross fertilize. The result was a hybrid plant that combined the genetic material from both parent plants yielding a plant with *two* sets of genes—which botanists call a “diploid.”<sup>20</sup> This hybrid cotton was a tremendous success because it produced a weaveable lint that was far superior to ancient plants of either the Old World or America. All subsequent domesticated cotton plants in America were derived from this diploid variety.

There is no basis for speculation that Old World cotton seeds floated across the ocean to America. Although wild cottons sometimes grow in littoral (seaside) habitats, domesticated varieties are not viable in sea-shore environs.<sup>21</sup> Since the seeds are small, bird transport or wind transport are conceivable explanations for the means by which Old World cotton plants reached America. However, there is a long road between accidental plant dispersal and growth of a textile industry.

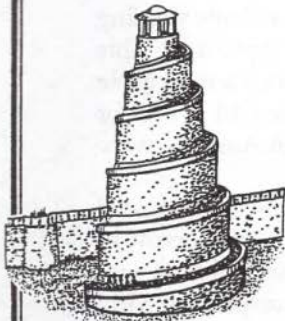
The surprising fact about ancient cotton cultivation in America is the presence of the entire assemblage of Old World textile-manufacturing equipment and technology. Numerous scholars have remarked about the lack of developmental forms of weaving equipment and textiles in ancient America. For example, the earliest looms and textiles of Peru (circa 2500 BC) are no different from those previously developed in the Old World.<sup>22</sup> All of the equipment used in Native American textile manufacturing such as back-strap looms, vertical looms, and spindle whorls, are identical to those of India, Egypt, and Persia. Furthermore, Peruvian textiles are difficult to distinguish from Old World textiles. Not surprisingly, Peruvians used the same methods of *batik* and *itka* dyeing as were practiced in the ancient Mediterranean.<sup>23</sup> The implication of all these similarities is that Native American weaving technologies were derived from Old World civilizations via trans-oceanic diffusion.



Regardless of evidence of Old World plants in America, it is inappropriate to assume Old World voyagers were responsible for the tremendous successes of native farmers. Indigenous peoples deserve credit for cultivating such native plants as potatoes, sweet potatoes, peanuts, *maize*, squash, *frijoles* (or beans), custard apples, tomatoes, avocados, yucca, wild rice, artichokes, pine nuts, pineapples, and chili peppers. Farming technologies and facilities developed through cultivation of native plants provided the essential foundation for the survival of foreign plants brought by Old World travelers.



Cultural Diffusion



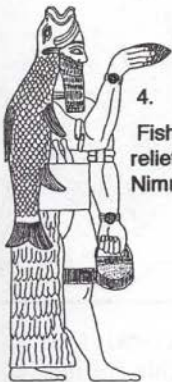
1. Samara Ziggurat  
Iraq 500-1000 AD



2. Helmeted Warrior  
Assyria



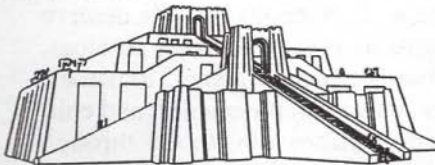
3. Cylinder Seals with writing  
Babylon, 1000 BC



4. Fish God  
relief sculpture  
Nimrud, Assyria



5. Sky Pillar  
Assyria



6. Stepped Pyramid at Ur  
2000 BC  
3.13



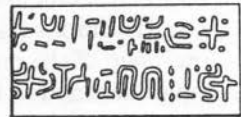
1. Helmeted Warrior  
Moche, Peru



2. Ziggurat jar  
Mochica, Peru  
700 AD



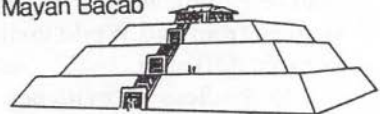
3. Cylinder Seals with writing  
Olmec, 800 BC & Tlatilco, Mx.



4. Sky Pillar  
Mayan Bacab



5. Fish God  
tapestry  
Peru



6. Stepped Pyramids, Chicama, Peru  
2000 BC to 1000 AD



7. Stepped Pyramids, Teotihuacan, Mx.  
200 to 500 AD

Mitchell Museum for Folk Arts

## Old World Impact on Native Culture

Indo-Sumerian voyagers brought their distinctive religion and architecture to America. From Mexico to Peru, the native peoples adopted Indo-Sumerian traditions of mud-brick (adobe) masonry, pyramids, cotton cultivation, cotton weaving, and the Earth Goddess religion. Historian James Bailey noted the enduring legacy of Indo-Sumerian voyagers:

A colony was founded on the island of the sun in Lake Titicaca in Bolivia. From there spread a civilizing and religious influence which left indelible marks upon Chile and the Amazon basin, and expanded into the southern states of North America. This Indo-Sumerian culture of sky-worshippers placed a stamp upon American religious and civil architecture which was never forgotten.<sup>24</sup>

Peruvian pyramids at Chicama and Panamarca are reminiscent of similar structures in Mesopotamia—such as the pyramid at Nippur, circa 2050 BC. Both Mesopotamian and Peruvian structures were made from sun-dried bricks. Consequently, they were vulnerable to erosion. Archeologists haven't found the earliest American pyramids, because they were either destroyed by rains or they lie buried beneath alluvial strata and coastal seas. The square-shaped structures were common at Moche ceremonial centers in Peru and Ecuador dating to the 1st millennium AD. The Mesopotamian pyramid tradition served as a model for most native societies from Peru to Wisconsin.

Indo-Sumerian architecture was the model for vast adobe cities like Peru's Chan-Chan—the largest adobe city in the world. Ruins of Chan-Chan date to the 2nd millennium BC. According to Joseph Gardner, editor of *Mysteries of Ancient America* (1986), the city was started by a chief named Taycanamo who floated ashore on a balsa log ship. Taycanamo claimed he was sent by “a great lord from across the sea.”

A unique Mesopotamian structure called a “conical ziggurat” has been identified in Peru at Paramonga. The conical ziggurat was a huge tower with a winding stairway or ramp around the outside. Conical ziggurats were also portrayed in Peruvian ceramics. Like the demigods portrayed on Peruvian reed ships, they are legacies of an ancient homeland across the Pacific in Mesopotamia.

Mesopotamian contact explains the practice of infant head deformation among native tribes. Ancient Peruvians regarded high foreheads as evidence of royal breeding, and mothers strapped boards against the foreheads of infants in order to produce a “royal” appearance. Besides the Middle East and Asia, deformed skulls have been found in Polynesia, the Pacific Northwest, Peru, Central America, and the Mississippi valley.<sup>25</sup> Ancient mariners spread this trait across the oceans.



# OLD WORLD FACES

IN ANCIENT AMERICA



**Persian**  
19th century illustration  
(after Heck, 1857)



**Sumerian**  
sculpture 2000 BC

**bearded visitor**  
Olmec ceramic sculpture  
Tres Zapotes, Mexico (800 BC)



**ancient seafarer**  
ancient Peruvian sculpture

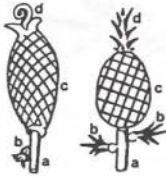
Native American burial practices were influenced by Indo-Sumerian voyagers. At the same time that Babylon exported lapis-lazuli beads to Egypt (1500 BC), Peruvians buried their kings with artifacts featuring the rare, deep-blue crystal.<sup>26</sup> The popularity of lapis-lazuli and the jeweler's skill in its use were derived from Mesopotamia. Cinnabar was equally popular in Native American societies as a burial offering; the practice was derived from agrarian cults of Mesopotamia. It was also one of the essential burial offerings of Mayan culture.

The Indo-Sumerian practice of marking trade goods with a personalized cylinder seal was adopted by native American merchants. The seal was carved into a large bead and worn as a necklace. Widespread use of seals from Central America to Peru is evidence of the profound impact of transoceanic commerce on native business practices.

## Impact of Contact in The Old World

Although the predominant flow of cultural diffusion was toward the Americas, Indo-Sumerians also benefited from transoceanic contact. Mariners brought at least two American food plants across the Pacific to the Middle East. Besides the grain amaranth, the most valuable export was the pineapple.

Assyria



**Pineapple**

An Assyrian carved stone mural (ca. 800 BC) portrays American pineapple (left). Schematic diagram of pineapple (right) shows distinguishing characteristics: a) stem, b) bud or slip, c) fruit with diamond-shaped pattern, and d) crown. 3.11

Sculptures of South American pineapples have been found in Assyria dating to the 6th century BC, and ceramic pineapples were found in ancient Egyptian tombs.<sup>27</sup> English scholar Henry Layard noticed a pineapple at Koyunluk in 1858. Layard wrote in his journal that: “The first servant following the guard bore an object which I should not hesitate to identify with the pineapple. . . . The leaves sprouting from the top proved that it was not the cone of a pine tree or fir.”<sup>28</sup>

Pineapples are only one of many American plants that isolationist historians have mistakenly assumed were unknown in the Old World until after Columbus. As recently as the 1990’s, it was not unusual for loyal isolationists to praise Spanish explorers for “discovering” American plants and shipping them abroad. The Spaniard Ovido’s 1525 illustration of a pineapple was commonly called the “first” such illustration in popular texts. However, Ovido’s illustration was actually preceded by Indo-Sumerian and Egyptian examples by more than two thousand years.



Ovido's Pineapple  
1525 AD

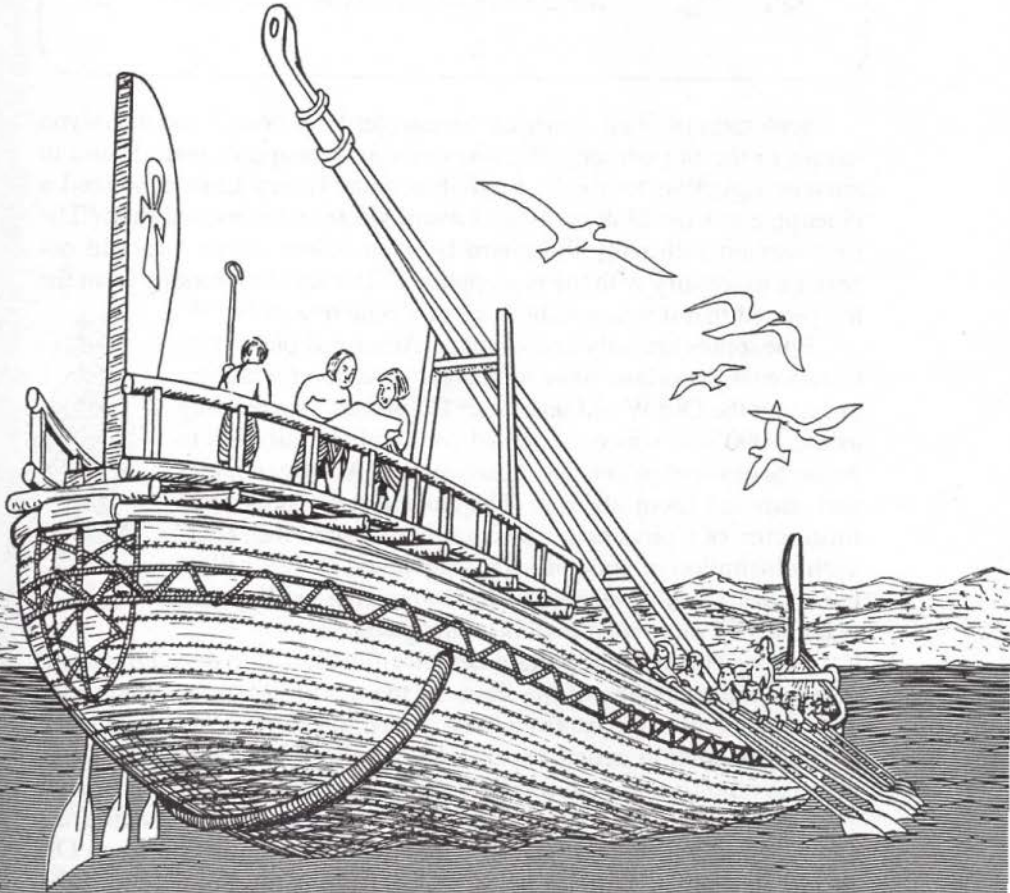
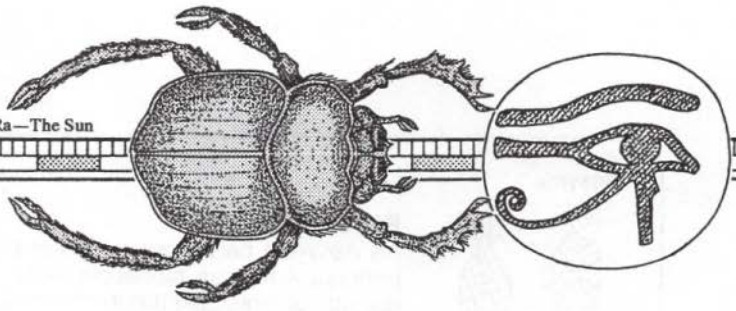
Perhaps the most important benefit from reed-ship expeditions was a better understanding of the shape of the world. Mariners who sailed across the ocean were confronted by a dilemma that faces every pioneer: whether to trust in actual experience or believe in dogma. Although agrarian religions promoted beliefs that Earth was square and flat, astute explorers realized it was actually round. That realization came from careful observation and from the inevitable encounters between Old World kinsmen in America going opposite directions around the globe.

**Fish God**  
pre-Inca tapestry  
Peru  
Munich Museum for Folk Arts



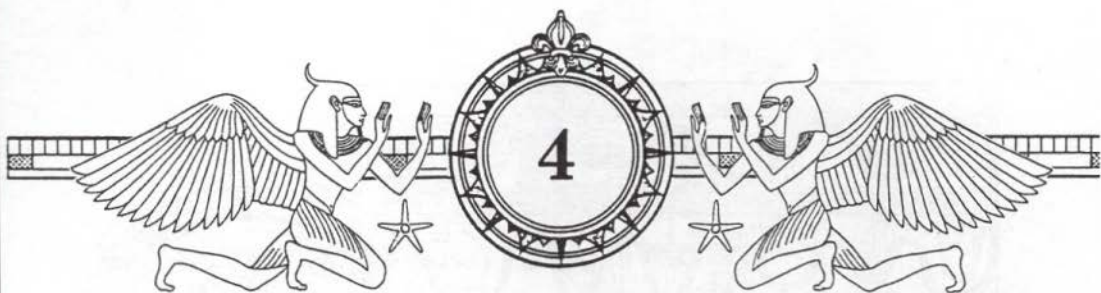


Sacred Scarab Beetle pushes Ra—The Sun



## **Mapping the Earth**

*Egyptian navigators reach the Abode of the Sun—America, 2500 BC.*



## ***EGYPTIAN EXPLORERS*** (3000 BC—350 BC)

Curiosity led Egyptian explorers to America nearly 5,000 years ago. Pharaohs demanded knowledge of lands beyond their domain, so they sent fleets across the oceans in search of unknown civilizations, exotic imports, and metal ores. Hieroglyphic murals and papyrus manuscripts report commercial ventures on the Red Sea, explorations around Africa, and daring voyages to the Land of the Setting Sun. According to Egyptian legends from the 10th millennium BC, geographers knew about continental lands across the Western Sea.

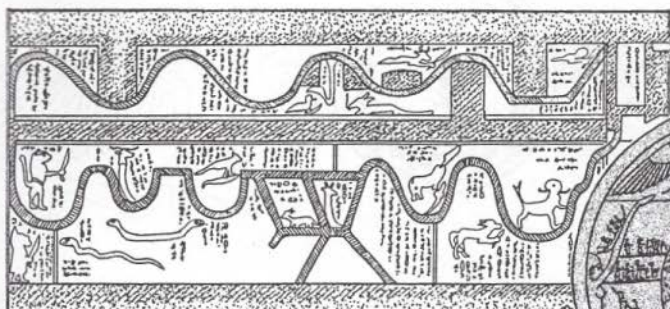
### **Quest for the Abode**

The Western Continents were cloaked in myth and mystery. Ancient traditions described a land of darkness beneath the earth. The “Underworld” was initially ruled by *Set*—God of Darkness. This forerunner of Satan presided over dark caverns through which the sun was presumed to ride on a sacred reed ship as it made its way to the eastern horizon.

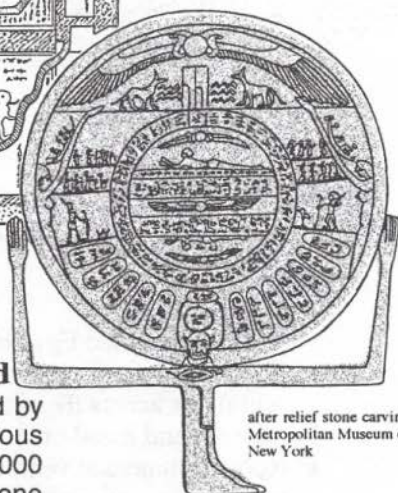
By the 3rd millennium BC, theologians were forced to revise their impressions of the Underworld—probably due to reports from seafarers who crossed the Atlantic. The Underworld became known as the Land of the Setting Sun—or the Abode. Set's foreboding land of darkness was transformed into an Earthly Paradise for reincarnated pharaohs. Eventually, the gates of paradise opened for any wealthy Egyptian who could afford a decent funeral.

Papyrus texts, including the *Book of The Dead* and the *Book Am-tuat*, describe the western abode as a land of “Eternal Life” presided over by Osiris—God of the Dead. The underworld of Osiris was a fully-endowed heaven. Egyptians called this paradise *Sekhet-Hetepet* —meaning “Fields of Peace” or “Elesian Fields.” Although the realm of Osiris was “celestial” in a spiritual sense, it was also regarded as being very physical and very real. Life in *Sekhet-Hetepet* was presumed to be similar to mortal existence: resurrected souls tilled fields and hunted much as they did in past lives along the Nile river. To reach this physical realm, spirits of the deceased had to make a voyage across the western sea. Maps were





coffin painting 2000 BC after *Imago Mundi*



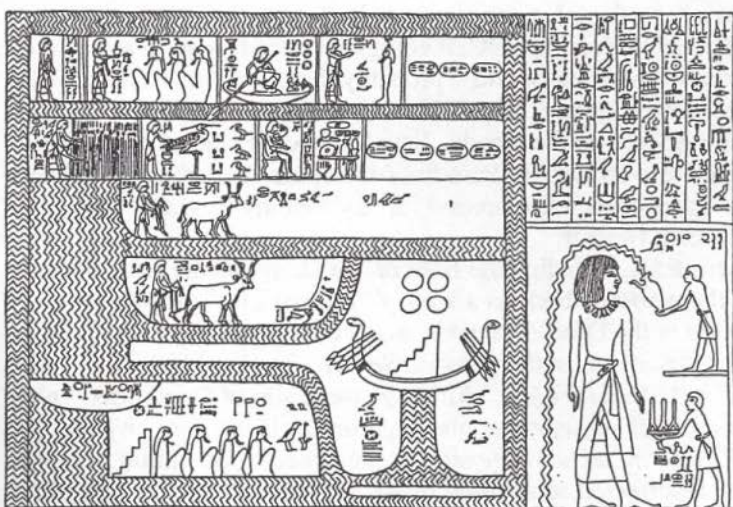
after relief stone carving  
Metropolitan Museum of Art  
New York

Saqqara world map

## Egyptian Maps of The Under World

Travel to an Earthly Paradise or Underworld by ship was a common theme of Egyptian religious books. During the Middle Kingdom (circa 2000 BC), cosmological route maps such as the one above were painted on the insides of coffins to direct the dead on their final voyage to paradise.

Their destination was the realm of Osiris called *Sekhet-Hetepet* or "Fields of Peace." It was also known as the Abode of the Sun. The Earthly Paradise was believed to lie in the west where the sun set. This realm was situated beneath Egypt on the spherical Earth—a concept portrayed in a cosmographical world map (right) circa 350 BC. Paradise is shown below surrounded by water on the *Nebseny Papyrus* circa 1400 BC.



papyrus painting after *Book of The Dead*, British Museum, London



**Osiris**  
—God of The Dead  
note serpent apr...

painted inside coffins to help celestial navigators.

It was not a one-way journey: the *Two-Ways Book* describes an ocean river that flows both directions. Life was portrayed as an endless cycle of birth, death, and rebirth as the soul journeyed to-and-from the celestial realm. In this manner, religious belief mirrored physical reality: Egyptian mariners traveled west to the realm of Osiris and returned to the Mediterranean via a “two-ways” ocean river—the North Atlantic current.

Papyrus texts tell stories of pharaohs and their minions who sailed to distant lands. During the 3rd millennium BC, Pharaoh Manetho sent a fleet into the Atlantic seeking news of Atlantis and the great continent beyond.<sup>1</sup> All that is known from this expedition is that Manetho's ships did not return until four years later. The funeral text of Pepi II (dated 2180 BC) claims Pepi sailed across the “Two Parts of Heaven” manned by “inhabitants from beyond the western horizon.”<sup>2</sup> Another hieroglyphic text reports that Queen Hatshepsut claimed sovereignty over “Lands of the Setting Sun” circa 1500 BC.<sup>3</sup> This claim confirms knowledge that the Western Abode was a physical reality. And the 12th-century BC pharaoh, Ramses III, boasted of expeditions to the “Inverted Waters.”<sup>4</sup>

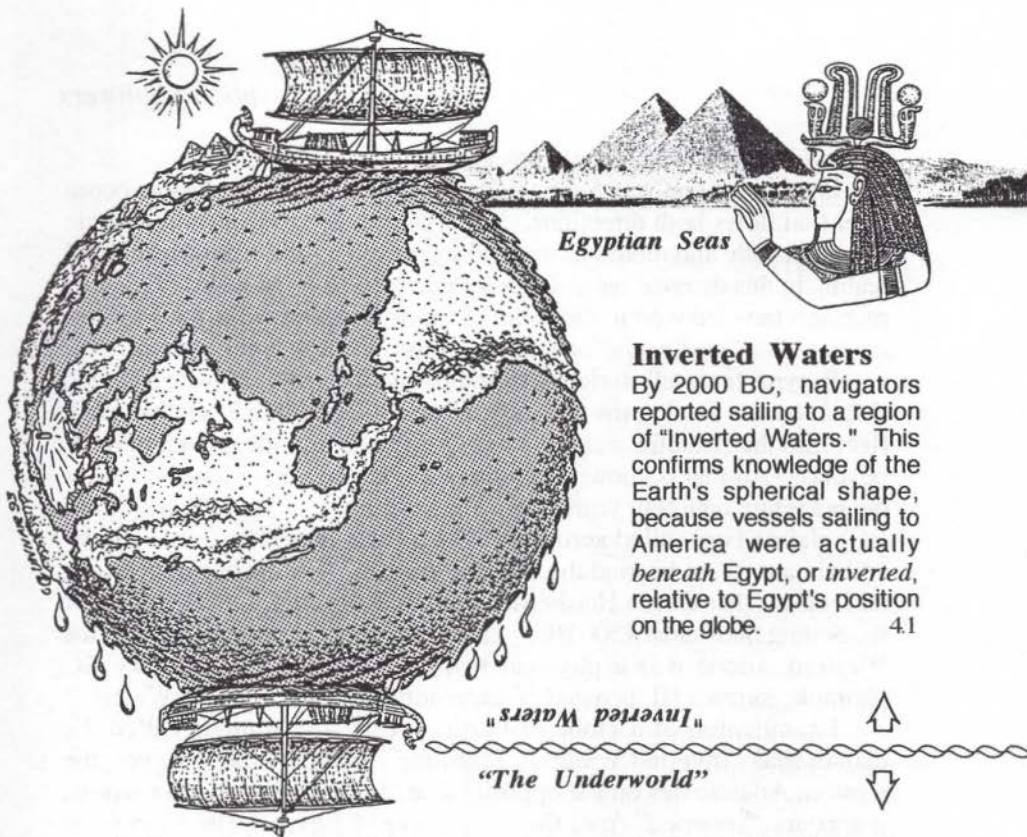
Examination of a globe of Earth reveals why Ramses called the distant seas “Inverted Waters.” From the vantage point of Egypt, the western Atlantic lies on the opposite side of the globe. In other words, it appears “inverted” from the perspective of Egypt. The expression “inverted waters” is an accurate description of the western Atlantic, and it confirms Egyptian knowledge of the Earth's spherical shape. Likewise, the realm of Osiris was known as “The Underworld” because it was located beneath Egypt on the spherical Earth. Egyptian cosmographical world maps portrayed Earth as a sphere—half of which was occupied by the Underworld, while the other half was the land of mortals. Between both worlds flowed the “Two-Ways” ocean river.

During the 4th century BC, Plato noted in his *Dialogues* that priests at Sais, Egypt, knew of a western continent beyond the Atlantic Ocean.<sup>5</sup> According to hieroglyphic inscriptions at Sais, the western continent was known by virtue of numerous expeditions across the seas.

### **Egyptian Civilization**

Towards the end of the 5th millennium BC, merchants from the Indus valley brought metal-working technology to the Nile delta.<sup>6</sup> Egyptian legends attribute the accompanying wave of cultural innovations to an anthropomorphic deity, *Thoth*, who was credited with introducing arithmetic, astronomy, medicine, music, and writing. An outgrowth of this foreign cultural inspiration was the production of wooden ships from planks. These ships were precursors of fleets that carried Egyptian merchandise to the Red Sea and the Indian Ocean.





### Egyptian Seas

#### Inverted Waters

By 2000 BC, navigators reported sailing to a region of "Inverted Waters." This confirms knowledge of the Earth's spherical shape, because vessels sailing to America were actually *beneath* Egypt, or *inverted*, relative to Egypt's position on the globe. 41

Followers of a new religion came to Egypt in 4241 BC. Semites and Aryans from the Middle East traveled by ship to the Nile river where they established the city of *Anu*—or "Sun City." The premise of Anu religion was monotheism; their supreme being was called *Ra* (the sun). The Anu were among the earliest tribes to realize that the sun was at the center of the celestial sphere. However, their innovative beliefs were not popular in conservative Egypt: for a thousand years after their arrival, theologians denounced such foreign beliefs as detrimental to social order. Then came the Deluge.

#### Dawn of a New Order

The World Flood of 3100 BC changed everything. Regardless of the pleadings and sacrifices carried out in the temples of Isis, the raging storms howled and thundered. The storm of "forty days and forty nights" dealt the final blow to the cult of the Mother Earth Goddess. Her mud-brick temples and stepped pyramids withered under incessant rains and rising tides—and so did the peoples' faith in the ancient religion.

Plato's *Dialogues* reveal that Egyptians were spared the worst devastation because many of their villages were located in sheltered areas far up the Nile river. However, cities on the delta were engulfed by rising seas. Other civilizations were not as fortunate: enormous floods

swept over cities along shores of the Red Sea and the Indian Ocean.

One of the consequences of the Deluge is a gap in the archeological record. Historians and archeologists have noted the appearance of highly advanced cultures circa 3000 BC—giving the impression of a sudden emergence of civilization. This is true of Egypt where scholars identified advanced societies along the Nile circa 3000 BC. Historian Will Durant observed: “At the very outset of recorded Egyptian history, we find mathematics highly developed.”<sup>7</sup> He noted a similar situation with regard to the palaces of Pharaoh Zoser in 3100 BC: the temple was an example of “perfection”—hardly to be expected from a civilization that was supposedly just getting under way. The lack of “developmental” forms of stone architecture made it seem as though advanced building techniques had miraculously appeared without the thousands of years of cultural evolution and experimentation that should have been required.

From a geological perspective, the Deluge was a minor surge in world-wide flooding that has witnessed a rise in sea level of over 300-feet during the past 20,000 years. Nevertheless, the Deluge washed away much of ancient Egypt, as well as many other regional civilizations. Cities on the delta were submerged beyond reach of archeologists, and they continue to sink further beneath the shores of the Mediterranean due to increasing weight of sediments on the underlying strata.<sup>8</sup> Buried in delta sediments are remains of Egypt's earliest civilizations.

Egyptians emerged from the Deluge uncertain of the temperament of the gods. Survivors reestablished their kingdoms on higher ground, while a *new order* of leaders emerged from the turmoil and wreckage of coastal cities. Tribal leaders organized an elite warrior class led by a *pharaoh*, or chief priest. They abandoned the female-dominated religion which had failed to prevent catastrophe; their favored replacement was the Anu sun god—*Ra*. Henceforth, people learned to worship pharaohs as incarnations of the sun; Isis was demoted from her role as Queen of Heaven to mistress of the sun.

Builders of the New Order established settlements farther inland along the Nile, thereby hoping to reduce the vulnerability of cities to future floods. Egyptian rulers surveyed the devastation wrought upon mud-brick buildings and decided that new temples would be made of more durable materials: limestone and granite. Architects introduce a new style of monumental architecture featuring round stone columns, bas-relief stone murals, and flat-sided pyramids. This cultural transformation was the origin of a “Classical” Mediterranean style which dominated Greco-Roman civilization and eventually spread around the world in the van of conquest and commerce.

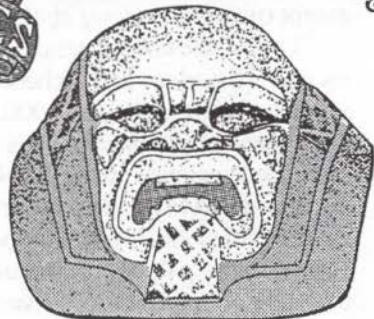
Building projects were unprecedented in magnitude: for example, Cheop's pyramid at Gizeh was built from 2,500,000 limestone blocks



OLD WORLD  
FACES IN ANCIENT AMERICA



**Pharaoh**  
Abu-Simbel, Egypt  
ornamental beard

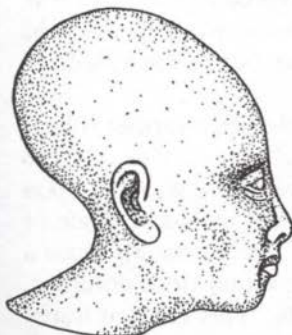


**Olmec priest**  
ornamental beard  
statuette circa 500 BC  
Valley of Mexico

**King Sakhra**  
ornamental beard  
Cairo, Egypt



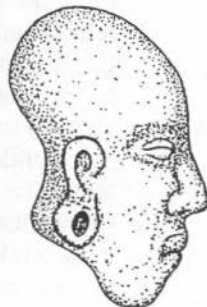
**Olmec priest**  
stone statuette  
ornamental beard  
Veracruz, Mexico



**Akhnaton princess**  
deformed head  
Egyptian sculpture  
1350 BC

**Flathead Tribe**

woman & child  
with forehead press  
Mississippi Valley  
from Blink (1899)



**Ecuadorian sculpture**  
deformed head  
400 BC to 500 AD

each weighing several tons; Queen Hatshepsut's temple was carved into solid rock; and the temple complex at Karnak covered 60 acres with hundreds of stone buildings and 86,000 statues. Several million slaves labored continuously to make the pharaohs' dreams become reality.

From the 3rd millennium BC onward, pyramids ceased having a role in agricultural worship. New pyramids reflected the prevailing religious transformation which promoted supremacy of the sun. External stairways, truncated layers, and temples at the top were discarded in favor of a simple triangular shape symbolizing the Earth womb of the sun god.<sup>9</sup>

Copper was essential for Egypt's grand creations including the pyramids at Gizeh and temples at Karnak required enormous amounts of copper. The relatively soft metal was combined with tin to form a very hard alloy: bronze. This was the preferred material for casting metal tools. Continuous wear on metal tools and the increasing demand for stone architecture resulted in rapid depletion of regional copper reserves.

Unfortunately, Egypt lacked major copper deposits. Explorers found a mountain of ore on Magan island in the Persian Gulf, but miners reduced the "mountain" to level ground. Next, they descended upon the Mediterranean island of Cyprus (or Copper Island). When the copper veins of Cyprus began to grow thin, explorers were dispatched across the seas in search of the vital mineral. Their search was rewarded in the Great Lakes region of North America where Egyptian miners found the world's most concentrated source of pure copper nuggets.

### **Math & Astronomy: The Science of Discovery**

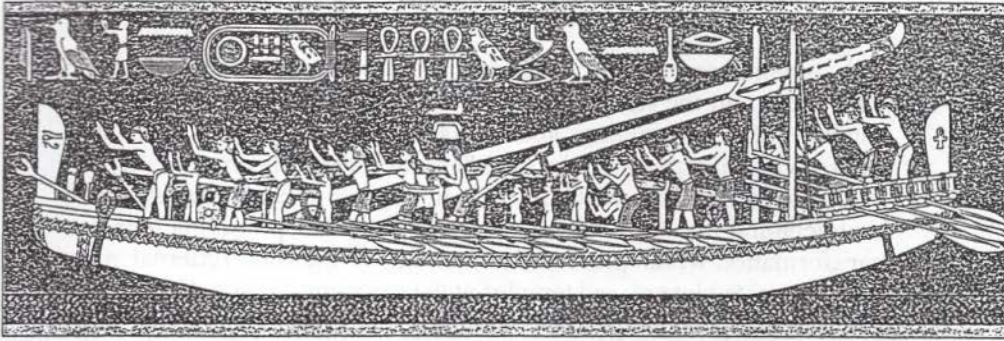
Egyptian scientists played a key role in American discovery. Their contributions to the cavalcade of exploration included development of technology for mapping, navigation, and keeping time.

Astronomy served an important function in all agricultural societies. Keeping track of the sun's position and calculating the passing of the seasons were essential for determining when to plant and harvest crops. Relationships between positions of the sun, moon, planets, and stars to the seasons implied that heavenly bodies exercised magical powers over social and political affairs as well. Consequently, observing and recording celestial movements and events was a major concern of leaders who sought to use priest-astrologers to influence the destiny of nations.

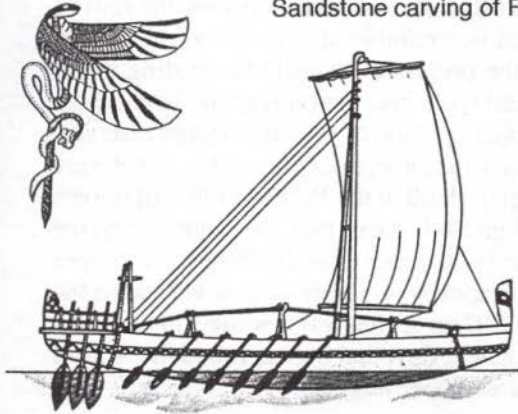
Egyptian astronomers were the benefactors of knowledge derived from the Indus civilization and Mesopotamia. The Zodiac was well-established when Egyptian skywatchers began their craft, and the solar year was already divided into "four quarters," or "four seasons." Observatories at Memphis, Sais, and Luxor contributed to the knowledge of the heavens by making thorough records of celestial events and by making accurate measurements using calibrated equipment. Over a period of



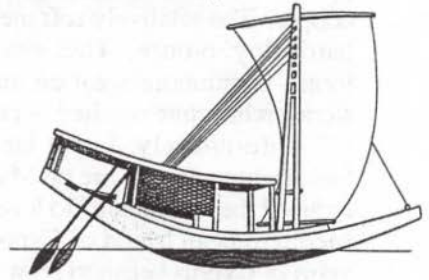
# Egyptian Ships



**1. Seagoing Merchant Ship (2800 BC)**  
Sandstone carving of Pharaoh Sahure's ship.

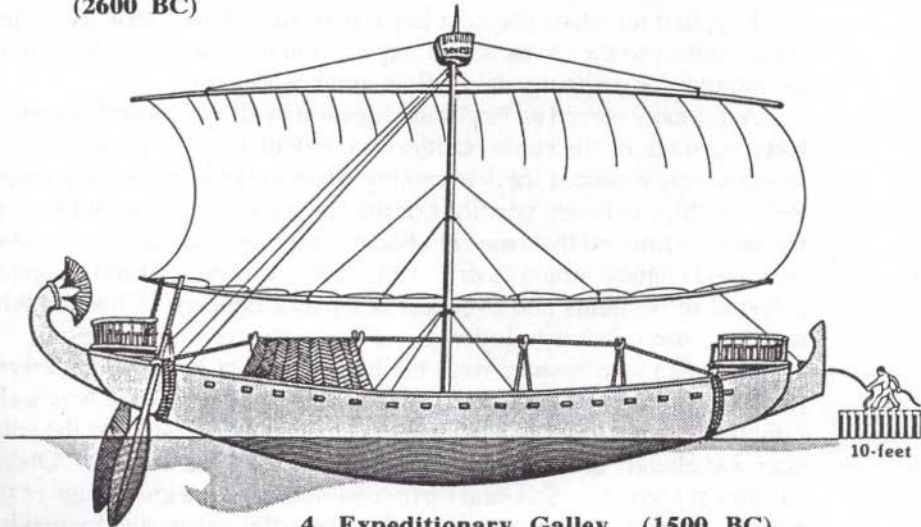


**2. Egyptian Cargo Ship (2600 BC)**



**3. Nile Riverboat (2400 BC)**

4.2



**4. Expeditionary Galley (1500 BC)**  
Vessels of Queen Hatshepsut's merchant fleet which sailed to Punt. Length: 160-feet.4.2



reed ship in shipyards  
Dojer dynasty (1500 BC)

several thousand years, astronomers recorded the relationships between the moon, sun, and stars using a device called the *boy merkhet*—which consisted of a notched staff and plumb line.<sup>10</sup> They also used *transits*, or observing tubes, to accurately pinpoint movements of stars. From these observations emerged a concept of time as an endlessly repeating pattern of cycles embodied in the orbits of celestial bodies.

By the mid-2nd millennium BC, astronomers perfected *Ramesside* star charts which listed the rising times for each constellation over the Nile capital at Luxor. Surveyors used star charts and water clocks to calculate their distance east or west from the Lower Nile. The river served as a convenient baseline because of its near perfect north-south geographical alignment. Distances north or south of Luxor were determined by known linear measurements or observations of rising stars. These techniques when combined with knowledge of mathematics and geometry enabled surveyors to accurately calculate longitude and latitude when mapping new territories.

In the early 16th century, an Arabian admiral named Peri Reis constructed a world map using copies of ancient charts taken from the library at Alexandria, Egypt. The maps were removed at the onset of a 7th-century invasion in which the library was burned. According to Reis, the ancient charts dated from the time of Alexander the Great—circa 350 BC. The Old World section of the Reis map is of near-perfect accuracy and bears testimony to the skill of ancient cartographers and surveyors.<sup>11</sup> It also bears testimony to ancient voyages across the seas for the purpose of surveying Earth's continents.<sup>12</sup>

### Commercial & Expeditionary Vessels

During the early years of the New Kingdom, Egyptians sailed in wooden ships seeking exotic imports for the pharaoh's amusement. Pharaohs often hired mercenaries or commanded tributary states to mount expeditions at their own expense. A few of these expeditions were significant enough to warrant monuments at Deir el-Bahari, Edfu, and Sakara. One sandstone inscription is an account of Pharaoh Snofru's expedition to Lebanon for a shipment of cedar. Another inscription recounts the three-year voyage of Phoenician sailors around Africa circa 2500 BC at the request of Pharaoh Sahure. Sandstone inscriptions also record an expedition on the Red Sea undertaken at the command of Queen Hatshepsut in 1500 BC. She dispatched ocean-going galleys to the Land of Punt (Somalia) for dyes, spices, honey, and textiles.

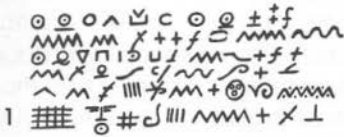
From the beginning of the 3rd millennium, expeditionary vessels were constructed from wooden planks. These were not the only ships engaged in long-distance commerce: biblical accounts tell of reed ships in the service of pharaohs as late as the 2nd century AD. Many wooden



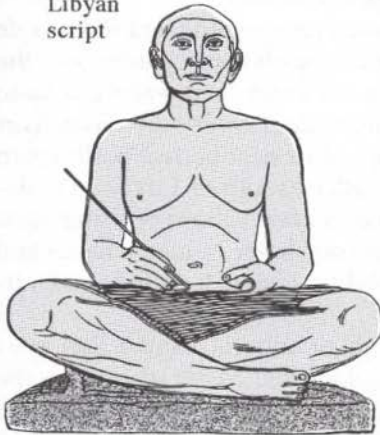
# OLD WORLD

## Cultural Diffusion

# AMERICA

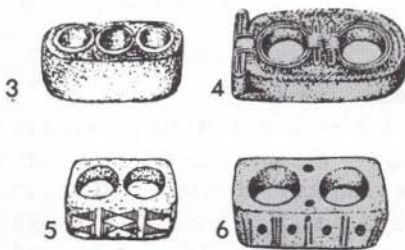


1 Libyan script



2. Egyptian Scribe, Louvre Museum, Paris

### Egyptian inkwells

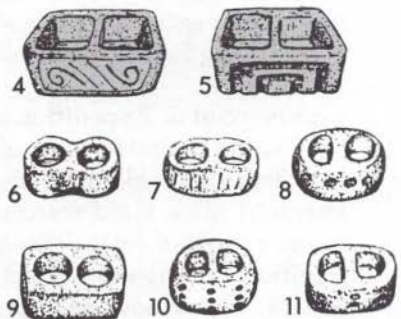


hieratic writing or hieroglyphs written in script



1. Mayan mural at Bonampak, Mexico

### Mexican inkwells



### Inkwells & Ancient Writing

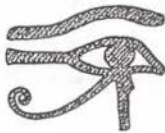
Egyptians and Mayans had several similar writing systems, including hieroglyphs (picture writing), hieratic writing (or common script as in A-2), and linear symbols (OW-1 & A-3). Mayans used linear symbolic writing on the trim of priestly robes, as in A-1 above and enlarged as A-3. Egyptians used double-chambered inkwells for red & black ink; Mexicans used similar inkwells A-4 & 5 (Olmec, 1000 to 500 BC) and A-6 to 11 (from Harvard's Peabody Museum Collection).



vessels exceeded 100-feet in length. Some of these are clearly portrayed on sandstone walls at Deir el-Bahari.

The design of Egyptian oceangoing vessels was an outgrowth of reed-boat and skin-boat technologies. Wooden hulls of Nile ships were similar in shape to modern yachts with a high bow and stern. However, they lacked keels. In order to compensate for limited internal support, Egyptian shipbuilders used a tension cable suspended above the deck to keep the ends from sagging. Wooden planks on the hull were held together with fiber stitching. This was a vestige of skin-boat technology. Seams were caulked and the entire hull was covered with an oil-based preservative. Masts consisted of two long poles joined at the top to form a triangle. Many vessels carried a compliment of galley slaves.

Egyptians regarded their ships as temples of the sun god. The *All-Seeing Eye*, or *Udjat eye*, was painted on the bows to enable the ship to



“see” its way through fog. At the stern, Egyptians carved an *ankh*, or “life-force” symbol in the shape of a cross with a loop on top. It represented the “breath of the sun” in hopes of a fair breeze.



### Evidence of Egyptian Contact

In spite of the great antiquity of Egyptian voyages to the American Abode, researchers have found evidence of their visits in traditions, loan-words, writing, medical practices, sculptures, artifacts, and symbols.

#### Loan-Words & Writing

Egyptian words occur in several native languages. A hieroglyphic text from the 12th-century BC tomb of Ramses III speaks of the sacred mountain of *Manu* which was located in the Land of the Setting Sun. Mayans had an underworld kingdom called *Mani*.<sup>13</sup> Mexican and Peruvian names for the sun god (*Ra*) are phonetically the same as the Egyptian *Ra*, meaning “sun god.” The Peruvian term for “paradise,” *yaru*, derives from the Egyptian *iaro*—also meaning “paradise.” And the Mexican word for the sacred crocodile barque, *cipak*, derives from an Egyptian word with the same meaning—*sibak*.<sup>14</sup>

Numerous double-chambered inkwells have been found at Mexican sites. Although these artifacts were produced locally, they are the same size and shape as Egyptian inkwells. Two chambers held the essential colors: red and black. Inkwells have been found at Olmec sites dating from 500 BC and at Mayan ruins of the 7th century.<sup>15</sup>

Similar hieratic (informal) writing styles have been identified in North Africa and Central America. Painted lettering on the robes of Mayan priests at Bonampak are very close to ancient Libyan writing.

Harvard scholar Barry Fell noticed an uncanny similarity between



OLD WORLD

Cultural Diffusion

to AMERICA



Egyptian dwarf-god Bes  
1000 BC

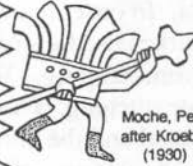


cartoon symbol  
Moche, Peru



Peruvian dwarf-god  
Raimondi Monolith  
200 BC

cartoon symbol  
Egypt



Moche, Peru  
after Kroeber  
(1930)

pharaoh or sun  
cartouche  
Egypt



ankh  
knot

Ankh Knot on Mexican vase  
from DuPouget (1895)  
National Museum of Mexico

ankh  
knot



serpent  
headdress



sun cartouche  
Mexico

serpent headdress  
Mixtec codex

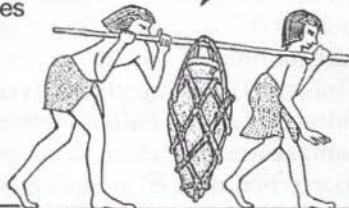


Pharaoh, sun-god  
with incense burner  
Tablet of Kings,



Mixtec sun-god  
with incense burner  
Tonatiuh  
from codex 1400 AD

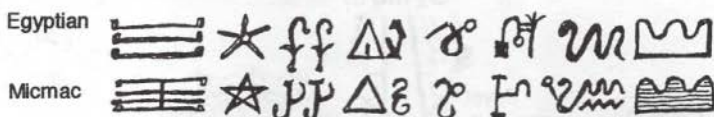
Egyptian amphora & net sling  
after a mural at Thebes



Mexican amphora  
with net sling  
after Vatican Codex



## Native Hieroglyphic Text



Micmac writing and Egyptian hieratic glyphs. He also identified several Egyptian loan-words used by Algonkian and Micmac speakers including *waban* (sunrise), *muskun* (heaven), and *oweao* (circle). Fell theorizes that Egyptian merchants taught natives a few words and symbols useful for trading. Subsequently, Algonkians developed their own written language. French scholar Father Eugene Vetromile reported in 1866 that: "When the French first arrived in Arcadia (Canada), the Indians used symbols to write on bark." According to Vetromile, all Northern Algonkian tribes carried on correspondence using birchbark letters.

Due to the fact that writing is regarded as one of the essential ingredients of advanced civilizations, Old World influence on New World writing deserves careful evaluation. Here-to-fore, most scholars have assumed that significant contact was impossible; so they have ignored linguistic evidence. New World writing systems were periodically standardized, thus Old World contributions are often difficult to detect.

### Symbols

Native American artists adopted numerous Egyptian symbols, or they adapted their own varieties after foreign inspiration. The most distinctive Egyptian symbol found in native America is the symbol for the eye of the sun—or *udjat*. This symbol includes a serpent rising out from the eye in the ancient tradition of using a serpent to represent wisdom (which is synonymous with "serpent power"). The *udjat* represents the sun—*Ra* or *Re*. The Eye symbol placed on a disk also represents the Sun God. Natives of ancient Central America used a similar serpent's eye superimposed on a disk to represent the sun: at the Mexican ceremonial center of Teotihuacan (circa 500 AD), the glyph *Re* stood for the "serpent's eye" (*ojo de reptil*), and it was also used to represent the sun.

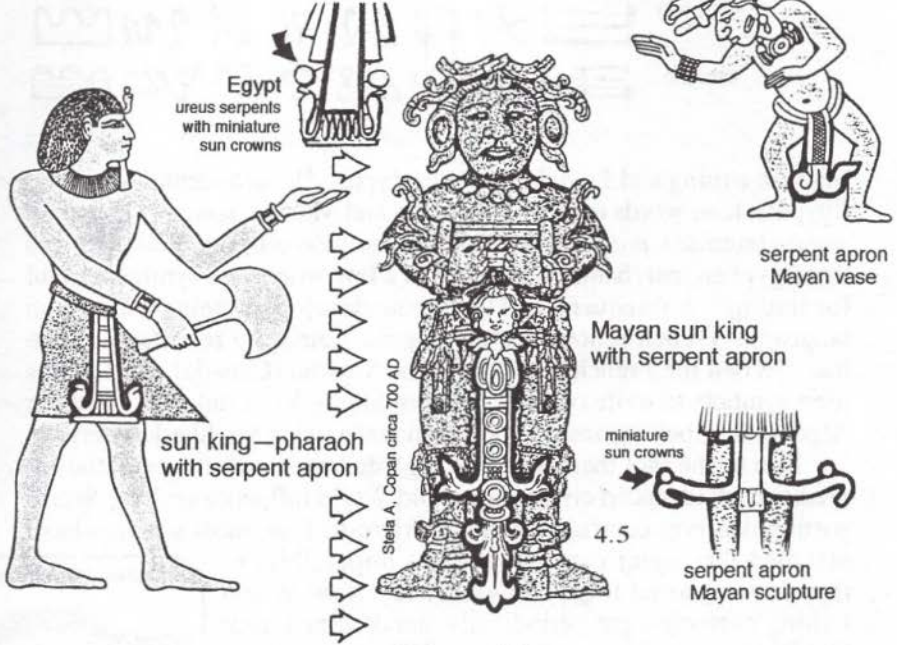
The Egyptian *ankh*, or "life-force" symbol appears on a Mexican pot in the form of a knot—which was also a common usage in the Nile region. Egyptians used an ellipse or cartouche to surround the names of pharaohs who were incarnations of the sun. The cartouche



*Re* glyphs after Muser (1978) Caso (1967)



### Serpent Apron Symbol

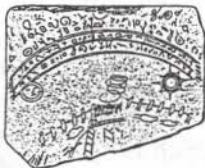


## Artifacts

4.3



Egyptian Goddess Isis statuette Acajutla, El Salvador after photograph Cuevas (1940)



Davenport Tablet portrayal of Egyptian Djed Festival found in an Inca burial mound 1874



Egyptian/Libyan inscription, Chile Admiral Mau's proclamation of annexation after Carl Stolp (1885) and Fell (1989)

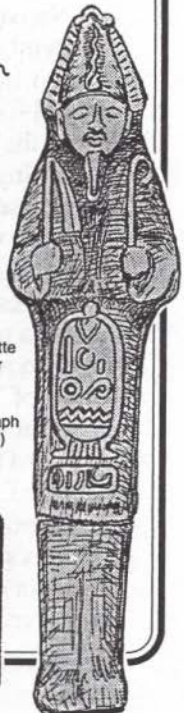
Egyptian sun pyramid gold plate at Ouenca, Peru after R. Hieronimus photograph



griffon sphinx Inca period, Cuzco, Peru from Paul Marcoy (1875)

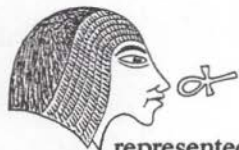
Egyptian pharaoh sarcophagus statuette Acajutla, El Salvador

after photograph Cuevas (1940)



Egyptian cartouche alabaster egg 600 BC found in Idaho (ca 1900)





Egyptian princess with sun-breath symbol

represented immortality—which was presumed to be characteristic of both suns and pharaohs. Mayans adopted a similar cartouche to surround the day names of the sun. Mexican *codices*, or picture books, often portray rulers wearing a serpent crown that is reminiscent of the *uraeus* serpent crown of pharaohs. Egyptian artists often placed an *ankh* symbol or a disc before the pharaoh's nose to represent the life-giving breath of the sun. Similar "sun's breath" symbols were used by Olmec and Mayan artists to represent the sun's breath. A disc-shaped ornament which Central American natives wore suspended from their noses also represented the "sun's breath." Peruvian artists seem to have adopted the Egyptian practice of using cartoon characters to personify symbols such as the *ankh*, and they devised their own version of Egypt's dwarf god, Bes. Mexicans and Egyptians used "Serpent Apron" motifs, and they portrayed the sun god holding a spoon-shaped incense burner.

Olmec warrior with sun-breath symbol



### Artifacts

In 1545, the archbishop of Salvador, Brazil, astonished Vatican historians with reports of Egyptian hieroglyphs found on ancient ruins.<sup>16</sup> Although the artifacts were "lost" during the turmoil of passing centuries, artifacts bearing Egyptian hieroglyphs continue to surface in the Americas. In 1900, an alabaster talisman bearing the cartouche of Pharaoh Tutankhamun turned up in Idaho.<sup>17</sup> In 1885, an amateur archeologist named Carl Stolp found a lengthy rock inscription in southern Chile. Harvard scholar Barry Fell identified the inscription as a testimonial to a Libyan-Egyptian expedition. According to Fell's translation, an Egyptian commander named Rata sailed to South America in 231 BC and claimed the land for the king of Egypt. Peruvian-Egyptian artifacts include a griffon sphinx carving that Paul Marcoy found at Cuzco in 1875. An artifact called the "Djed Festival Tablet" was excavated from a burial mound near Davenport, Iowa. The tablet bears an inscription that is similar to Egyptian hieroglyphic writing.<sup>18</sup>

Among the most significant Egyptian artifacts found in the Americas are two statuettes uncovered at an archeological site in El Salvador in 1914. Historian Mariano Cuevas reported the discovery in his *Historia de la Nacion Mexicana* (1940). According to Cuevas, a veteran archeologist, Professor Miguel Angel Gonzalez, conducted "precise" excavations at the Pacific port city of Acajutla—the site of an ancient city northwest of San Salvador. One of the statuettes which Gonzalez excavated from several feet below the surface is a miniature sarcophagus inscribed with an Egyptian cartouche; the other is a likeness of the Egyptian goddess Isis. Cuevas noted that local villagers had removed or destroyed many similar artifacts from the site. He concluded that the statuettes were evidence of ancient voyagers from Egypt:



## AMERICAN DISCOVERY

In the presence of these artifacts, it is a real possibility that Egyptians lived in the ancient city or that it was an Egyptian colony. Their influence in our country (Mexico) could have resulted from immigration—if not by Egyptians then by peoples in contact with Egypt.

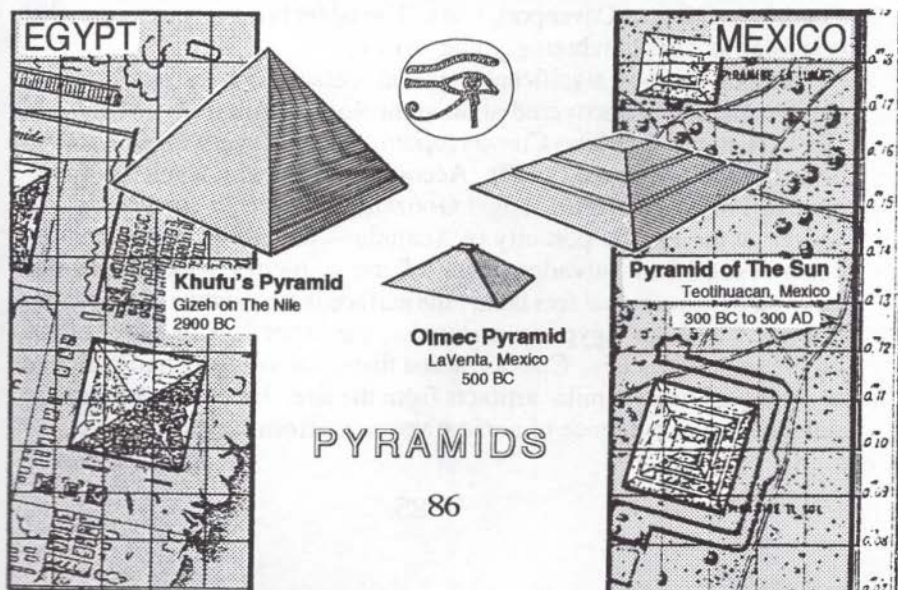
### Native Traditions

Egyptian contacts left an impression on the folklore of Central America. The ancient Mayan *Popol Vuh* and Mexican traditions tell stories of ancient vessels coming from the East.<sup>19</sup> It is significant that these ships carried explorers seeking “the abode of the sun.” Furthermore, there is evidence in Egypt that the voyagers successfully returned home: a team of German microbiologists has identified two native American plants in the sarcophagus of Ramses III. Tobacco and cocaine were used in the embalming of the pharaoh.<sup>20</sup>

### Egyptian Impact on Native Culture

Foreign contact brought numerous traditions, art styles, religious beliefs, city planning concepts, medical practices, and weaving technology. Several canine breeds can be attributed to Egyptian cultural diffusion. Many contacts had an inspirational nature, particularly in the realms of art and religion. Indigenous people adapted and elaborated foreign ideas to the extent that resulting cultural developments bore slight resemblance to foreign sources. This was particularly true with regards to pyramid design.

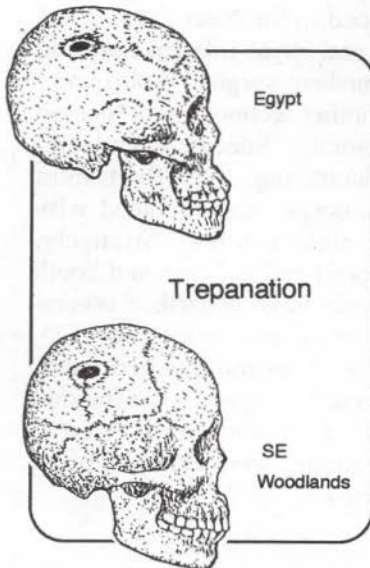
Nile voyagers had a profound impact on native religious beliefs: they introduced worship of the personified sun god in Peru, Central America, and the Southeastern Woodlands. Many indigenous rulers adopted the title of “Sun Chief.” However, architectural and religious traditions surrounding the Earth Mother Goddess cult were sufficient to assure



survival of her ancient temple pyramids. Her multi-layered structures with external stairways stood in stark contrast to the smooth-sided, pointed pyramids of Egypt. Temple pyramids from Peru to the Great Lakes served multiple functions—reflecting a variety of Old World influences and native inspirations: they were monuments of ancestor worship; they were tombs for sun chiefs; they were centers for agricultural rituals; and they were places for astronomical observation.

Only three New World pyramids out of many thousands evoke images of Egypt's colossal structures. These are the pyramids of the Sun and Moon at Teotihuacan, Mexico, and earthen pyramids at Panche, Colombia, and LaVenta, Mexico. Archeologists who excavated LaVenta's pyramid described it as a rectangular, pointed structure. However, isolationist scholars later assumed it was really "conical" in shape and modeled after a volcano. By reconceptualizing the structure as a volcano, isolationists hoped to avoid any implication that the pyramid's design might have been influenced by Old World visitors.

Architects at Teotihuacan were aware of Khufu's Pyramid at Gizeh which stands 140-meters high. Mexico's Pyramid of the Sun occupies an identical area at the base (44,000 square meters) although it is only half as high. Mexican historian Mariano Cuevas believes the Egyptian structure served as a model because both have the same geographical alignment. Furthermore, archeologists have identified the "Re" serpent/sun glyph at Teotihuacan. This artifact of *Re*—the Egyptian Sun God—is a sure sign that Nile mariners visited the principal Mexican religious center in the Valley of Mexico.



### Medicine

Native tribes practiced cranial surgery, embalming, and head deformation from the Mississippi Valley to Peru. Evidence of these cultural traits found at archeological sites is suggestive of Middle Eastern if not Egyptian influence. Head deformation practiced on infants was regarded as an aristocratic privilege as was the case with the Flat-head tribe of the Midwest.

Native tribes achieved remarkable medical discoveries by identifying pharmaceutical plants, such as quinine and aspirin, however brain surgery was not one of their innovations. Egyptian surgeons were among the first medical





1. Anubis or jackal protector of the dead Tutankhamun's tomb



2. Egyptian terrier



3. Mesopotamian spaniel circa 1000 BC Louvre Museum, Paris

Egyptian Dogs in America



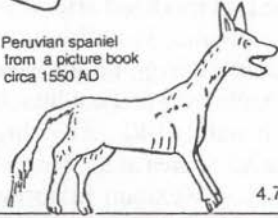
1. jackal in Florida ancient wood carving Key Marco, FL



2. Peruvian terrier from a Moche jar 500 AD



3. Peruvian spaniel from a picture book circa 1550 AD



4.7

stone carving found at Millatoyuca, Mexico



from Cuevas (1940)

Mexican "Mummy"

practitioners to develop a technique called "trepanation," whereby a hole is cut into the cranium to remove tumors, or relieve excessive pressure on the brain. Suitable tools, anesthetics, and antibiotics were first developed in the Near East, where sufficient resources and royal interest nurtured development of the medical-surgical profession.

Embalming is another technology pioneered by servants of the pharaohs. Successful embalming is not a simple undertaking. Body fluids must be drained from the corpse and replaced with camphor and clove preservatives. Strangely, mummification was practiced in North and South America. Archeologists have unearthed several Peruvian rulers interred as mummies. In 1775, Kentucky pioneers found several hundred mummies in a catacombs near Livingston. The fragrant aroma of the remains led historian Josiah Priest to conclude that the mummies were evidence of an ancient Egyptian colony.<sup>21</sup>

### **Egyptian Dogs in Ancient America**

Egyptian canines portrayed in aboriginal American art or found in Peruvian burials include jackals, spaniels (or basenji), and terriers. The jackal is portrayed on a wooden mask from Key Marco, Florida, on the wall of Anubis Cave, New Mexico, and on a stone carving at Texcoco, Mexico.<sup>22</sup> Dog bones comparable in size to the cocker spaniel are present at the Mayan site of Cozumel, Mexico. Mayans called their hounds *te-chi-chi*. Spanish explorer Hernandez identified *te-chi-chis* as similar to Old World spaniels.<sup>24</sup> A third canine breed corresponds to the Egyptian terrier.<sup>25</sup> It was portrayed on Peruvian ceramics; mummified remains of terriers have been found in Inca burials.

### **Impact on The Old World**

New World copper resources helped build stone monuments in Egypt, Babylon, Greece, India, China, and Central America. A lasting legacy of these monuments has been the preservation of ancient arts, science, and history.

Rulers in each of the major civilizations borrowed the stone-carver's craft from neighbors. Each culture assured the individuality of its own monuments by requiring artisans to use traditional religious symbols and native designs. Nevertheless, a few foreign motifs were invariably incorporated from parent carving industries. The process of technological transfer and diffusion has left clues for modern investigators regarding the geographical migration of stone-carving crafts.

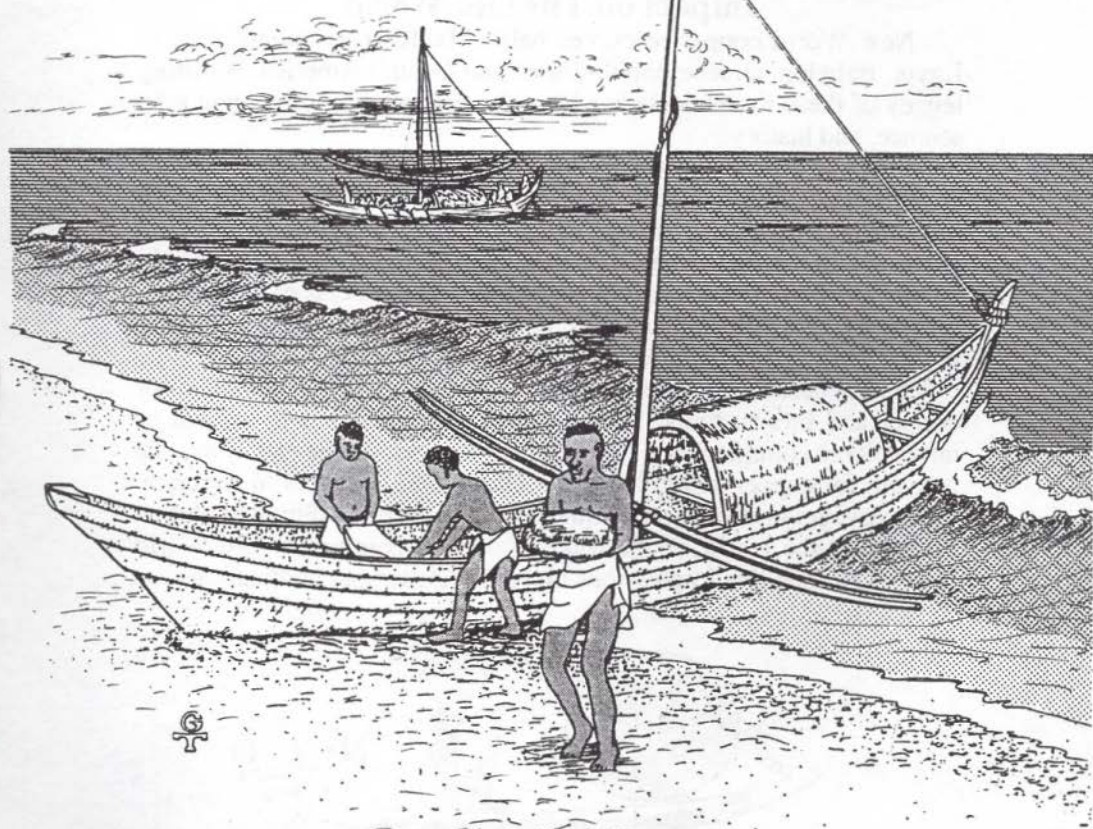
As the desire for stone monuments spread, so did the demand for copper and bronze tools. These building projects led to growth of international commerce and transoceanic voyages. In the end, it was the demand for copper which led many Old World voyagers to America. Their voyages and discoveries quickened the pace of cultural evolution throughout the world; in the wake of ancient commerce, Old World traders left indelible impressions on Native American civilizations.



**The Barque of Millions of Years**  
Nile astronomers called the sun god's ship the "Barque of Millions of Years," because they believed the sun had traveled its same course across the heavens for millions of years.  
P. 2

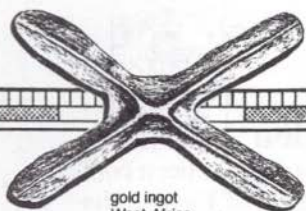


Rakel (1894)



### ***Trans-Atlantic Traders***

*African voyagers step ashore in Mexico after two months at sea, circa 900 BC.*



gold ingot  
West Africa  
from Rakel (1894)



## WEST AFRICAN CREATORS (1000 BC—1500 AD)

Black explorers reached the shores of eastern Mexico nearly 3,000 years ago. Sailing from the West African kingdom of Ghana, they were the vanguard of trading expeditions that continued until the 16th century. They inspired native business practices and jewelry manufacturing.

African settlers were already living in Caribbean villages when Spanish explorers dropped anchor off Cuba. Although reports of “black natives” appeared in the earliest Spanish chronicles, modern historians typically assumed they were cases of “mistaken identity.” Historians believed it was inconceivable for Africans to be in America until the Spanish began importing slaves in the 16th century, therefore a ruse was devised to explain the unorthodox reports of black natives: presumably, natives simply used black “body paints” to conceal the true color of their skins. However, that belief was shaken in 1862, when Mexican *campesinos* found a colossal stone sculpture in the jungle near Tres Zapotes. The sculpture was that of a man's head, and it bore the distinct features of a West African—thick lips, bold chin, and flat nose.

The *campesinos* were frightened. Many believed the sculpture was the work of demons, giants, or magicians. The fact that it was of an alien race heightened their anxiety and bewilderment. Scholars were inclined to suspect a hoax, until archeologists found similar sculptures buried near the Gulf of Mexico. Ten of these giant heads have been found—all carved from black basalt. They stand between six to nine-feet high and weigh up to 40 tons.

Historians were baffled. There was no “reasonable” explanation for ancient African sculptures on Mexican soil. The best excuse anti-diffusionists were able to contrive was that the sculptures were “abstract art!” Presumably, any similarity to *real* West Africans was coincidental.



colossal head, Hueyapan, Mexico  
photo from Cuernus (1940)





### Africa's Mystery Civilization

The enigma of African artifacts in ancient America has been compounded by the lack of archeological research outside of Egypt. Historian Cheikh Diop believes a "parent" civilization was located in southern Egypt and the Sudan at the source of the Nile.<sup>1</sup> Diop has shown that Nubian ceramics from the Sudan featured decorative motifs that later appeared in classical Nile-valley civilizations. He credits this Sudanese "parent culture" with giving to Nile civilization traditions of matrilineal inheritance and monotheism. Egyptians honored the ancestral homeland of royalty by facing south towards the Sudan when they prayed. Pharaohs called the Sudan "Land of The Gods."

Influence from the Sudanese heartland also reached the Niger civilization of Ghana and Senegal in West Africa. Diop believes linguistic and ceremonial parallels between Egyptians and Ghanians reveal a common heritage with the Sudanese.

Although much of northern Africa has been engulfed by the Sahara Desert, the region was much different 10,000 years ago. A cool and moist climate supported Neolithic societies along several major rivers, including the Niger, the Volta, and the Nile. After 7000 BC, the Sahara began its transformation into a desert. Societies that were once culturally similar began to develop individual identities. By 2000 BC, the Sahara had become a major barrier to commerce, although horse and foot caravans continued along ancient trails serviced by way-stations called *oases*. Asiatic camels joined the trans-Sahara trek by the 4th century BC. They transported salt, iron, copper, gold, ivory, and textiles.

While pharaohs ruled the Nile valley, "paramount chiefs" ruled the tropical kingdoms of Guinea, Senegal, Ghana, Mali, Nigeria, Sudan, Kush, and Ethiopia.<sup>2</sup> Ghana was the most powerful kingdom in the west. Its location on the Atlantic coast at the southern terminus of the Sahara trade network made it the region's leading mercantile center. A thriving commercial exchange brought the riches of the Sudan and much of South Africa into the hands of Ghanian merchants. Ghana's population and wealth grew accordingly, and so did the wealth of Ghana's paramount chiefs. In the 11th century, Arab historian al-Bakri wrote that Ghana's paramount chief commanded an army of 200,000 warriors. His palace was a pavilion of golden splendors. Indeed, gold was so plentiful that young princes wore golden threads woven into their hair.

### Discovery Voyages

The earliest African expeditions across the Atlantic occurred in the mixed company of crews sailing Phoenician and Egyptian galleys. From the 3rd millennium BC to the 1st millennium BC, slaves from a variety

of ethnic groups, Carthaginians, Egyptians, Berber tribesmen, and Black Nubians, pulled at the oars of merchant vessels as well as ships hired for royal expeditions. When Pharaoh Sahure's Phoenician allies circum-navigated Africa during the second millennium BC, Black Africans served both as slaves and as captains.

### The Paramount Quest

Ghana was situated in the most ideal position for launching expeditionary voyages across the Atlantic. The shortest distance across the ocean lies between Africa's west coast at Cape Verde and the Caribbean. Africans and Phoenicians knew from their many voyages that a great equatorial current passed alongside Ghana's coast and headed due west into the Atlantic Ocean. By the second millennium BC, most civilized nations had myths of continental lands across the seas, so seafarers expected to reach land on the other side. Paramount chiefs of Ghana were aware of Phoenician and Egyptian discoveries; they were also powerful enough to mount independent expeditions.

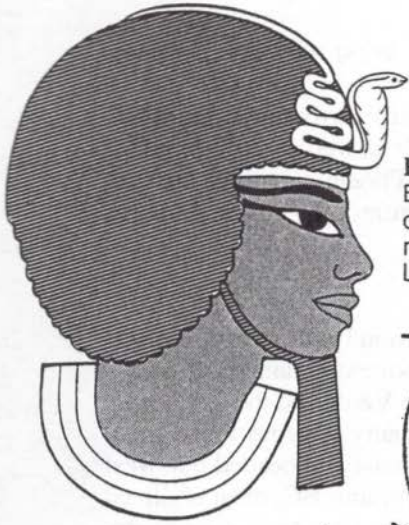
According to West African tradition, a paramount chief from Ghana sailed across the Atlantic in the 9th century BC.<sup>3</sup> Tribal elders passed along the oral tradition until it was recorded by Arabian scholars during the 14th century. Most anti-diffusionist historians conclude that the voyage was a failure attributed to the ephemeral rationalization of "lost at sea." However, the voyage coincides with archeological evidence of African sailors coming ashore along the Gulf Coast of Mexico.

Olmec artisans produced colossal stone carvings in the 9th century BC to commemorate the visit of a West African king. These are the colossal sculptures found by campesinos during the late 1800's. Besides the fact that these sculptures have the basic facial features of West Africans, they were carved with unique helmet-shaped crowns which are the distinctive hallmark of Ghana's paramount chiefs.

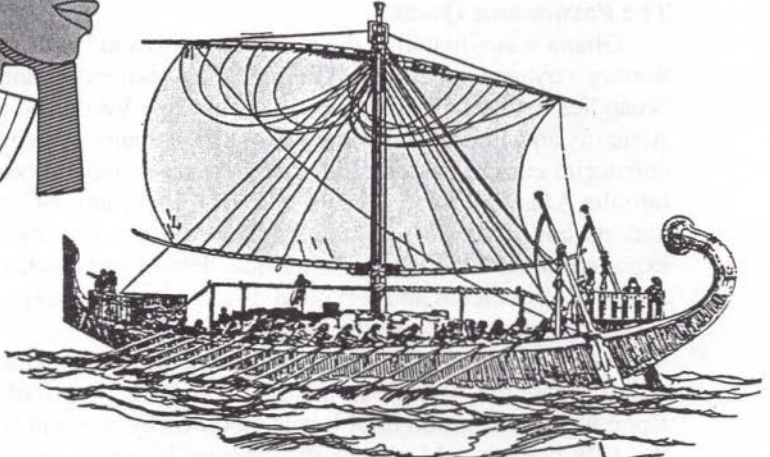
During the 14th century, Arab historian Ibn Amir Hajib recorded oral traditions of several trans-Atlantic expeditions following the 9th-century AD Moslem conquest of North Africa. Hajib's *Arabian History of Africa* includes references to expeditions by Sultan Abubakari and Sultan Kankan Musa of the West African kingdom of Mali.<sup>4</sup> According to the legend, Abubakari dispatched a trading expedition of 400 ships loaded with provisions, gold, iron and textiles. Traditions of prior voyagers and Phoenician tales led Abubakari to believe lucrative trade was possible with peoples on the far side of the ocean. The sultan waited in vain for several years without hearing any news of his lost expedition. By 1300 AD, he decided to see for himself what lay across the seas, so he assembled a second fleet of two thousand vessels. He put to sea and was never heard from again.<sup>5</sup>



## Black African Ships



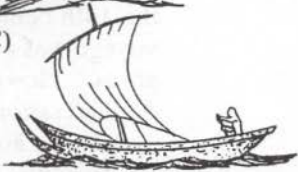
**Pharaoh Amenhotep III (1400 BC)**  
Black African pharaohs commanded hundreds of vessels in the fleets of Egypt's navy and the navies of tribute states, including Phoenicians, Libyans, and Cretans.



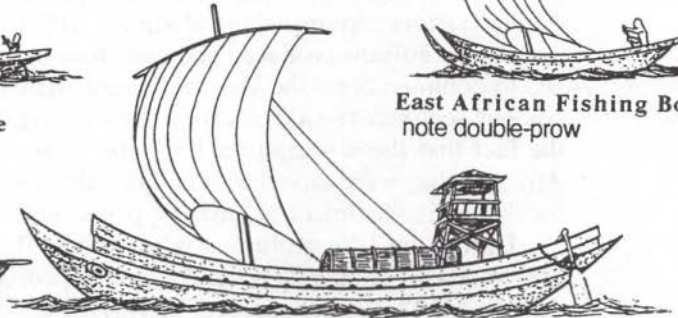
**1. Egyptian Naval Galley (1500 BC)**  
(from Culver, 1924)



**Congo Sailing Canoe**  
(1600 AD)



**East African Fishing Boat**  
note double-prow



**2. Mali Expeditionary Galley (1000 BC)**  
artist's conception



**3. Mombassa Dhow**  
(1300 AD)



Did he succeed? We can't be certain. Barring an encounter with a hurricane, Abubakari probably crossed the ocean in one or two months.<sup>6</sup> It was a 2,000-mile journey from Cape Verde off the African coast to South America. Although a difficult voyage under the best of circumstances, the strong equatorial current was in their favor.

Abubakari's successor, Kankan Musa, also dispatched flotillas into the Atlantic—presumably to find out what happened to earlier voyagers.<sup>7</sup> By the 14th century when the traditions were recorded, there was no knowledge whether any of the sailors had ever returned, so they were presumed either lost at sea or preoccupied with life in a western paradise. Hajib finished his *Arabian History* with a lot of question marks.

Skeptics of African seafaring typically assume that the expeditions were “swallowed up” by the ocean. However, Spanish reports of black tribes thriving in the New World *prior* to the first European explorations verify that West Africans successfully crossed the ocean.

### **Ships of African Kings**

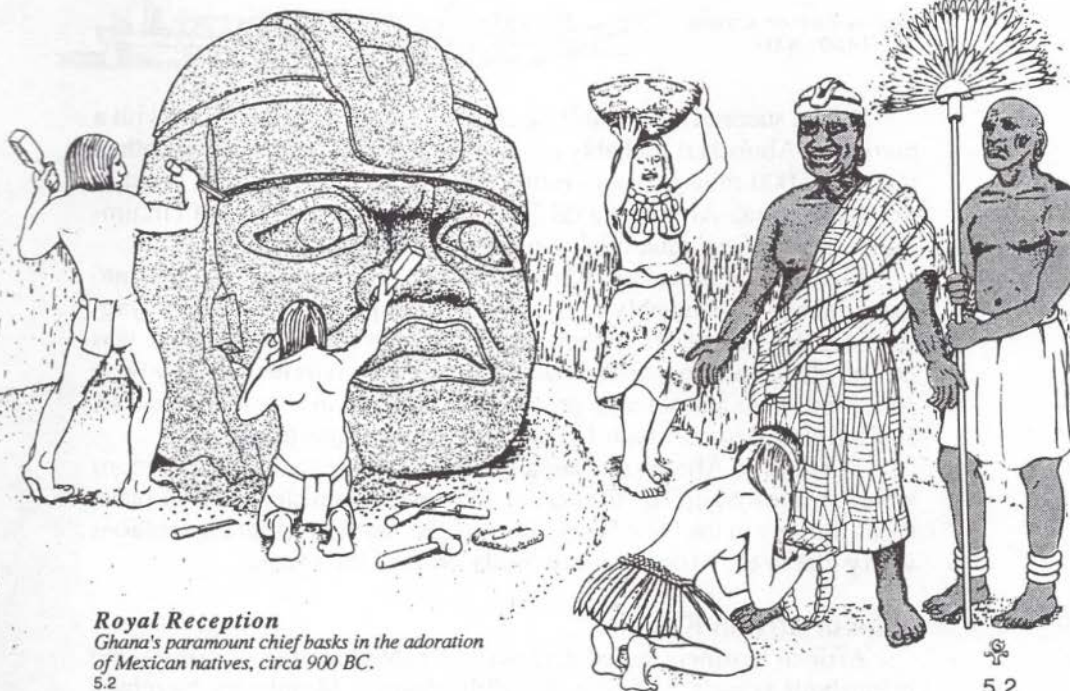
African mariners sailed a variety of extended dugout canoes and plank-built vessels. During the 13th century, Mombassa merchant vessels (*mtepes*, *dhow*s, and *booms*) carried cargoes weighing 30 tons on long-distance voyages to Arabia. Their journeys were recorded in Arabic chronicles. During the 16th century, Portuguese explorers observed sailing canoes on the Congo river delta. Mali trading vessels of the 19th century reached lengths exceeding 100-feet. They had lateen sails and reed deckhouses.

African chiefs preferred “power canoes” for ceremonial occasions and short river trips. The power canoe was actually a light-weight barge with rowing benches on the ends and a hut in the middle. Teams of 24 men rowed in shifts, enabling the vessel to make steady headway. During the 15th century, Portuguese explorers reported seeing these vessels in Gambia, Africa. When Spanish explorers reached South America in the 16th century, they found similar vessels on the Orinoco river.<sup>8</sup> Native merchants used them for voyages between Venezuela and Puerto Rico—a journey of over 400 miles. Rutgers University anthropologist Ivan Van Sertima believes the South American “power canoe” was derived from contacts with African explorers who sailed to America.<sup>9</sup>

### **Evidence of Contact**

One of the enduring enigmas of ancient American history is the origin of Mexico's colossal stone heads.<sup>10</sup> Anthropologists have determined that they were produced during the 8th, or 9th, century BC. In addition to characteristic West African features, many of these sculptures have a distinct peripheral lip ridge that is a common genetic heritage of





### **Royal Reception**

*Ghana's paramount chief basks in the adoration of Mexican natives, circa 900 BC.*

5.2

5.2

West Africans. This genetic trait in association with other typically West African features and distinctive helmet crowns clearly denotes an African heritage for the giant sculptures.<sup>11</sup> Van Sertima has identified Ethiopian-style braids on a colossal head from Tres Zapotes, lending further credibility to the African heritage of Mexico's enigmatic sculptures.<sup>12</sup> Archeological evidence thus confirms the success of 1st millennium BC voyages between West Africa and America.

Other voyagers followed: Mayan murals at Bonampak and Chichen Itza, Mexico, show black-skinned warriors alongside warriors of lighter skin colors. Mexican archeologist Alexander Von Wuthenau found dozens of ceramic sculptures showing African physical types. His book, *Unexpected Faces in Ancient America* (1975), is an album of Black African voyagers in Central America. Included in Von Wuthenau's album are native sculptures which depict an African custom called "facial scarification." Although other cultures have utilized facial scarring as a means of beautification, West Africans developed unique patterns, including concentric rings of stippled scars around the mouth. The same pattern is portrayed on ancient Mayan pottery figurines.

### **Black Natives, Black Tribes, Black Languages**

Black commerce with Native American merchants continued through the 15th century. According to 16th-century historian Peter Martyr, Balboa encountered Black Africans in the Darien region during his 1513

march to the Pacific. He believed they were shipwrecked African pirates—presumably recent arrivals because they were continually fighting neighboring tribes.<sup>13</sup> A Spanish priest, Fray Gregoria Garcia, mentioned black Africans on an island north of Colombia in the 16th century; Garcia's associate, Bartholomew Las Casas, saw a "Negro king" in Panama.<sup>14</sup> During the mid-1500's, the Spanish geographer Lopez de Gomara reported *swart* (black) natives in Panama and along the Carolina coast; Portuguese explorer Pigafetta reported "olive-colored" natives in Brazil; and Spanish explorers encountered black settlements near Cartagena, Colombia.<sup>15</sup> Most of these are far too early to have resulted from "lost" African slave ships headed for Hispaniola.

According to historian Hugh Thomas, author of *Conquest* (1994), the Spaniard Miguel de Pasamonte received authorization in 1519 to capture "slaves" on Venezuela. The reason for seeking black slaves was that they had a better reputation for enduring the grueling hardships of forced labor. Pasamonte's authorization reveals Spanish knowledge of indigenous black settlements in South America.

In 1524, French explorer Verrazano reported Blacks along the Carolina coast: "The color of these people is black (*neri*), not very different from that of Ethiopians." Near Roanoke Island, some of these "black people" swam out into the surf to rescue a French sailor who had fallen from a dory. Verrazano noted that the natives were *still black* after wading ashore. Thus Verrazano lays to rest isolationist claims that natives used black body paints to conceal the true color of their skins.<sup>15</sup>

In 1905, Alphonse Quatrefages, anthropology professor of the Museum of Natural History in Paris, reported the locations of "indigenous" black tribes in America, including the Charruas of Brazil, the Black Caribbees of Saint Vincent, the Jamassi of Florida, dark-complexioned Californians, and Panama natives in Darien which he referred to as "true Negroes."<sup>16</sup> Quatrefages believed these tribes were descendants of ancient trans-Atlantic voyagers from Africa.

Native traditions and tribal names also reveal ancient African expeditions and migrations to America. According to Dhyani Ywahoo, author of *Voices of Our Ancestors* (1987) "Our elders told me that long before the White men made their appearance upon the shores of Turtle Island, other visitors had come. In the great long time ago, the Black people came from Africa." The Quiche Mayan oral tradition of *Popol Vuh* mentions "blacks" who came from "The Land of The Sunrise."<sup>17</sup> Some African and American tribes have common names—suggesting voyages of clans who preserved their tribal identities. There are tribes called the "Galibis" in Mali (Africa) and Brazil. Another Brazilian tribe, the "Marabitas," has a counterpart in the Sudan: the "Marabutine."<sup>18</sup>

Anthropologists have reported a West African language called





5.3 &amp; 5.4



### Black Faces in Ancient Mexico

San Lorenzo Colossal head (left) was carved in basalt using iron tools imported from Africa ca. 900 BC. Stone pillar from Alvarado (right) portrays black slave with bearded lord circa 800 BC.

“Mandinga” spoken among scattered tribes from Venezuela to Nicaragua. Skeptics of pre-Columbian voyages assume the language spread to native tribes *after* black slaves escaped from Spanish plantations in the 17th and 18th centuries.<sup>19</sup> Probably *both* ancient and recent African contacts contributed to the diversity of languages in America.

### Corpus Africanis

Several anthropologists have identified Negroid bones in ancient American burials. A Polish forensic specialist, Andrzej Wiercinski, identified African skeletons at three Mexican archeological sites: Tlatilco, Cerro de Las Mesas, and Monte Alban.<sup>20</sup> Smithsonian archeologists found the remains of two male Africans in the Virgin Islands. The burials had radio-carbon dates in the mid-13th century range.<sup>21</sup>

### Plant & Animal Diffusion

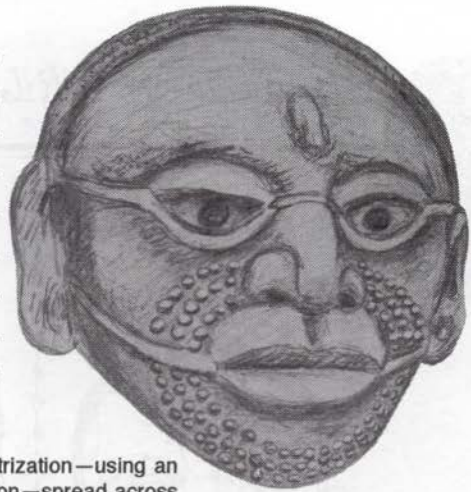
Numerous African plants reached the Americas in ancient times. These included bottle gourds, dipper gourds, the plantain, and yams.<sup>22</sup>

The origin of a banana-like fruit called the plantain has troubled historians for the past century. Historical accounts of the 16th and 17th centuries described plantains as a common fruit of the Caribbean. Spanish explorers reported that natives cultivated the fruit on large plantations in Colombia and Venezuela *prior* to European colonization.

West African warrior



from Johnston (1903)



from Thompson (1992)

### Facial Scarification

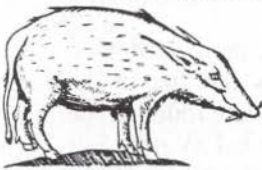
The ancient African tradition of cicatrization—using an infectious agent to cause scarification—spread across the Pacific to Micronesia and Central America. Mayans and Mexicans with stipple marks on their faces were portrayed on ceramics between 700 and 900 AD.

Vera Cruz native ancient sculpture 700 to 1300 AD



Reports that Columbus brought plantains from the New World to Spain have been regarded as historical “facts” ever since 1493. Indeed, much of the mariner’s glory resulted from beliefs that he played the *key* role in bringing New World plants to Europe. However, botanists have determined that plantains actually originated in Africa.<sup>23</sup> Evidently, African voyagers introduced the plant to America several centuries *before* Columbus—so he could pick up a bunch to take back home.

Plantains are not the only plants carried across the Atlantic. African yams (*Dioscorea alata*) and jackbeans have been found in American archeological sites.<sup>24</sup> The yams were already growing in cultivated fields on Trinidad when the Spanish arrived. Yams require *vegetative* planting for propagation, that is, stalks or tubers are used instead of seeds. This method of cultivation requires farmers to learn about the method of propagation *before* they are able to grow the plants. Geographer George Carter of Texas A & M University believes African voyagers transported the first yams directly to American soil and were also responsible for instructing Native Americans in yam cultivation.



Red river hog  
Brazil, and Guinea Africa

During the 18th century, Portuguese colonists in Brazil noted a peculiar hog roaming the jungles.<sup>25</sup> Hogs were not indigenous to the Americas, although a related animal, the mountain peccary, inhabited Central and South America. The mysterious hogs were identified as an African breed: the Guinea hog, or “Red River” hog—*Potamochoerus porcus*. Isolationists *assume* 16th-century Portuguese slave ships imported

the hogs; however, it seems more likely that earlier African voyagers brought Guinea hogs to America.



# OLD WORLD FACES



## AFRICA



note:  
peripheral  
lip ridge

**Tropical African**  
after a photograph  
by Emil Schulthess (1962)



**Congo Native**  
from Ward (1890)

## ANCIENT AMERICA

5.6



note:  
peripheral  
lip ridge

**Olmec Colossal Head**  
San Lorenzo, Mexico 900 BC



**Tumaco Native**  
ceramic sculpture  
Ecuador 100 BC

## Impact on Native Culture

African voyagers had a profound impact on native culture in Mexico and the Caribbean. The importance of African contact is indicated by the locations of colossal African heads. These sculptures were found at the three principle ceremonial centers of the ancient Olmecs: LaVenta, San Lorenzo, and Tres Zapotes. Their presence at LaVenta is particularly controversial, because LaVenta was the ancient capital of the Olmec empire. LaVenta's priest-rulers dominated most of Mexico between 1200 and 500 BC. The advanced culture they developed became the foundation of subsequent Mexican civilizations.

LaVenta's rise to prominence represented a significant advancement over independent tribal villages of prior centuries. Construction of this religious center with its huge pyramid and ceremonial buildings required a highly-evolved and centralized society. Influence of LaVenta's theocracy reached from Mexico all the way to Nicaragua.

Smithsonian Institution B.A.I.  
Cortesian codice 5.5



The role of West Africans in the cultural florescence of trade was so important that Mexicans conferred their highest honor upon a visiting African chief: they declared him an immortal. Mexicans called the black chief *Ekchuah*—meaning “Black Calabash.” His emblem was the hieroglyph for calabash, or gourd. *Ekchuah*'s heavenly role was befitting a West African king: he was regarded as the patron and protector of traveling merchants. During the 19th century, journalist Jose Melgar toured the region where the colossal heads were found. He encountered a strange name in the vocabulary of the peasants: it was *Yalahau*, which means “Negro chief.”<sup>27</sup> Melgar concluded that the title was a vestige of an ancient time when natives worshiped a Black African and carved his image in stone.

It is hardly surprising that a paramount chief was so honored. The kingdoms of Mali, Ghana, and Songhai were renowned for their standardized system of weights and measures as well as fair business practices. The mercantile center of LaVenta apparently derived much of its success from the expertise of an African visitor.<sup>26</sup> We are led to this conclusion from a unique symbol found in Olmec art: the ubiquitous “X” motif. This symbol represented wealth and holiness; it was used often on the chest and crown ornaments of Olmec dignitaries and gods. It recalls X-shaped gold ingots which are characteristic of West Africa.

### Fruits of Commerce: Iron, Weaving, Jewelry

African traders brought iron to Mexico. West Africans were noted for shipping iron tools to the Mediterranean at an early date. Cheap iron tools were favored by merchants because people living in less-advanced societies were willing to pay dearly to obtain them. Primitive peoples regarded iron tools as “magic stones” because they broke apart rocks as hard as basalt. Mexicans used such “magic stones” imported from Africa to carve colossal heads, altars, statuettes, and ornaments.

Isolationists once believed that Native Americans used only stone tools to produce intricate stone carvings like those found at LaVenta. However, that belief had to be abandoned after archeologists failed in attempts to carve stone objects using only stone tools. University of Texas archeologist Suzanne Lewenstein reported a stone-carving experiment conducted by a group of modern anthropologists in 1978.<sup>28</sup> As



OLD WORLD

Cultural Diffusion

to AMERICA

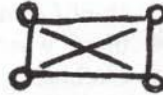


helmet crown

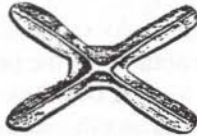
Paramount Chief, Ghana with helmet crown 1960 after photo by M. Silverstone (1962)



Olmec Helmet Crown colossal stone head San Lorenzo Mexico 900 BC



Olmec Priest with "X" emblem Guerrero, Mexico 500 BC



West African ingot



filigree extruded wax gold casting Ashanti, West Africa, 19th century after Matisse Gallery, New York



filigree extruded wax gold casting Monte Alban (Mixtec), Mexico 1400 after Oaxaca Regional Museum



Arawak effigy, Jamaica 15th cent. wood carving after Fernandez (1974)

West African effigy 19th cent. wood carving after Coughlan (1962)



hammered & embossed sheet gold mask Dogon, West Africa 19th century



after Leucinger (1972)



hammered & embossed sheet gold mask Chimu, ca. 1400, Peru

after photograph from National Gallery of Art, Washington, D.C.

a consequence of Lewenstein's research, most scholars realized that intricate stone carvings are possible only with hardened copper, bronze, or iron chisels. Most Native Americans lacked the technology for an indigenous iron-smelting industry, so they obtained bronze and iron tools *via* Old World merchants who sailed to America.

Stone carvings have certain characteristics which reveal the use of metal tools. These include "strike marks," undercutting of raised details, and intricate designs. All of these characteristics can be observed in Olmec, Mexican, and Mayan artifacts. A piece of iron found with a 13th-century "Negroid" skeleton on the Virgin Islands confirms the role of African commerce in the transport of iron tools to America.<sup>29</sup>

West Africans influenced the production of Mexican textiles. Spanish conquistadors reported that scarves worn by Mexican women were identical to scarves (called *almazars*) which the Moors exported from West Africa.<sup>30</sup>



West African Trade Beads

Black merchants left their mark on native jewelry by introducing glass beads and gold-working technology. Historian Zive Dorner noted that Africans preceded Columbus to America: "Nor could West African traders resist the call of the Western ocean—driven by chance on the same west winds that Columbus sailed. This claim is supported by the evidence of glass beads, found in South America, that are known to have been among their truck."<sup>31</sup>

West Africans were renowned for their gold work, particularly the production of special alloys, filigrees, embossing, and "lost-wax" castings. Filigrees consist of intricately wound gold wires that are welded together. Lost-wax casting is a process whereby molten gold is poured into a mold that was originally formed around a piece of sculptured wax. The wax is melted out of the mold, or "lost," before the molten gold is poured into the mold cavity. False filigree castings were produced in both West Africa and the Americas using wax string produced by an extruding process. Jewelers in Central America developed a sophisticated gold industry using all of the techniques known to Africans.

A key piece of evidence confirming the West African role in Central American gold-working is the name of the Mexican copper-gold alloy—*guanin*. This term was derived from *Ghana*—the West African kingdom whose overseas merchants brought the alloy and jewelry-making technology to Mexico. Spanish metalurgists revealed that West African and Mexican alloys contained the same ratios of gold, silver, and copper. Identical alloys are evidence of common smelting traditions which were handed down from master to apprentice. Caribbean natives who met Columbus called the alloy *goanines*, and they told him it was introduced by "black people." The same alloy is called *guanines* in West Africa.<sup>32</sup>



# OLD WORLD FACES

## AFRICA

## IN ANCIENT AMERICA



West African

Rakel (1894)



Congo maiden  
from Ward (1890)

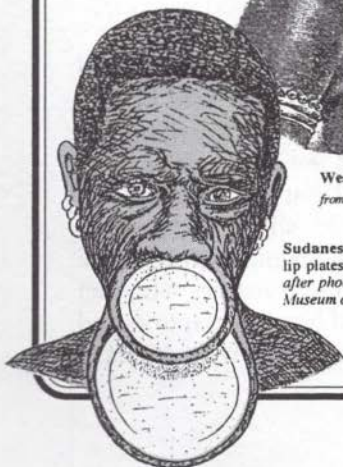


Rakel (1894)



West African maiden  
from Rakel (1886)

Sudanese woman  
lip plates ca. 1950  
after photograph  
Museum of Man, Paris



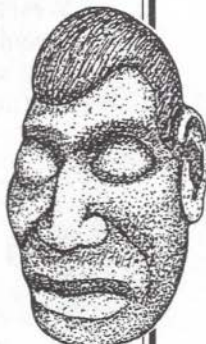
Brazilian maiden  
Botocudo Tribe  
after photo in Rakel (1886)



Olmec priest  
stone carving  
Mexico, 800 BC



Mexican maiden  
ceramic 500 AD  
Teotihuacan



Mexican  
Vera Cruz  
carving  
900 AD



Botocudo male  
lip plates ca. 1850  
from DuPouget (1895)

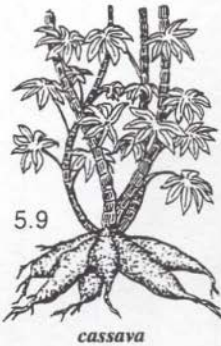


In South America, jewelers of the Quimbaga tribe used another term, *tumbaga*, for gold-copper alloys. Some scholars think the word *tumbaga* is derived from *tamraka*, which is an Arabic word for gold-copper alloys. Researchers encountered variants of *tamraka*, or *tumbaga*, associated with gold-copper alloys in various cultures from India to Southeast Asia. Diffusionists believe this is the result of long-distance commerce with Old World Arabs after 1000 AD.<sup>33</sup>

### Impact on The Old World

The principle contributions of ancient American contact were agricultural: African voyagers imported two crop plants—*maize* and cassava—along with the diploid variety of American cotton.

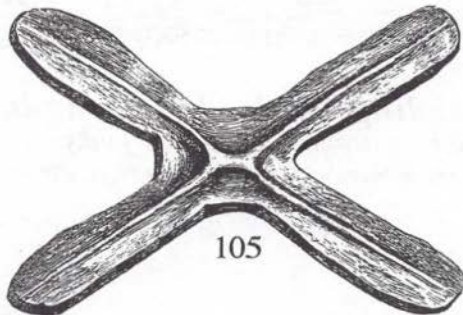
*Maize* has been found with pre-Colonial ceramics in South Africa, and it was widely distributed throughout much of West Africa when Europeans first arrived.<sup>34</sup> Pottery fragments with *maize* imprints dating to the 12th century were excavated at Ife, Nigeria.<sup>35</sup>



The American cassava (*Manihot esculenta*) was a staple among tropical West Africans prior to the arrival of European colonists.<sup>36</sup> The potato-like plant was an important source of food-starch and tapioca.

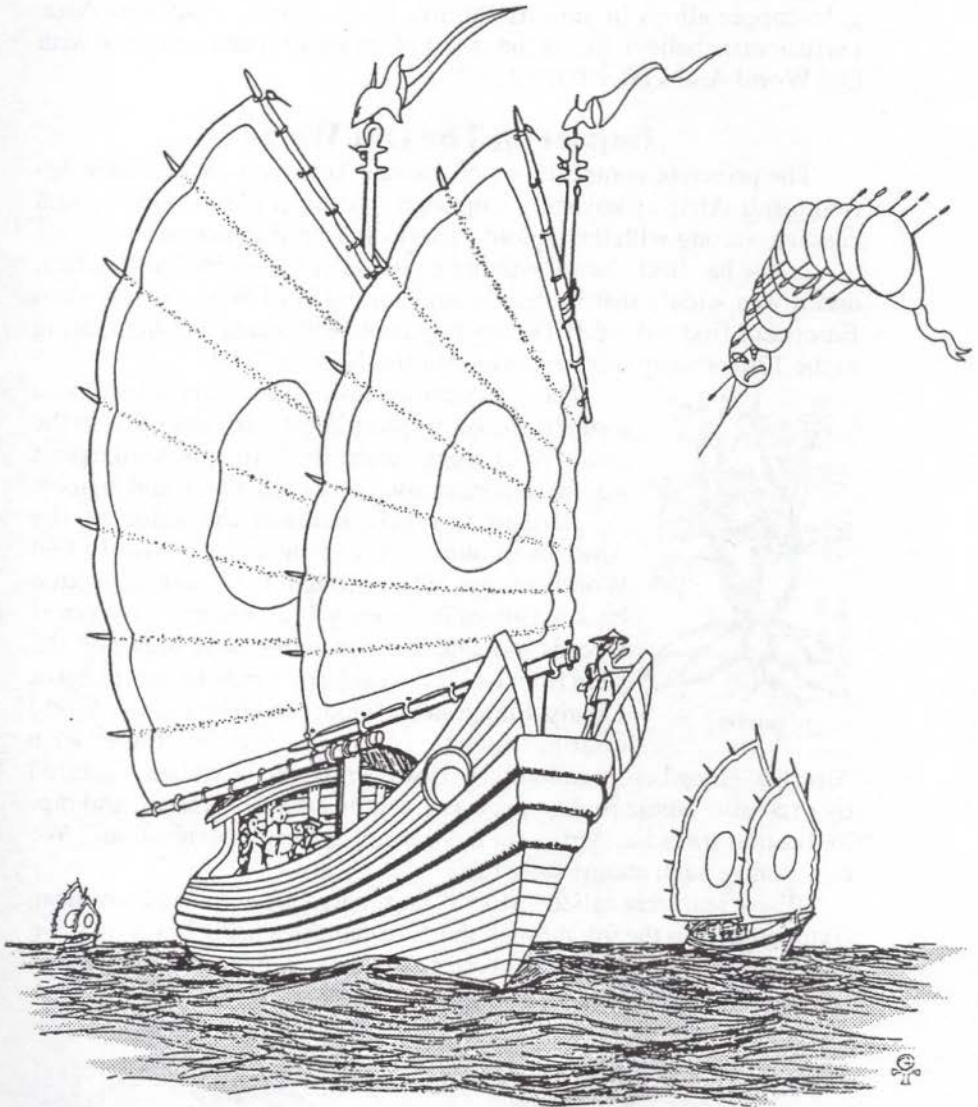
African voyagers realized the value of the American cotton hybrid which is superior to Old World cottons. They brought the American cotton back to Guinea in the early 15th century.<sup>37</sup> Historical records indicate that Spaniards later imported the plant from Guinea to the Cape Verde Islands in 1466. Clearly, European knowledge of Guinea's New World cotton imports followed African trade with America—long before Columbus. However, Anglo historians—spurred by excessive ethnic pride—once asserted that *maize*, cassava, and diploid cotton spread to Africa “in the wake of Spanish colonization.” We now realize such claims were false.

Black seafarers called “Moors” dominated western Mediterranean commerce from the 9th through the 13th centuries using bases in Spain and North Africa. Their role in trans-Atlantic commerce is addressed in Chapter 13—*Merchants of Arabia*.



Flake! (1894)





**Heading for the Jade Kingdom**  
*Led by a dragon kite, Asian junks cross the Pacific  
on their way to Central America, circa 500 BC.*



## **CHINESE MERCHANTS**

(3000 BC—1850 AD)

East Asian voyagers sailed to America more than five thousand years ago. They came mainly as explorers and merchants. Royal surveyors toured the Grand Canyon during the 3rd millennium BC. By the 5th century BC, Taoist merchants established colonies along the Pacific coast of Central America. In the following centuries, poets praised the distant isle called “Fu-Sang” which they regarded as an idyllic land. During the 13th century, Tibetan refugees fled to North America after escaping Ghengis Khan’s Mongol barbarians. Over the course of several thousand years, Chinese travelers influenced the arts, commerce, religion, architecture, and political events of Native America; they played a vital role in the rise of Central America’s Mayan civilization.

### **Dragon Civilizations**

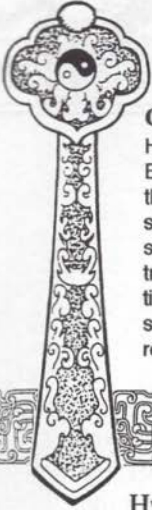
East Asian civilizations emerged along the Hwang Ho and the Yangtze rivers in China, the Mekong in Vietnam, the Chao in Thailand, and the Irrawaddy in Burma. Inhabitants of these river valleys had many common attributes: they subsisted on fish and rice; they lived in wooden houses; they were proficient sailors; and they all believed in dragons.

Asians endured the ravages of intermittent coastal flooding and suffered the full brunt of the World Deluge of 3100 BC. According to a Chinese legend, survivors found temporary refuge on the back of a mythical turtle. After the Deluge, a group of legendary heroes instructed survivors in writing, mathematics, metal-working and farming.

Chinese legends attribute to Hwang-ti the dual honors of being the Father of Astronomy and the Founder of Taoism.<sup>1</sup> During the early 3rd millennium BC, He invented the astronomical globe and established observatories throughout China. His astronomers determined that the Earth revolved around the sun, and they realized that natural laws governed the motions of stars and planets. This realization led to the Taoist religious principle called *Tao*, or “Natural Law.” Taoists chose the moon to symbolize the harmonious natural state arising from the complimentary forces of light and dark. They called these forces Yin and Yang, portraying them in art as two interlocking scrolls or dragons.







### Chinese Cosmological Map

Han dynasty world maps circa 100 BC portrayed Earth as a sphere. They were often featured on the backs of cast bronze mirrors like the one shown here. The Known World is shown as a square surrounded by an ocean. A ring of triangles or pyramids represents the ring continent of mountains (arrow) which lay across the seas. A third ring of dragons and cloud scrolls represented the cosmos surrounding Earth.



Hwang-ti is credited with introducing bronze and cast-metal tools circa 3000 BC. By the 1st millennium BC, Asian smiths forged iron and steel. The new technology vastly improved maritime commerce because ships were easier to build with metal tools. There was great demand for metal tools in outlying villages. Merchants made considerable profits by transporting cheap metal tools to overseas colonies.

### Ocean-Going Junks

During the Neolithic Age, circa 12,000 to 5000 BC, Chinese fishermen depended upon dugout canoes. Between 5000 BC and 3000 BC, boatbuilders made extended dugouts. Later, they devised flat-bottomed river craft called *junks*. The *junk* was adapted for ocean travel by the addition of a deep keel, rounded hull, and retractable stern-post rudder. During passing centuries, various junks were designed for specialized use as cargo ships, long-distance transports, and military vessels.

Inscriptions on turtle bones dating to the 2nd millennium BC tell of long-distance voyages and the transport of huge armies. This was achieved using large, ocean-going vessels.<sup>2</sup> By the 5th century BC, ocean sailing was so common that Hong Kong merchants had shipyards capable of building vessels 100 feet long. Artists of the 4th century BC portrayed double-decked Asian galleys engaged in combat.

Ocean-going junks carried up to seven masts with "lug" sails made from cotton or woven reeds. This distinctive sail is so-named because it is "lugged" or carried alongside the mast. Thin slats, or "battens," woven into the sails give them a fan-like appearance and considerable strength. Lug sails proved advantageous for sailing in the strong winds of the China Sea. Hulls were made from overlapping planks attached to watertight bulkheads. The bulkhead design, which originated in the Orient, enabled ships to remain afloat after striking submerged rocks. In this respect and many others, Asian vessels were far superior to ships of the

Mediterranean prior to the 15th century.

Europeans failed to notice *round-bottomed* junks in Chinese ports, so they reported only *flat-bottomed* vessels. This oversight led Western historians to assume Chinese vessels were inferior to those of Europe.<sup>3</sup> However, excavation of a 13th-century junk near Quanzhou confirms that Chinese ocean-going junks had deep keels and rounded hulls.<sup>4</sup>

### Discovery Voyages

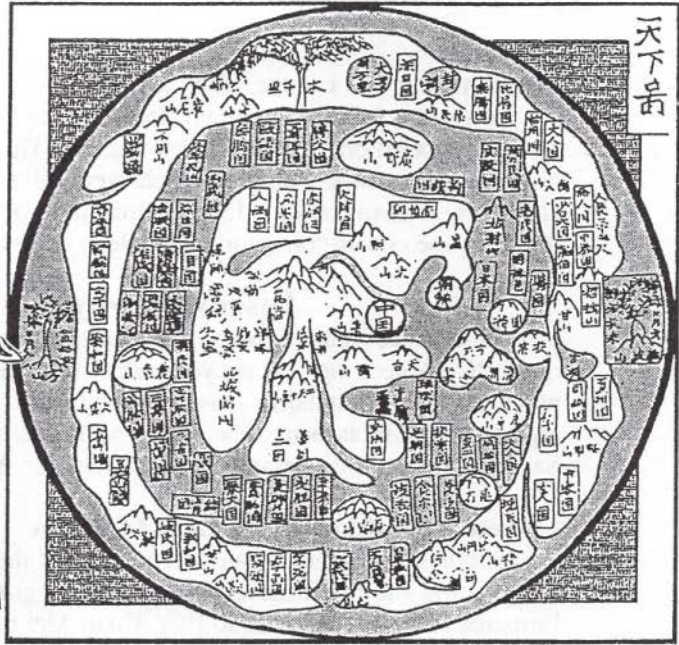
Chinese accounts of overseas expeditions date from the 3rd millennium BC. A geographical encyclopedia from that era describes a world-wide survey of mountains, seas, and continents. Subsequent chronicles reported expeditions across the Pacific to the "Isle of The Blest" and "Fu-Sang." These were common Asian names for America.

### Chinese Expeditions to the Grand Canyon

Buddhist historian Kuan-Mei identified the Grand Canyon of Fu Sang as the site of Chinese observations beginning with the reign of Emperor Hwang-ti circa 2640 BC. Kuan-Mei noted that: "It was in Fu Sang that Hwang-ti's astronomers resided who were charged with observing the rising sun."<sup>5</sup> Scholars have known for decades that the Grand Canyon region of the Southwestern United States was the site of ancient astronomical observations. Anasazi natives identified natural rock features corresponding to the rising of the sun at the solstices, and they recorded important celestial events by making rock paintings or *petroglyphs*. The presence of Chinese astronomers in the canyon region is confirmed by several ancient petroglyphs of the Taoist Yin-Yang motif found in the Southwestern United States.

An ancient Chinese geography called the *Shan Hai Ching*, or *Classic of Mountains and Seas*, refers to the Grand Canyon as the "Great Luminous Canyon." The canyon was known in Chinese poetry as the "birthplace of the sun." The *Shan Hai Ching* geography is evidence of a world-wide survey undertaken by Hwang-ti and his successor, Emperor Yu, circa 2250 BC. Surveyors Ta-Chang and Shu Hai led teams across distant lands, including North America, as they made an inventory of geographical features and mineral resources. The survey resulted in 32 geographical journals each consisting of several hundred pages; however, only 15 have survived the passage of time. The most recent copy was done by Kuo Po in 318 AD. Because the mountains and seas of foreign countries seemed bizarre to the Chinese, Asian scholars assumed they were fictitious. However, several historians, including Henrietta Mertz, Donald Cyr, and Hendon Harris have examined the *Shan Hai Ching* geography and verified the accuracy of the journals.



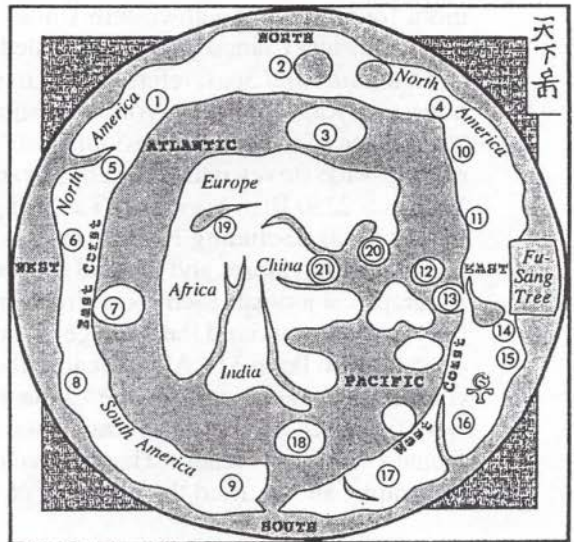


**Shan Hai Ching World Maps (before 1100 AD)**

More than two dozen antique copies of an ancient map are in museums and private collections. The map is based on a 5,000 year-old Chinese geography called *Shan Hai Ching*. The Americas are shown as a ring continent encircling the Old World. Two names on the ring continent confirm that they represent America: Fu-Sang Mountains (13); and Land of Women (16). Marco Polo designated a Land of Women southeast of the Strait of Anian (Bering Sea); Fu-Sang was regarded as the western paradise. Japan (12) is shown east of China in the Pacific.

**KEY TO SCHEMATIC MAP:**

1. Plowing Monkey Land; 2. Great Lake;
  3. Wide Panorama Mts.; 4. Giants Country;
  5. Land of Everlasting June; 6. Female Country;
  7. Beautiful Farmers' Mts.; 8. Land of Volcanoes;
  9. Second Monkey Land; 10. Measuring Skies Mts.;
  11. Uncle Dragon Country; 12. Japan;
  13. Fu-Sang Mts.; 14. Sweet Lake; 15. Bright Chasm Mts.;
  16. Land of Women; 17. Depend on Heaven Mts.;
  18. Land of Immortality; 19. Mediterranean Sea;
  20. Korea; 21. China Kingdom.
- Translations from Cyr (1978) & Harris (1975). 6.M1



### China's 15th-Century World Maps

Authenticity of the ancient Chinese geography (*Shan Hai Ching*) is confirmed by Chinese world maps published between the 15th and 19th-century. Historian Donald Cyr, author of *Dragon Treasures* (1989) believes the maps were based on Hwang-ti's 3rd-millennium BC world survey and subsequent explorations of America and the Old World. Indeed, 75% of the place names on the map correspond to places mentioned in the geography; the remainder are of places known prior to the 11th century. Geography professor Hirosi Nakamura issued a report in *Imago Mundi* (1946) confirming that the maps are 19th-century copies of an ancient original probably dating to the 11th century.

Several of these maps are in the collections of the British Museum in London and in the French Ecole Des Langues Orientales Vivantes in Paris.<sup>6</sup> They feature an enlarged China with Asia, Europe and India forming a single landmass. China was placed at the center of the world. It was a common practice: Medieval European cartographers placed Jerusalem at the center of Christian world maps. On Chinese maps, Old World continents are surrounded by oceans and a ring of land corresponding to North and South America.

The ring continent is identifiable because it includes names such as Fu-Sang, Great Luminous Canyon, and Kingdom of Women that correspond to lands known to lie across the Eastern Sea (Pacific Ocean). The ring shape was chosen because explorers leaving the Old World in any direction encountered continental land across the ocean; so there was a common perception that the Old World was surrounded first by a circular ocean and then by concentric land. Of course, those who crossed the American continent found ocean on the other side: so some maps showed a second ring-shaped ocean surrounding the ring continent. The inaccurate portrayal of concentric rings of land and water was resolved by the development of spherical cartography.

### Iron Age Merchant Voyages

Ancient expeditions to America followed a coastal route from Siberia to the Aleutian Islands and down the Northwest American coast. Later voyagers took a shortcut along the *Kuro Shio*, or "Black Current," which hastened their speed by one mile-per-hour. In only four days, they gained a hundred miles of eastward movement just from riding "piggy-back" on the current. Scholars refer to the *Kuro Shio* as the great "conveyor-belt" of trans-Pacific travel. Skilled navigators completed the voyage in less than two months and returned via the mid-Pacific current.

Between the 7th and 5th century BC, East Asian merchants established a colony in Central America. Asian merchants traded iron tools, textiles, and grain for jade, furs, ivory, and hallucinogenic mushrooms.



# East Asian Ships

## China, Korea, Vietnam

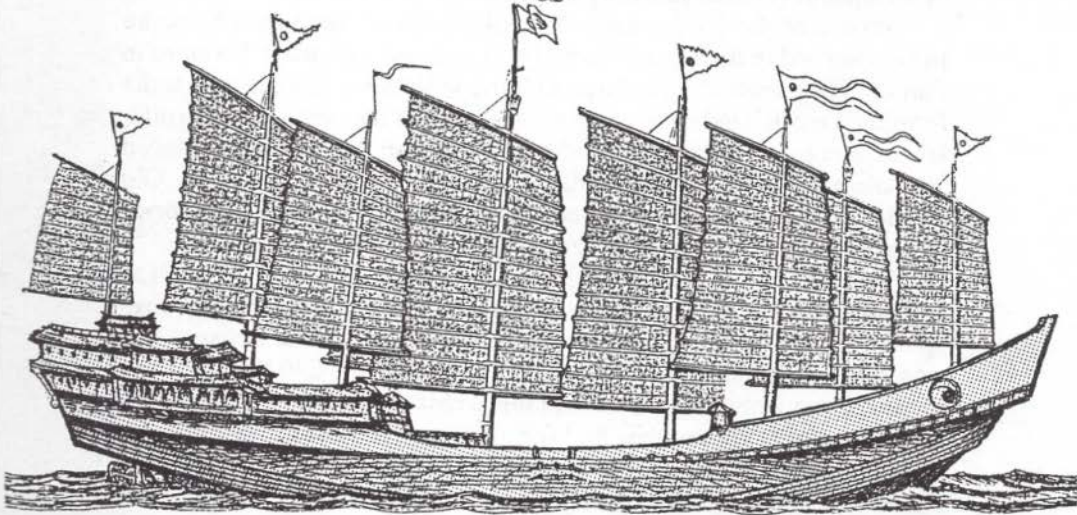


1. Chinese Galley 500 BC  
from a bronze jar

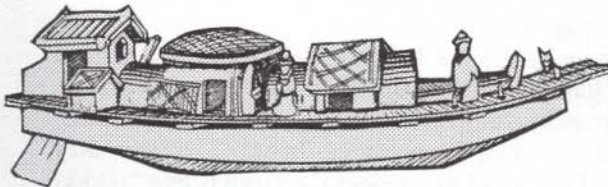
6.2



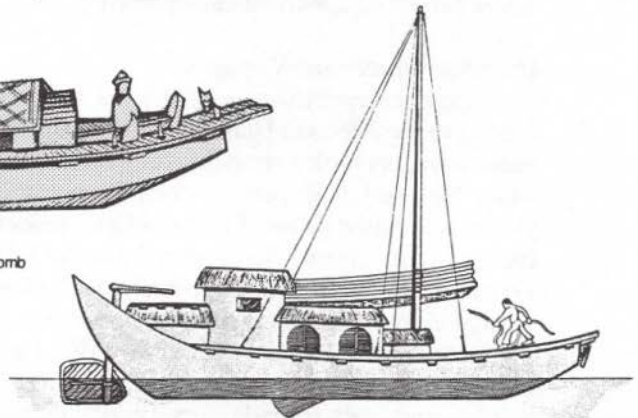
Ming dragon  
—symbol of imperial China



2. Cheng Ho's Imperial Cruiser 1300 A D  
vessel famous for voyage to Africa  
artist's design based principally on Pechelli Junks



3. River Junk 100 A D  
model from a Han dynasty tomb



4. River Junk 1300 BC  
Ming dynasty silk painting



5. South China Trading Junk 1800 A D  
length: 80 to 200-feet



6. Ch'uanchou Merchant Junk 1300 A D  
reconstruction of 60-foot vessel  
excavated at Ch'uanchou, China



7. Ming Dynasty Dragon Ship  
1300-1500 A D  
from a wood-block print



OLD WORLD  
FACES

IN  
ANCIENT AMERICA



note:  
lion dog on  
right shoulder



British Museum, London

note:  
lion dog on  
right shoulder

Chinese  
Fisherman  
& Lion Dog  
ivory carving  
19th-century

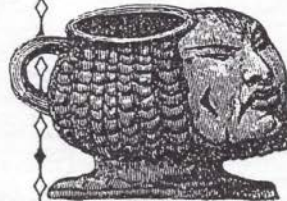


Guatemalan  
Sculpture  
circa 500 AD  
Seler (1908: f61)



Man with  
Lion Dog  
Uxmal, Mexico  
400 BC  
stone carving  
Carnegie Inst.

Chinese Priest  
12th century  
after Hayashi (1903)



Peruvian Jar Inca period  
from Paul Marcoy (1875, 199)  
*Travels in South America*

6.9

Merchant voyages escaped mention in royal chronicles because court scribes were charged with recording only "official" enterprises. However, trans-Pacific travels were a common subject of folklore.

The oldest official voyage on record took place at the beginning of the silk trade with Mediterranean countries. An ancient Chinese historian, Szuma Chien, reported the 3rd century BC voyage of Chang Chien to Rome. It was an official expedition backed by the emperor. Szuma's account, which appeared in the *Shih Chi* history journal, credits Chang with "discovering" the nations of the Mediterranean and initiating the Greco-Roman silk trade.<sup>7</sup> Chang referred to the inhabitants of Rome as

“western barbarians.” Unofficial traders brought silk to the Red Sea many centuries before Chang's voyage. Egyptian archeologists found strands of Chinese silk in the hair of a mummy dated circa 1000 BC.

By the 1st millennium BC, the Asian population numbered in the tens of millions. Many coastal inhabitants were excellent voyagers although their exploits seldom received the attention of historians. In 140 BC, Chinese merchants sailed in ocean-going junks to Madras, India, with a shipment of gold and silk.<sup>8</sup> Because the expedition was ordered by Emperor Wu Ti, it was documented in the *Han-Shu*, or *Han History*. Chinese historian Wan Chen described 2nd-century AD ships in his book *Strange Things of the South*. Four-masted vessels of the China Sea were 200-feet long; they had accommodations for 700 passengers; and they carried 260 tons of cargo.<sup>9</sup>

Chinese archeological sites contain ivory pendants from Siberia dating from the 6th century BC and Vietnamese ceramics from the 7th century BC. These artifacts confirm existence of a maritime trade network reaching from Siberia to the East Indies.<sup>10</sup> Round-trip voyages of 10,000 miles or more were required to bring products from outlying markets to Chinese urban centers. By the 5th century AD, large junks made regular trips from Canton (Hong Kong) to the Persian Gulf.<sup>11</sup> The ancient port was soon crowded with Egyptian, Roman, Persian, Indian, and Jewish merchants.

China's reputation as the world's leading maritime power extended from the 6th through the 13th centuries. In 1237 AD, an armada of 80 imperial cruisers sailed on the China Sea. Each vessel carried 600 men and provisions for a year-long journey.<sup>12</sup> A 13th century Venetian named Marco Polo saw the huge vessels on his trip through the Orient. He reported that Chinese ships carried five masts and had accommodations for several hundred people. Polo also reported there were more ships on the Yangtze than “on all the rivers of Christendom.” In 1405, Emperor Yung-Lo dispatched Admiral Cheng Ho on a diplomatic voyage to Java and India. The Admiral's fleet consisted of 63 vessels called “giant junks.” They were more than 200-feet in length, and they had crews of 1000 men in addition to the emperor's cavalry. On his third voyage, Cheng Ho sailed to Somalia. He returned with a cargo of ivory and an African giraffe for the emperor's zoo.

### Voyages to The Isle of The Blest

By the 5th century BC, popular Chinese legends told of a wondrous land across the eastern sea known as *The Isle of The Blest*. It was a magic land of exotic plants and precious stones. One of these was jade—a mineral the Chinese called the “Stone of Heaven.” Indeed, the Chinese valued jade more highly than gold. Jade and a similar mineral, *nephrite*,



OLD WORLD

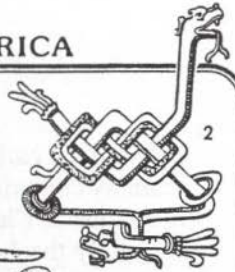
Cultural Diffusion

AMERICA

1300 BC to 1300 AD

6.6

700 to 1450 AD



note Yin-Yang symbol on chest

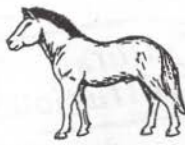


**Chinese Symbols in America**

Native Americans adopted many Chinese religious symbols, including: 1) the flaming pearl; 2) endless knot; 3) serpent & turtle; 4) bearded serpent; 5) trumpet shell; 6) sacred bat; 7) soul-catcher, or *sisiutl*, of the Northwest Coast. Items A1 to 6 are from Central America.

were used to make elaborate jewelry, talismans, and emblems of rank for the nobility. Because there were no sources of jade in China, merchants were forced to travel great distances in search of the precious stone. Another product of the distant land was a sacred mushroom which Taoists called the "Food of Immortals." Taoists believed these hallucinogenic mushrooms, or *ling chih*, shortened the path to enlightenment; poets claimed the mushrooms bestowed eternal life.

In 225 BC, Emperor Shih Huang ordered Captain Hsu Fu to find the mysterious *Isle of Immortals* and return with the sacred *ling chih* mushrooms. Upon returning from a two-year voyage, Hsu Fu informed the emperor that the immortals refused to let him take the *ling chih* unless he brought back young men, girls, and tradesmen in exchange. The emperor was anxious to acquire the food of immortality, so he complied with the demand. In 219 BC, Hsu Fu's flotilla departed China with 3,000 young men and women. However, Hsu Fu never returned with magic mushrooms. Authors of the *Shih Chi*, a 1st-century BC journal, believed



Hsu Fu absconded with the fleet and its wealth. According to the *Shih Chi*: "Hsu Fu found some calm and fertile plain with a broad forest and rich marshes where he made himself a king."<sup>13</sup> In other words, Hsu Fu established a colony across the seas—in America. By the 1st century AD, Han-dynasty scribes called the overseas paradise *Fu-Sang*.

### Tales of Fu-Sang

Where was *Fu-Sang*? Ancient Chinese legends told of the voyage of eight immortals to a paradise across the Eastern Sea. During the 7th century, poets occasionally referred to Japan as "Fu-Sang," because the island civilization reminded them of the mythical Land of Immortals. Although some modern scholars assume Japan was indeed the mythical isle, ancient journals consistently referred to *Fu-Sang* as a "land beyond the Eastern Sea." *Fu-Sang* is identified on 15th-century Ming dynasty world maps as an isle on the far side of the Pacific Ocean; it is situated next to a ring continent that borders the ocean. These same maps show Japan as a separate island closer to Asia: clearly, Chinese mapmakers regarded *Fu-Sang* as an isle in the far-eastern Pacific. A 7th-century Chinese astronomer stressed that *Fu-Sang* was "east" of Japan.

The land had other names. Poet Li Po spoke of *Tien-mu*—a land that was "lost in the misty sea waves" of the far East. An ancient Tibetan manuscript mentions a "green land" across the Eastern Sea. And 6th-century chronicles tell of a land east of the Aleutians called *Tahan*—or "Great China." Frances Gibson, author of *The Seafarers* (1974), notes that an early name for Peru was *Tahuan tinsuyu*.

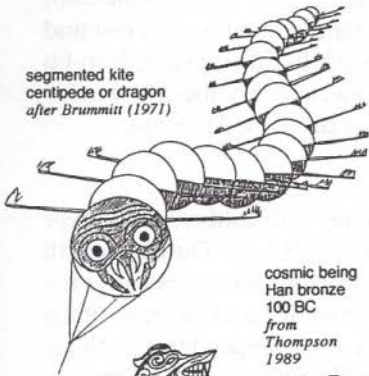
### The Fu-Sang Missionary Voyages

In 458 AD, a group of Afghan Buddhists sailed from southern China to Fu-Sang. Forty years later, one of the missionaries named Hui-Shen returned to China and entertained the court of Emperor Laing Wu Ti with tales of a bizarre land across the sea.<sup>14</sup> According to the missionary, Fu-Sang was situated 20,000 *Li* (or 6,000 miles) east of Siberia which is in the vicinity of northern Mexico. Supposedly, the inhabitants had horses and wagons; women took "snakes" for husbands; there was a "sea of varnish;" there were "flying rats" and white-headed birds. Hui-Shen's most incredible claim was that merchants paid no tax.

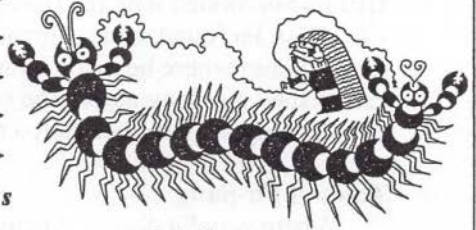
Laing Wu's court laughed at Hui-Shen's tales, although scholars have authenticated most of what he said. According to Hopi tribal lore, women marry men from the *snake clan*; there is a "sea of varnish" in southern California called the LaBrea Tar Pits; America has "flying rats" or bats; and bald eagles have white heads.<sup>15</sup> There is even evidence of horses and wagons in pre-Columbian America. The claim that Fu-Sang merchants didn't pay tax is particularly revealing: anthropologist Victor



segmented kite centipede or dragon after Brummit (1971)



kites



centipede kite on Moche jar, Trujillo, Peru after Means (1931)

cosmic being Han bronze 100 BC from Thompson 1989



cosmic being sisiuti Northwest Coast 19th century



Mexican kite bone carving ca. 500 BC Chiapa de Corzo after Bernal 1969

Cosmic Being motifs



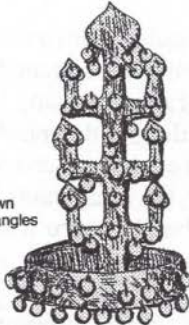
Yin-Yang dragons with eyes and flames 1500 BC to Ming Dynasty

Yin-Yang motifs

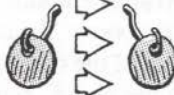


Maya, Mexico, Teotihuacan dragons with eyes and flames

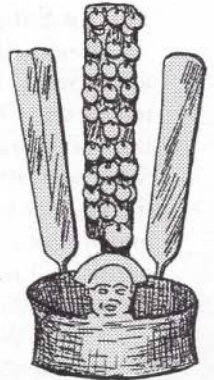
Korean crown with gold dangles



embossed gold diadems with gold disc dangles

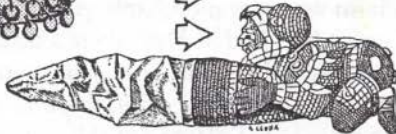


Peruvian crown Pre-Inca with gold dangles



turquoise inlay knives

Shang sacrificial stone knife turquoise inlay Freer Gallery Washington, DC



Mexican sacrificial knife from DuPouget 1895



VonHagen reports that Mayan merchants paid no taxes.<sup>16</sup>

Hui-Shen's account is not the only evidence of Asian missionaries in America. Native religious symbolism from South America to the Northwest Coast includes Buddhist and Taoist motifs. Buddhist symbols include a banner of four scrolls, the conch, a disk with ribbons, and images of Buddhist priests. In Zhou-dynasty China circa 500 BC, the banner of four scrolls represented the agricultural god, Hou-chi, and it was adopted as a Buddhist symbol of world evangelism. The most prevalent emblem of Buddhist and Taoist missionaries was the Yin-Yang motif. It has been identified on ancient petroglyphs in the Southwest, on Mayan hieroglyphs, and on Peruvian textiles.

### East Asian Migrations

Between the 9th century and the 13th century AD, several Asian tribes left their homeland to escape Turkish and Mongolian invasions. They crossed the Pacific in vessels provided by Chinese merchants. Austrian anthropologist Robert von Heine-Geldern identified the western Asian "Pontics" as one of the tribes that sailed to America.<sup>18</sup> In the 9th century, the Pontics fled the Turks and migrated to the Gulf of Tonkin. Because the Tonkin coast was already inhabited, the Pontics were forced to seek refuge across the Pacific Ocean.

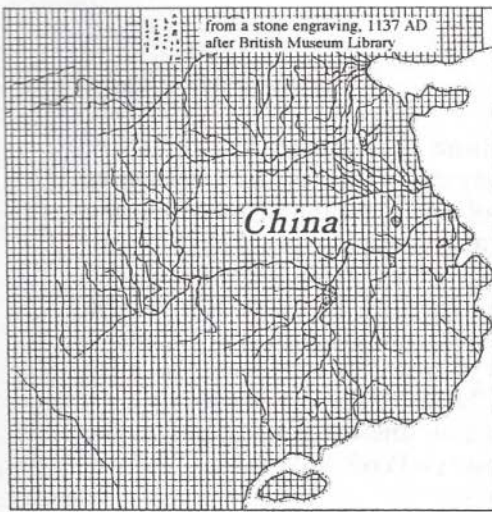
Another trans-Pacific migration occurred during the 13th century. Legends of the ancestral migration were still being told among the Dene tribes of the Mackenzie Valley in northwestern Canada during the 19th century, and they were recorded by Father Emil Petitot between 1860 and 1875.<sup>19</sup> According to the legends, the Dene tribe of Central Asia were attacked by *Dhoen-on*, or "shaved heads." Historian Ethel Stewart believes the attackers were a Mongol tribe led by Ghengis Khan: the Khan's men shaved their heads, and they were known as the *Dhoen-on*.

### Marco Polo's Maps

Hui Shen's account of travels to a Land of Women is echoed in the manuscripts and letters of a 13th-century Venetian adventurer named Marco Polo. The documents were passed down through generations to Marcian Rossi who made them available to Leo Bagrow—editor of *Imago Mundi* and author of *History of Cartography* (1964). Bagrow noted that: "Two of the provinces described by Marco Polo (Ania and Toloman) are taken to be the northeastern point of Asia and the coast of Alaska; the Gulf of Anian is taken to be the present Bering Strait."

As a confidant of Kublai Khan, Polo had the opportunity to explore the Khan's domain with the benefit of a heavy military escort. One of his trips was to the far northeast of Asia where he wrote about a huge sea and an archipelago leading to a place called "The Kingdom of Women." On





### Marco Polo's Map 1297 AD

The Pantect Map (above right) is one of 5 maps left to heirs of Marco Polo. This map shows the peninsula of Alaska and the Aleutian Islands in the upper right corner. Polo called land beyond the Strait of Anian (later Bering Strait) the "Land of Women." A map of China (left, 1137 AD) shows a higher degree of accuracy—attesting to Chinese skill in cartography sufficient to produce the Polo maps by the 13th century.

the way, Polo gained the aid of a North Pacific trader by the name of Biaxo Sirdumap. The trader gave Polo a map of the North Pacific which shows the Kamchatka Peninsula, the Strait of Anian, and Alaska. An Arabic notation by Sirdumap in 1287 states that the inhabitants of the distant isle (Alaska) were part Tartar and part Scythian immigrants.

Polo later made his own maps of the region. The "Pantect Map" bears Polo's name and the date 1297. Drawn on parchment, it shows all of Asia from the Indian Ocean to the North Pacific. The Aleutian Islands and Alaska are clearly portrayed across the Gulf of Anian. According to Bagrow (*Imago Mundi*, 1949), scholars regard the map as genuine, however they assume New World territories were added by later copyists. This conclusion is based upon the unsubstantiated belief that Asia is portrayed "too accurately" for the 13th century. On the contrary, a 12th-century Chinese map inscribed on stone at Hsianfu (now in the British Museum) is even more accurate than Polo's map. Clearly, Chinese cartographers had far-surpassed their European counterparts. Western cartographers reached this level of accuracy in the 19th century.

Polo's claim that Chinese merchants made regular trips across the North Pacific to the Kingdom of Women (America) is validated by his own testimony and by more-ancient chronicles. The *Hang-Sze-Kung-Ki* tells of envoys bringing crystal mirrors from Fu-Sang to China; the *Year Book of Tang* tells of a land beyond the Aleutians.

## Evidence of Asians in America

Asian traditions, artifacts, loan-words, symbols, plants, and animals that have been found in America confirm voyages across the Pacific.

### Native Traditions

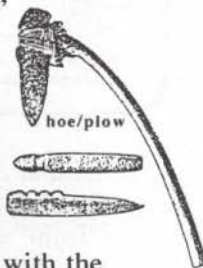
Native traditions praise the arrival of trans-Pacific voyagers in the New World. Mayan and Zapotec legends tell of a giant turtle that emerged from the ocean bringing many strangers who came as teachers. Another Mayan legend tells of a culture-hero named Itzamna who came to Central America in deep antiquity. He brought the technological gifts of a far-off land. Itzamna did not come alone: Mayans refer to his arrival as “the Great Migration.” Peruvians have a tradition that a culture-hero named Taycanamo started construction at Chan Chan—the world’s largest adobe city. Joseph Gardner, editor of *Mysteries of Ancient America* (1986), relates that Taycanamo arrived on a great *balsa* (or ship) circa 1000 AD. Taycanamo told his adopted Chimu tribe that he was sent to govern them by a great lord “from across the sea.”



Itzamna on his ship  
Dresden Codex, 1400 AD  
after Willard (1936)

### Artifacts

The oldest artifacts of East Asian contact are from Neolithic cultures circa 3000 BC. Archeologist J.G. Anderson reported similar elbow-handled hoes in excavations at Linsi, Mongolia, and at North American sites.<sup>20</sup> He regards the hoe as evidence of a direct Asian role in ancient American agriculture.



During the 2nd millennium BC, Olmec artisans shared with the Chinese a unique belief that jade was more valuable than gold. Jade artifacts are common in Olmec sites, while gold artifacts are very rare. Between 1200 and 500 BC, Olmec artisans produced jade objects including finely-sculptured figurines, engravings, and beads. Miniature jade carvings and engravings are very unusual because of the hardness of the stone. Chinese craftsmen required metal engraving tools and crystalline abrasives to work in jade. Olmecs found domestic supplies of garnet abrasives, but they depended on overseas traders to supply iron carving and engraving tools. Ethnographers report that Mexican and Chinese jade carvers share a unique ritual: craftsmen from both places call out to the “Jade Spirit” when seeking unworked stones.

Numerous scholars confirm Asian contact in Central America circa 500 BC. Smithsonian archeologist Betty Meggers identified Asian influence at the Valdivia site in Ecuador where archeologists found ceramic head rests dating to the 5th century BC. Archeologist, Paul Tolstoy, identified an Indo-Chinese source for stone bark-beaters in





1., 2., & 3. Yin-Yang Petroglyphs Inyo, Ca., and Utah



15. Inca jar, Peru Paul Marcoy 1875 (199)



8. Coin Hoard 1200 BC Cassiar, British Columbia



9. Trade Coins 1800-1925 on Wishan costumes, Oregon



4. & 5. Ship Inscriptions from Tuxtla Statuette circa 200 AD and cave painting, Mexico, 500 BC



16. Inca ceramic, Peru Paul Marcoy 1875 (199)



10. Chinese Inscription Nasca, 200 BC



11. Mayan Inscription



6. Jade Money 300 AD Teotihuacan, Mx.



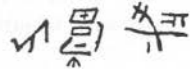
12., 13., & 14. Chinese Inscriptions Peru, circa 700 AD



7. Jade Money Chiapa de Corzo, Mx.



17. Inca jar, Peru (from Paul Marcoy, 1875, p 99)



Central America circa 500 BC. Robert von Heine-Geldern established 500 BC as the beginning of a Mayan decorative tradition called the "Tajin" scroll style, and he confirmed the 5th-century BC introduction of other Asian traits, such as ornate marble vases, tripod jars, scroll-shaped tattoos, and disc-shaped mirrors worn as badges of office.<sup>21</sup>

Artifacts of Iron Age Chinese voyages include numerous petroglyphs, inscriptions, figurines, and coins. Two tablets inscribed with Chinese writing were found when workers excavated a tunnel 50-feet below the streets of Mexico City.<sup>22</sup> In 1865, well-diggers found a bronze figurine of a man sitting on a turtle. The figurine was inscribed with Chinese writing which Taiwan's Academia Sinica has dated to the 1st millennium AD.<sup>23</sup> According to Spencer Bohmmar of the Oriental Institute of Chicago, archeologists found pieces of Burmese jade that were imported to the Yucatan Peninsula circa 800 AD.<sup>24</sup> One piece was set into a warrior's burial mask found in a Mayan tomb. University of California anthropologist Nigel Davies reported the removal of a Chinese soapstone lamp from a pre-Columbian mound in Mexico.<sup>25</sup>

Chinese coins were a popular trade item in the Northwest Coast region. In 1882, miners uncovered Zhou-dynasty coins (circa 1200 BC) near the site of an ancient jade quarry at Cassiar, British Columbia.<sup>26</sup>

During the 1800's, Russian fur traders in British Columbia saw Chinese coins hanging on native masks; and in 1915, Edward Curtis photographed Wishan brides wearing Chinese coins woven into their hair.<sup>27</sup>

### Asian Inscriptions & Loan-words

Numerous Mayan and Peruvian artifacts have Chinese inscriptions, and the earliest Mayan hieroglyphs are indistinguishable from Chinese character writing. In 1908, Peruvian archeologist Pablo Patron reported Chinese writing on two cast bronze figurines from Peru.<sup>28</sup> Shan-shun Ling of the Academia Sinica in Taipei identified the characters as the name of "Wu Tang," the God of the North. He assigned to the artifact a date circa 500 AD. M.R. Steen of the Ecole Francaise de Extreme Orient identified the writing on another artifact as a Chinese spell against evil. Chinese writing is also evident on jade beads found at Teotihuacan and Chiapa de Crozo, Mexico. Texas A & M University geographer George Carter believes the beads and Chinese writing arrived at Teotihuacan sometime between 300 BC and 300 AD.<sup>29</sup>

Another jade artifact from this time period, a statuette from Tuxtla, Mexico, is covered with Chinese characters. The author examined the 2nd-century AD artifact in 1986 and identified 13 Chinese characters, including the Taoist Yin-Yang motif. The Yin-Yang symbol was a frequent glyph used in both Chinese and Mayan writing; it also appears in Mayan hieroglyphic texts at Palenque, Mexico.<sup>30</sup>

Mayans attributed the origin of their writing system to the ancient culture hero—"Itzamna." His cult originated in the Mayan region of southern Mexico and Guatemala along the Pacific Coast.<sup>31</sup> It spread towards the East along with other Chinese cultural traits, including a unique religious symbol called the "Omnibus Power Sign."

East Asian languages have been identified among the native peoples. When the 1850's California Gold Rush brought many Asians to America, Chinese immigrants from Kwangtung discovered they spoke the same dialects as the Sioux and Apache tribes.<sup>32</sup> In 1865, two Peruvian scholars reported that natives in Eten, Peru, understood Chinese.<sup>33</sup> In 1874, linguist Stephen Powers reported linguistic evidence of an ancient Chinese colony on the Russian river in California. During the 1980's, a Manchurian visitor in Bolivia was able to communicate with Quechua-speaking natives using her own Manchurian dialect.<sup>34</sup>

Asian loan-words are common among Native American languages. Canadian historian Ethel Stewart reported Asian loan-words used by the NaDene. The Peruvian term, *quipu*, meaning "accounting cord," is derived from the Chinese *gee-poo*, or "calculating cloth." Quipus were common in Zhou-dynasty China (1100-256 BC). The Columbian word for small craft, *chamban*, is derived from the Chinese *sampan*. The



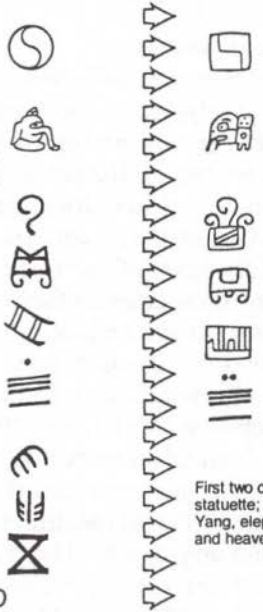
Chinese Characters

Chinese Writing in Central America

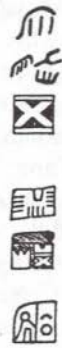
Mayan Glyphs



500 BC to 500 AD



First two columns from Tuxtla statuette; glyphs include Yin-Yang, elephant, ship, hands, and heaven symbols.



Tuxtla statuette 200 AD

6.4

Ecuadorian word *balsa*, for “raft,” was derived from the Asian *palso*—which is an Asian raft. These are only a few of many Asian loan-words used by various American tribes.

**Symbols: The Omnibus Power Sign**

In the 1960’s, Gordon Ekholm, curator of New York’s Museum of the American Indian, and archeologist Robert von Heine-Geldern noted similarities between decorative scroll motifs of China and those of Central America. In 1974, mythology expert Joseph Campbell called scroll motifs “striking evidence of direct influence from China to Mexico.”<sup>35</sup> However, it was not until my own research in 1986 that the real magnitude of transoceanic influence became known. Analysis of religious symbols revealed a complex of motifs that Asian Taoists brought to Central America over 2,000 years ago. Geographical and temporal distributions confirmed this discovery.

Taoist Chinese used scroll motifs to represent many facets of spiritual power. Beginning as early as the 3rd millennium BC, Taoist artists portrayed dragons engulfed by scrolls as though emerging from clouds; the scrolls represented the spiritual forces of the universe.

Taoists also portrayed plants emerging from scrolls representing fertility. At this point in the development of scroll motifs, Taoist symbolism was similar to religious art throughout the world: most religious artists use scrolls to represent serpents, dragons, clouds, and fertility. However, during subsequent centuries, Taoists began using scrolls to represent *all* supernatural powers, such as flight, sight, consciousness, sacredness, the wind, immortality, breath, speech, cosmic power, thunder, eternity, the source of rain, the cosmic or holy spirit, life force, communication with spirits, and the cosmic matrix of spiritual forces. Indeed, Taoists believed that the universe was a veritable cauldron of cosmic forces which they represented with specific varieties of scroll motifs. Because Taoists used scrolls in an all-encompassing manner to represent supernatural phenomena, I felt justified in naming the versatile symbol the world's first *omnibus* power sign.<sup>36</sup>

No other society has devised an Omnibus Power sign, because symbols are commonly used to distinguish between different kinds of things. For example, most people regard such things as vision, flight, and holiness as discrete phenomena. Accordingly, Christian artists portray vision with a human eye, flight with wings, and holiness with a halo. However, Taoists regarded *all* supernatural forces as inter-related, so they used scrolls to represent everything. Instead of eyes, Taoists used scrolls to represent vision; instead of wings, Taoists used scrolls to represent flight; instead of a halo, Taoists used scrolls to represent holiness—and so on *ad infinitum*.

The Taoist Omnibus Power Sign embodied the principle Taoist belief that *everything* resulted from the interplay of Yin and Yang.

Although simple scrolls are common as motifs throughout the world, it is erroneous to assume they have no value in identifying their specific meaning or their cultural heritage. Scroll motifs are similar to the stars and stripes on the United States flag. Although stripes and stars are common as flag emblems throughout the world, the *specific* arrangement of stars and stripes on the American flag is unique. Furthermore, traditions specify the number of stars, the number of stripes, their colors, their arrangement—and the symbolic meanings behind each of these. Flag traditions are further associated with historical events and other political symbols which characterize the history of the United States.

By the 7th century BC, Taoists developed 13 specific types of scroll motifs which were standardized throughout China. Examination of Olmec and Mayan artifacts dating before the 7th century BC revealed few scroll symbols and none of the specific motifs characteristic of the Taoist Omnibus Power Sign. Furthermore, there was no evidence in ancient Central America of the great diversity of developmental scroll motifs that were present in ancient China over a period of 3,000 years.

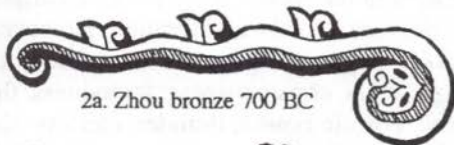


1. Tang carving  
500 AD



Yin-Yang

### EAST ASIA



2a. Zhou bronze 700 BC



2b. Ming carving 1300 AD



4. Indonesian  
mural 1000 AD



6. Zhou carving 700 BC



3. Zhou bronze 700 BC



5. Timor mask 1900



7.  
Han mirror  
100 AD



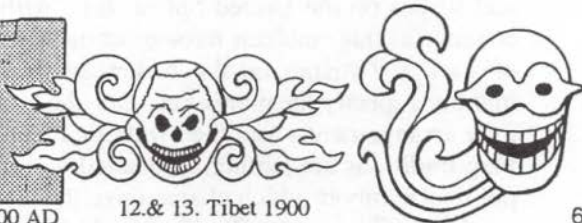
9. Shang jade 1300 BC



10. Han mirror 100 AD



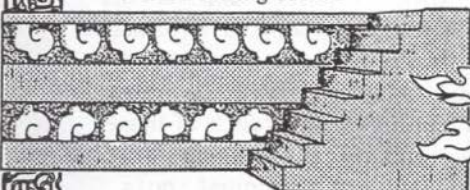
8. Zhou carving 800 BC



12. & 13. Tibet 1900

6.7

11. Ming pyramid 1000 AD



### OMNIBUS POWER SIGN

Mayans adopted the 5th century BC Taoist Chinese use of scroll symbols to represent virtually *all* supernatural phenomena. Mexicans continued the Mayan tradition after 1300 AD. Shown above are a few of thousands of similar motifs in China and Central America. There are several distinct types of scroll traditions: 1) serpent wind; 2) celestial serpent; 3) scroll eyes, or cosmic sight; 4) the sky mouth or source of



Asian  
Power Sig





Yin-Yang, Mexico

# CENTRAL AMERICA

1. Toltec facade  
1000 AD



3. Toltec facade



2a. Toltec facade  
1000 AD



2b. Vatican Codex



5. Yucatan facade 900 AD



4. Teotihuacan  
500 AD



10. Izapa, Mx. 300 BC



9. Toltec  
vase 1000 AD



6. Mayan 700 AD



8. Mayan 300 BC



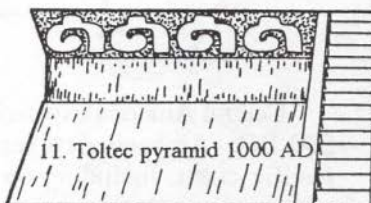
7. Aztec codice  
1300



13. Chichen Itza 1300



12. Mayan 800 AD



11. Toltec pyramid 1000 AD

Mexican  
Power Sign

6.7 after Thompson 1989

wind & rain; 5) cosmic consciousness; 6) cosmic disk--or the hole to heaven; 7) the queen of heaven on her throne of immortality (a double-headed serpent); 8) eternity symbol--a double-headed serpent; 9) Yin-Yang serpents, or life-force; 10) scroll wings representing divinity; 11) pyramid with thunderhead or rain-cloud motifs; 12) life-force scrolls issuing from skulls; and 13) consciousness of ancestral spirits.

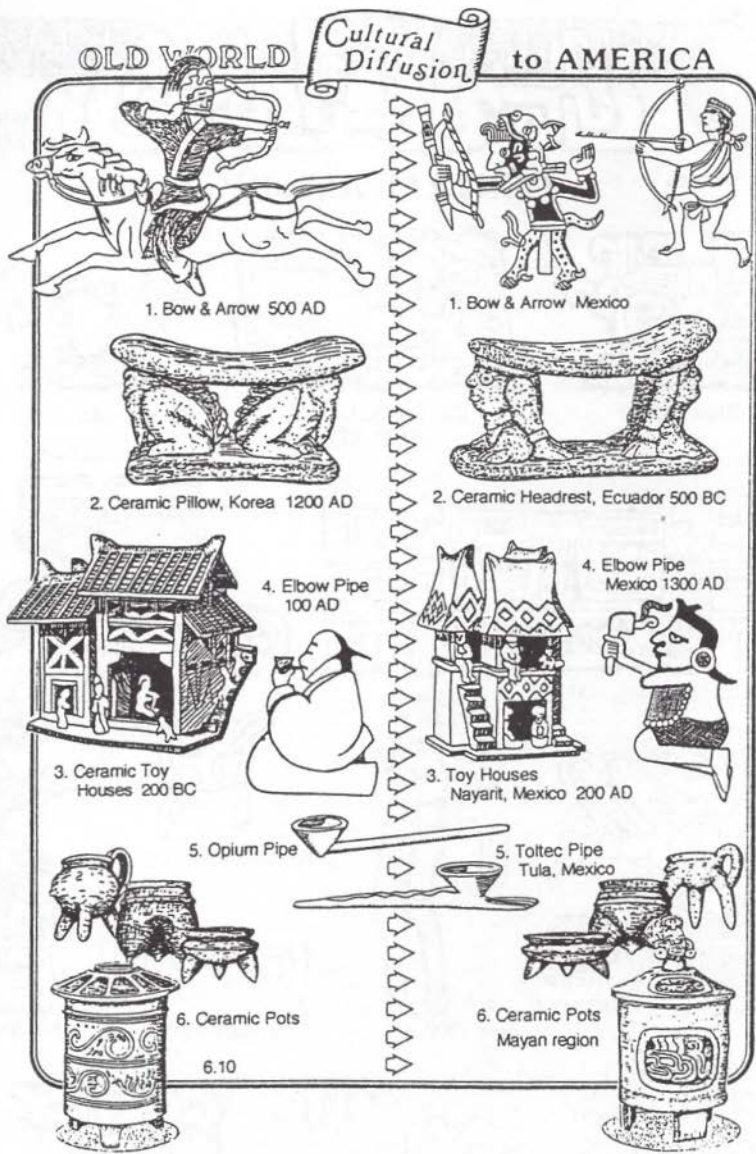




OLD WORLD

Cultural Diffusion

to AMERICA



Central America experienced a radical cultural transformation circa 500 BC. Archeologists report evidence of Asian contact along the Pacific coast, including the introduction of pottery headrests, jade statuettes inscribed with Chinese writing, and bark-beaters made in the Asian tradition. Concurrently, in about 500 BC, all 13 varieties of the Omnibus Power Sign suddenly appeared along the Pacific coast of southwest Mexico and Guatemala. This marks the emergence of a new decorative art tradition archeologists call "Izapan."

The lack of developmental forms of the Omnibus Power Sign in Central America and the simultaneous appearance of all 13 motifs on the

Pacific coast of southern Mexico circa 500 BC were the result of maritime contact with Taoist Chinese merchants. Subsequently, the Omnibus Power Sign became the core symbolism of the Mayan religion. Many of the Taoist-Mayan symbols were later adopted by the Aztecs.

Pacific coast sites where the Taoist Omnibus Power Signs first appeared are at Izapa, Mexico, and Kaminaljuyu, Guatemala. These ancient cities were located on the Mayan coastal trade route, and they had easy access to the principle source of Mayan jade at Motagua, Guatemala. The region is also renowned for its hallucinogenic mushrooms. It was an *ideal* location for a Chinese colony.

### Plant & Animal Diffusion: Five Grains, Dogs, & Horses

The chronicles of the Hsu Fu expedition indicate that the 3rd-century BC voyagers took along seeds of the *five grains* on their trip to Fu-Sang.<sup>37</sup> Presumably, these were millet, rice, barley, wheat, and sorghum. In the 1980's, a cache of ancient Chinese seeds was found in eastern Washington State. Geographer George Carter reports that millet was the oldest cultivated grain in both Mexico and China.<sup>38</sup> Carter's conclusion that ancient Chinese agricultural practices diffused to Mexico is supported by the presence of Chinese Neolithic hoe-plows in North America. Curators at the Heard Museum in Phoenix report finding "native" barley at several Southwestern Hohokam ruins dating to the 13th century. Although weed barleys grow throughout the world, botanists believe all grain-bearing plants derive from Asian domesticates.

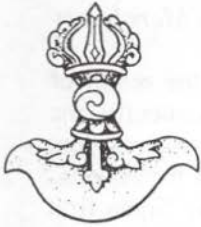


During the 16th century, European explorers reported grain-bearing millet growing along the East Coast. Although some weed varieties of millet (*Sataria*) are native to America, botanists have identified the Asian foxtail millet (*Sataria chaetochloa*) as one of the varieties growing in North America. How and when it arrived is unknown.

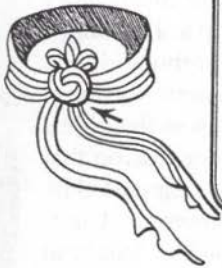
Mayan rice-farming was patterned after East Asian traditions. Farmers burned the jungle and dug canals prior to planting. Asians used canals to control the flow of water which was crucial to maintaining the right temperature for rice cultivation. Archeologists have been baffled by the function of canals in Mayan jungle regions, because they assumed canals were only needed in arid regions where they are used to irrigate *maize* and garden crops. But there was no lack of water in the jungle.

Several Asian canines reached America on Asian ships. Ancient ceramic sculptures of the Chinese pug are similar to sculptures of the Mexican *sholo*.<sup>39</sup> Mexicans, Peruvians, and Asians regarded the small fattened dog as a delicacy. Palmer's *Illustrated Guide to Dogs* (1981) indicates that another breed, the Mexican Hairless, originated among nomadic tribes of northeastern Asia.<sup>40</sup> The breed was further domesticated in Mexico. Recently, experts identified offspring of the Mexican





Yin-Yang, China



1. Mythical Lion Dog  
Chinese mural 1300 AD



2. Chinese Ha Pa Dog  
from a vase 300 BC



3. Toy Terrier  
after 20th-cent. photo



6.8

Asian Dogs in Mexico



1. Mythical Lion Dog  
Aztec drum 1450 AD



2. Mexican Dog  
Colima, Mx. 100 AD

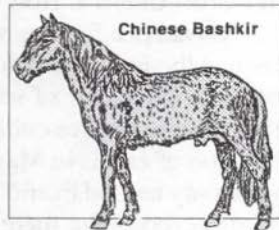
3. Mexican Hairless  
after 20th-cent. illust.



breed along the waterfront in Hong Kong; how the Mexican hounds reached Asia is a mystery.

Another Mexican dog, the curly-haired Lion Dog, was a mythical beast portrayed on a wooden drum from the Valley of Mexico. This canine has an uncanny resemblance to an Asian breed, the Pekingese, which is also referred to as a "Lion Dog." Portrayals of the Peking Lion Dog have the same curly-haired features as the mythical Mexican beast.

Chinese explorers brought horses to North America. Historian Orville Hope believed *bashkirs* accompanied Chinese surveyors on their 3rd millennium BC trek across America. Bashkirs were short, sturdy animals with curly hair. Perhaps these were the horses Hui-Shen saw on his 5th-century expedition to Fu-Sang?



Chinese Bashkir

Early explorers also noticed curly-haired horses in the Northwest; the natives rode them from Oregon to Southern California on trading expeditions. During the 15th century, the Spanish imported *bashkirs* to work the farms of California's missions. Natives called these horses *chinos*.<sup>41</sup>

Historical Reports

When the first Spanish explorers reached the Pacific, they reported

(Donnelley, 1924)



Fokien Trader—Chuan Chow, China

strange sailing ships off the southern California coast.<sup>42</sup> These were foreign merchant ships of the Far East. In 1544, Coronado sighted exotic ships with “pelican-shaped bows” in the Gulf of California. In 1573, Franciscan friar Juan DeLuco sighted eight “strange ships” along the west coast of Mexico. During the 17th century, Spanish priests in southern California found Asians working mines and fishing along the coast; native tribes reported continuous commerce with Asian merchants since the time of their ancestors.<sup>43</sup> Archeologists later found Chinese anchor-stones near Palos Verdes, California. The anchor-stones had been made from local materials by ancient Asian settlers in southern California.

### Impact on Native Culture: Rise of the Mayans

Asian-American contact had a profound impact on Olmec and early Mayan cultures. More than three decades ago, Robert von Heine-Geldern observed that Asian contact transformed Native American villages into urban societies comparable to those of the Old World.<sup>44</sup> Through this contact, native civilizations were able to jump beyond many centuries of gradual development and experimentation that otherwise would have been necessary. Trans-Pacific contact led to some pronounced similarities in mythology and beliefs. Joseph Campbell regarded Mayan myths, religion, and astronomy as branches from Asian culture. He noted that: “The underlying mythologies of mathematical order governing the Earth as well as Heaven are the same.”<sup>45</sup> Campbell observed that an eclipse table in the Mayan *Dresden Codex* was identical to a table produced by Han dynasty astronomers in the 1st century AD. Both tables predicted 23 eclipses during a 135 month period, when in fact only 18 occur. In other words, the Mayan table was not only *faulty*, it had the *same* errors as the Chinese version. Because the identical pattern of errors could not have resulted from independent observations by Mayan skywatchers, Campbell concluded that the Mayan eclipse table had been adopted from an ancient Chinese version *via* transoceanic diffusion.

Other similarities between East Asia and the Americas include the Mexican and Peruvian use of molds in ceramic fabrication, widespread Mayan use of cinnabar as a burial offering, Mayan construction of stepped-pyramids in the Chinese fashion with stairways on all four sides, Mochica gold-casting using the lost-wax method, Mexican turquoise inlays, Peruvian chamber-burials, Peruvian manufacture of copper wire, the fresco technique for decorating walls, Peruvian and Mayan kite

in Mexico



Mexico

yin/yang



## AMERICAN DISCOVERY



sailing, the Mexican manufacture of bronze bells, and the Peruvian *quipu*, or “accounting cord.”<sup>46</sup>

Asians influenced native smoking practices by introducing the elbow pipe and the cone-shaped opium pipe. Elbow pipes first occurred at South-eastern Woodlands villages circa 100 AD; cone-shaped pipes date to Mexico’s “Post Classic” period circa 1200 AD. Regardless of the growing popularity of stone elbow pipes, most aboriginals favored tube pipes and cigars for smoking tobacco.

### The Mayan-Taoist Alliance

Asian impact was particularly significant in the Mayan region of southern Mexico and Guatemala between 800 BC and 200 AD. Prior to Chinese colonial activity, the native Olmecs dominated the region from ceremonial centers along the Gulf Coast of eastern Mexico, and Mayan tribes paid tribute to Olmec rulers. However, between 800 BC and 500 BC, the Mayans banded together into a confederacy whose purpose was to defeat the Olmecs. Mayans overran Olmec ceremonial centers and desecrated many Olmec monuments—including colossal sculptures of Black Africans.<sup>47</sup> According to archeologist Victor Von Hagen, the capital of the Mayan Confederacy was located near the Pacific coast at Monte Alban, Mexico.<sup>48</sup> Abundant Chinese symbols found at Monte Alban imply that Chinese colonists assisted the Mayan rebellion.

The fact that the Mayans adopted the Taoist Omnibus Power Sign reveals a very close bond between Asians and Mayans. This bond was probably due in part to the success of Asian weapons.

### Bows & Arrows

The earliest evidence of bows and arrows in Central America is a jade pendant from Monte Alban dated to the 3rd century BC. The pendant shows a warrior holding a bow. Most anthropologists believe the principle native weapons were throwing stones, spears, and the *atlatl*—or spear thrower. Chinese merchants brought a far-superior weapon: steel-tipped arrows and the *composite bow*. Unlike the regular bow which is made from a single piece of wood, the composite bow has several laminated layers providing greater strength and range.

How and when bows reached America is one of the lingering controversies of anthropology. According to a popular theory, the weapon diffused slowly from Asia across Alaska via the Inuit culture reaching Central America by about 500 AD.<sup>49</sup> The earliest known obsidian arrow points in Mexico occur after 900 AD, and archeologists have dated Southwestern petroglyphs showing hunters with bows circa

Mexican archer  
Monte Alban, 500 BC  
jade relief carving



1000 AD.<sup>50</sup> Mexican and Peruvian artists occasionally illustrated bows and arrows *after* 1300 AD, giving the impression that use of the weapon was a fairly recent phenomenon.

However, North Americans used a curious assemblage of arrowpoints, including antler tips, hardened wood, flint, obsidian, copper, and iron. Because most of these materials readily decay, they have left no trace in the archeological record. Likewise, Asian arrows with iron or steel tips rusted shortly after use and left no evidence for archeologists. Most excavators have overlooked diminutive arrowpoints called *microliths*, meaning "small stones." Indeed, microliths suitable for arrows have been found at Alaskan sites dating to 8000 BC, and they occur in California by 4000 BC.

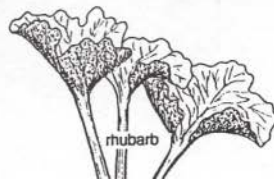
### Origins of Mayan Civilization

Archeologists have been baffled for decades by the sudden flowering of Mayan civilization, because it occurred in the dense jungle environs of southern Mexico and Guatemala. The early stages of Mayan cultural growth were predominantly a local phenomenon: civilization had taken root by 1500 BC with minimal inspiration from abroad. However, by 500 BC, Chinese Taoists established colonies for the purpose of acquiring jade, hallucinogenic mushrooms, exotic feathers, incense, and gold for which they traded iron tools, textiles, and paper. Chinese writing greatly facilitated communication among the numerous Mayan tribes that spoke different languages, and the increasing foreign trade established inter-tribal bonds. Ultimately, Chinese weapons and strategy enabled Mayan leaders to defeat the Olmecs, thus paving the way for the rise of Mayan Civilization.

Because of the successful alliance, native tribes adopted many Asian cultural traits including Taoist beliefs, Chinese picture writing, the Omnibus Power Sign, and an ancient Chinese solar calendar. Chinese scholars have identified a calendar from the ancient province of Huey that is identical to the oldest Mayan calendar.<sup>31</sup> Mayans also adopted the Taoist tradition which emphasized an individual's personal quest for enlightenment as the single most important purpose of existence.

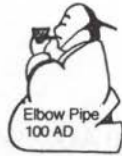
### The Strange Case of Rhubarb

One of the plants which Columbus claimed to bring back from the Caribbean in 1493 as proof he succeeded in reaching Asia was rhubarb—*Rheum rhaponticum*. Columbus knew, as do modern botanists, that rhubarb is indigenous to Asia. It is described in a Chinese herbal, *Pen-king*, dating to 2700 BC. Arabs imported the plant to Europe where it was used as a medicinal—so Europeans were familiar with the plant in time for the Columbus voyage.





## AMERICAN DISCOVERY



### Impact On The Old World

The most important benefit Asians derived from the trans-Pacific mercantile exchange was the introduction of American plants including peanuts, tobacco, sugar apples, *maize*, chili peppers, amaranth, sweet potatoes, and hibiscus.<sup>52</sup>

The oldest American crop import was the Peruvian peanut. Asian archeologists found peanut remains at two Chinese sites. Peanut shells from Chekiang had a radio-carbon date of 2000 BC; shells at Kiangsu were dated to 3500 BC.<sup>53</sup> Transport by oceangoing vessels is the only feasible way they could have reached China.

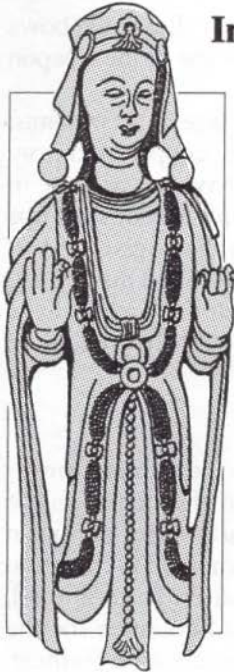
Tobacco is another American crop that reached China long before 17th-century Europeans. The plant was so prolific in East Asia that 19th-century botanists believed it originated in China or Mongolia.<sup>54</sup> Indeed, Han dynasty banners (circa 200 BC-220 AD) show men smoking with elbow-pipes. In the 17th-century, Alaskan natives obtained tobacco *via* maritime trade with China.<sup>55</sup>

Botanists were confused by another trans-Pacific import: the sweetsop or sugar apple (*Anona squamosa*). Ancient Chinese traditions led botanists to believe the plant originated in Asia. Equally convincing was the fact that native Mexicans used an Asian name for the plant: *ate*. Brazilians used a similar name: *ata*. Botanists believe these names were derived from Asiatic terms *atis* or *attoa*.<sup>56</sup> In spite of the native American practice of using Asian names for the plant, botanists believe sugar apples originated in the Caribbean.

According to Yu Kie's 502 AD account of the Hui-Shen voyage, the Buddhist returned with seeds of the "Fu-Sang plant" which had leaves like an oak, stalks like sugar cane, and reddish fruit in the shape of a pear. It was used to make alcoholic beverages, paper, and clothing. This description could equally refer to *maize* or the century plant (agave).

There is ample evidence for the ancient dispersal of *maize* to East Asia. Chinese statues dating to the 6th century AD portray Buddhist divinities wearing garlands of *maize* ears. Assam legends contend that the hill tribes cultivated *maize* long before rice. The plant is also featured in a ceramic mural at Shanxi Province. Chinese historian Sidney Chang dated the mural at circa 900 AD.<sup>57</sup> In 1422, Chinese naval officers reported seeing "extraordinary large ears of grain" on their voyages to Africa and India. Botanist M.D.W. Jeffreys is certain it was *maize*,

Chinese Priest with maize garlands statue from North China, 600 AD (6.11)



*maize* 9th century Shanxi, China from ceramic mural

after Thompson 1992

Gem-Like Sorghum



after Weatherwax (1954)

chili pepper



because no other grain fits the description.<sup>58</sup> Li Shih-ch'en's 16th-century botanical encyclopedia, *Pun Ts'ao Kang-mu*, included an illustration of *maize* (a *gem-like sorghum*) which reportedly came to China from Mongolia at "a remote date."<sup>59</sup> An ancient botanical encyclopedia, the *Ke Chih King-yuan*, refers to it as "Imperial Wheat."<sup>60</sup> These domestic terms for the plant suggest cultivation prior to European merchant voyages of the 16th century.

Another New World food plant, the grain amaranth, was an ancient arrival in Asia. The plant was so widespread by the 18th century that European travelers assumed it was indigenous to Asia. The Chinese call the plant *Tien-shu-tze*, or "millet from heaven." Botanist Johnathan Sauer notes a clear reference to grain amaranth in a Chinese *materia medica* published circa 950 AD.<sup>60</sup> Chinese and Mexican farmers employed similar methods of amaranth cultivation using *chinampas* or artificial lakes that were drained so that algae could be harvested for fertilizer. Historians ignorant of such details typically assume this plant is an example of the "miraculous speed at which New World crops spread across the Pacific following European conquest."

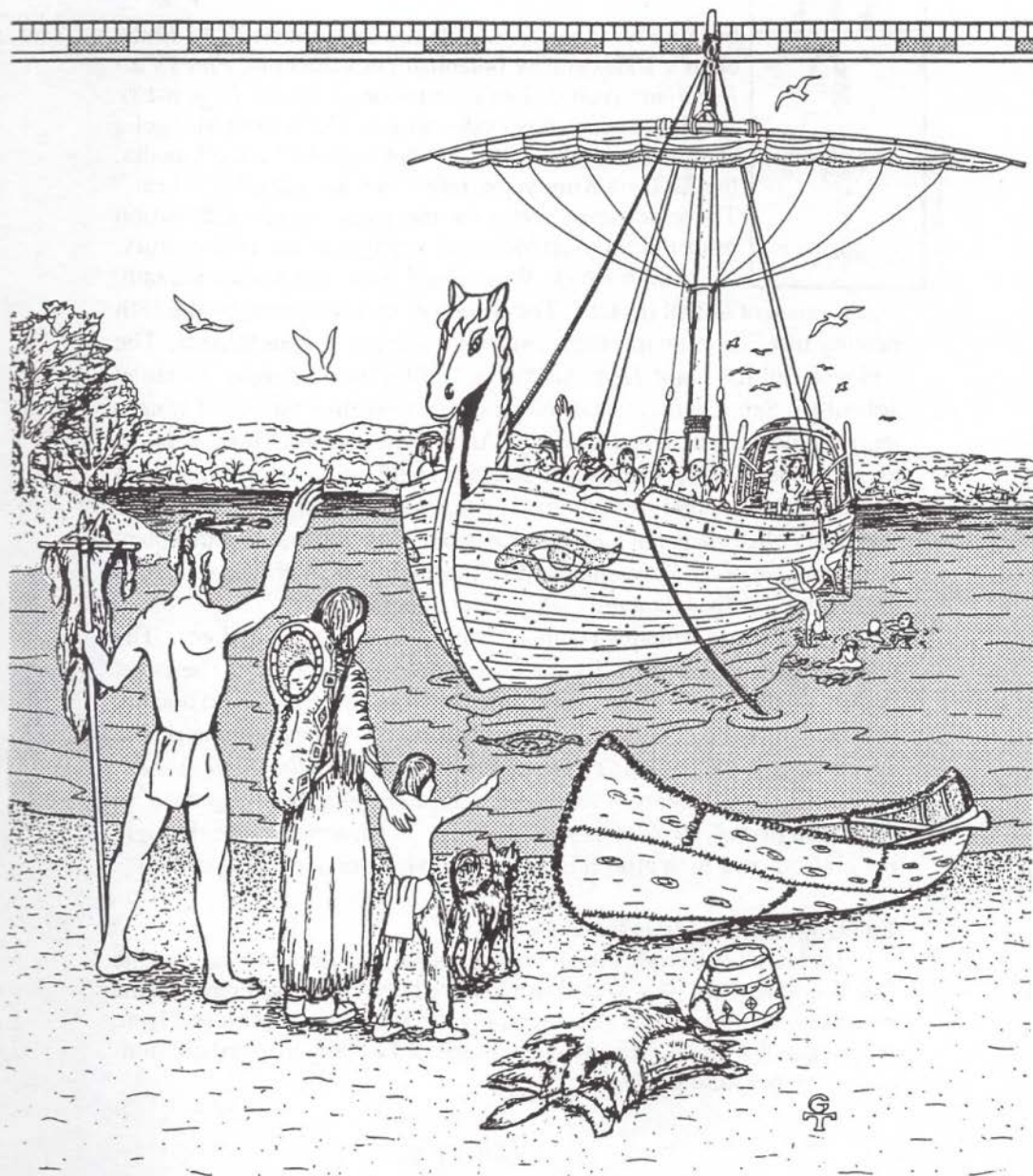
Several other American plants reached China in ancient times. The Chinese have a local name for the chili pepper—*T'im Tsiu*.<sup>61</sup> The sweet potato, which the Chinese called *kan-shu*, was described in an ancient botanical report circa 300 AD.<sup>62</sup> An illustration of the common potato appeared in Wu Chi-Chun's 16th-century herbal *Wu Ming Shih Tu Kao*. According to 1st-century accounts, Chinese merchants exported an American flower, the red hibiscus, to Persia. Vietnamese sailors brought the hibiscus to China after returning from voyages across the ocean.

### Fu-Sang: A Land that Poets Dream Of

Had it not been for Chinese voyages across the Eastern Sea, both the Old World and the New World would have been vastly different. China was a major importer of American plants; it was an exporter of iron, religion, and writing. Meanwhile, legends of Fu-Sang inspired missionaries, mystics, and poets.







**Argonauts in America**  
*Iroquois natives greet Phoenician traders near the  
St. Lawrence river, circa 800 BC.*



## ***MINOANS & PHOENICIANS*** (3400 BC—146 BC)

**D**emand for copper was the driving force behind the earliest Old World colonies in America. Throughout the Mediterranean, queens, kings and emperors demanded stone palaces and temples which could only be made using hardened copper or bronze tools. Mining tunnels at Vinca in the Balkans were emptied of copper ores during the 3rd millennium BC. The copper demand jumped in 2780 BC with construction of Djoser's stepped pyramid at Saqqarra, Egypt. It was the first of Egypt's colossal pyramids. Tens of thousands of stone blocks were required for the structure, and hundreds of thousands of metal tools were needed for cutting the stones from quarries and shaping them into perfect rectangles. Mediterranean and Middle Eastern copper reserves were rapidly depleted as miners leveled mountains of ore. Copper deposits in Lebanon were soon exhausted; the copper mountain on Magan Island in the Persian Gulf was entirely consumed by the 2nd millennium BC; and copper veins on Cyprus were chiseled bare.<sup>1</sup>

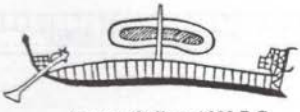
In desperation, pharaohs dispatched explorers across the seas to search for new sources of the vital metal. They found one of the world's richest deposits in North America. Because mining and the transport of ore were beneath the dignity of Egyptian citizens, pharaohs delegated those tasks tributary states, such as the Minoans of Crete and the Phoenicians of Lebanon.

### **Crete's Minoan Civilization**

The island of Crete is located in the Mediterranean Sea 50 miles south of Greece and directly north of Egypt. Archeologists have determined that the inhabitants of the island engaged in active commerce with Macedonia (or Greece) as early as 3400 BC.<sup>2</sup> During nine centuries of Egyptian domination, Cretan merchants played the role of long-distance brokers and transporters of raw materials needed for the pharaohs' places and pyramids. In ports along North Africa, Lebanon, and the Aegean Sea, Cretan merchants brought the building blocks of human progress: textiles, metal tools, wine kegs, sculptures, grains, quarried stones, lumber, and slaves.



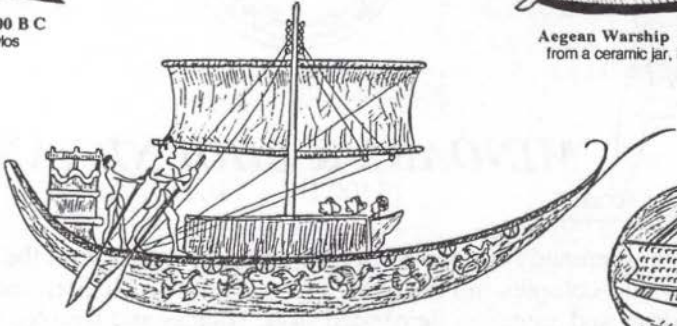
# Minoan Ships



**Aegean Galley 1200 B C**  
from a ceramic jar, Pylos



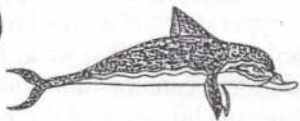
**Aegean Warship 850 B C**  
from a ceramic jar, Eleusis



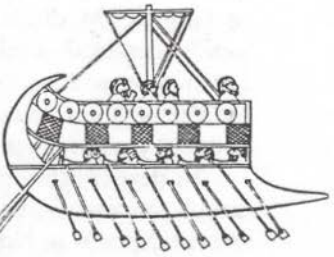
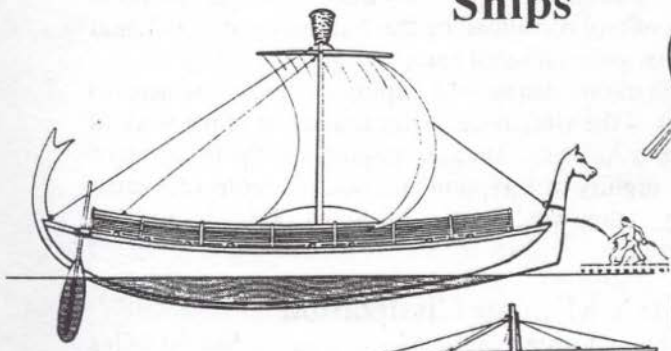
**Minoan Galley 1500 B C**  
from a mural at Akrotiri, Thera



**trade seals**  
after Cotterell (1979)



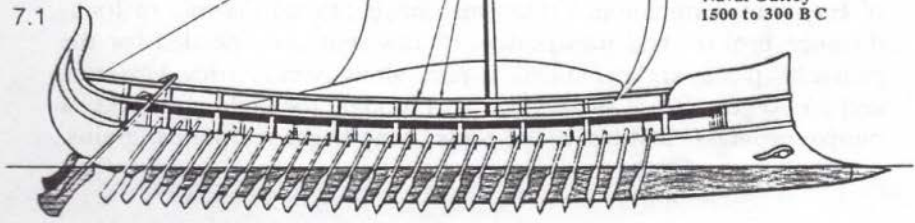
# Phoenician Ships



**Phoenician Bireme 700 B C**  
sandstone relief carving  
note: two banks of oars

**Phoenician Merchant 1500 to 300 B C**  
note: stallion figurehead  
length: 60 to 150-feet

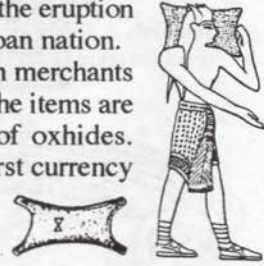
7.1



**Naval Galley 1500 to 300 B C**

Crete's ancient civilization was named after King Minos who established his palace at Knossos in 2500 BC. Minos' palace was one of architectural wonders of the ancient world. Like his counterparts in Egypt, Minos built his palace of stone blocks and pillars, because he wanted an enduring monument for the adoration of future generations. His power derived from the growing wealth of vassal merchants and the success of his navy. Merchants of Crete paid yearly tribute to Egyptian pharaohs until 1400 BC when a tidal wave from the eruption of Mount Thera virtually extinguished the Minoan nation.

An Egyptian mural at Keftiu depicts Minoan merchants bringing tribute to Pharaoh Rekhmara. Among the items are copper ingots which were cast in the shape of oxhides. Miniature oxhide-shaped ingots served as the first currency in both the Mediterranean and North America.



### Cretan Galleys

The demands of commerce led Cretan shipbuilders to devise a new kind of vessel that was suitable for ocean sailing and commercial transport. Cretan galleys were the first vessels having a keel with curved ribs and an overlying "skin" of wood planks.<sup>3</sup> Builders used two layers of thin planks to give the hull strength and to cover the gaps where adjacent planks came together. They were held to the ribs with copper spikes or wooden plugs called "treenails." These light-weight vessels of the 3rd millennium BC reached lengths of 100-feet, and they had upward-curving prows which enabled them to land on sandy shores. Cretan galleys had a single mast with a square sail and were maneuvered by oars and side mounted steering paddles. Portrayals of these vessels on Cretan murals and ceramic artifacts show as many as 60 oarsmen. This ship design met the needs of Mediterranean merchants and established shipbuilding traditions that lasted until the 13th century AD.

### Evidence of Minoan Contact

Minoan explorers and miners left few traces of their ancient American voyages. However, amateur archeologists have reported some intriguing inscriptions, and Native Peoples made frequent use of a classic Minoan symbol called the "Minoan Maze."

Minoan inscriptions have been found in Georgia and in Brazil along the Amazon river.<sup>9</sup> These inscriptions date to 1500 BC. Historian James Bailey concluded that inscriptions reported by Brazilian trapper Bernardo Ramos were similar to a Cretan style of writing known as "Linear A."<sup>10</sup>

In 1883, antiquarian Herbert Bancroft reported that Pima natives of Arizona showed 16th-century Spanish explorers a traditional symbol





# OLD WORLD FACES

## IN ANCIENT AMERICA



**Phoenician Merchant**  
Egyptian mural  
1000 BC



**Melkarth**  
Phoenician statue  
500 BC



**Melkarth**  
Rio Balsas  
Mexico  
500 BC



**Cypriot Sailor**  
600 BC sculpture



**Guatemalan Sculpture**  
with Semitic features  
200 AD incense burner



**Mayan Sculpture**  
700 AD



**Semitic Merchant**  
Egyptian mural 1500 BC



**Bearded Man**  
Mexican relief carving

7.6

they used to represent the search for wisdom: it was the Minoan Maze.<sup>11</sup> The symbol's origin dates to the 3rd-millennium BC reign of King Minos. According to Greek legends, Minos demanded the sacrifice of seven Athenian youths and seven maidens as atonement for the murder of his son at the Olympics. Victims were sent into a maze, or Labyrinth, which was the domain of a bull-headed demon called the "Minotaur." A Greek hero named Theseus discovered the Minotaur's secret and slew the beast. Henceforth, the maze represented the quest for knowledge.

The maze was known throughout the Mediterranean as a consequence of Minoan travels and trading. Minoan coins also bore the Minotaur's emblem. Greeks, Phoenicians, and Libyans helped spread

Tanith, Carthage  
after ESOP (1989)



the motif during the course of their worldly travels because they often carried Minoan coins.<sup>12</sup> Ancient American examples are known from Mexico, Ecuador, Panama, Arizona, and New Mexico. Isolationists have argued that Spanish colonists were responsible for the symbol's dispersal in the New World, although they are at a loss to explain why devout Catholic Spaniards would promote use of a pagan motif. The accounts of early Spanish explorers in the Southwest reveal that it was Pueblo natives who first showed the motif to incredulous Spaniards.

## Phoenician Civilization

Minoan power ended abruptly in 1400 BC, when tidal waves and volcanic ash engulfed Crete following the cataclysmic explosion of Mount Thera. Minoans who survived the disaster were captured by invading Greeks who chose this moment of weakness to attack their arch-rival. Meanwhile, the Minoan merchant empire fell into the hands of Lebanese seafarers known as "Phoenicians."

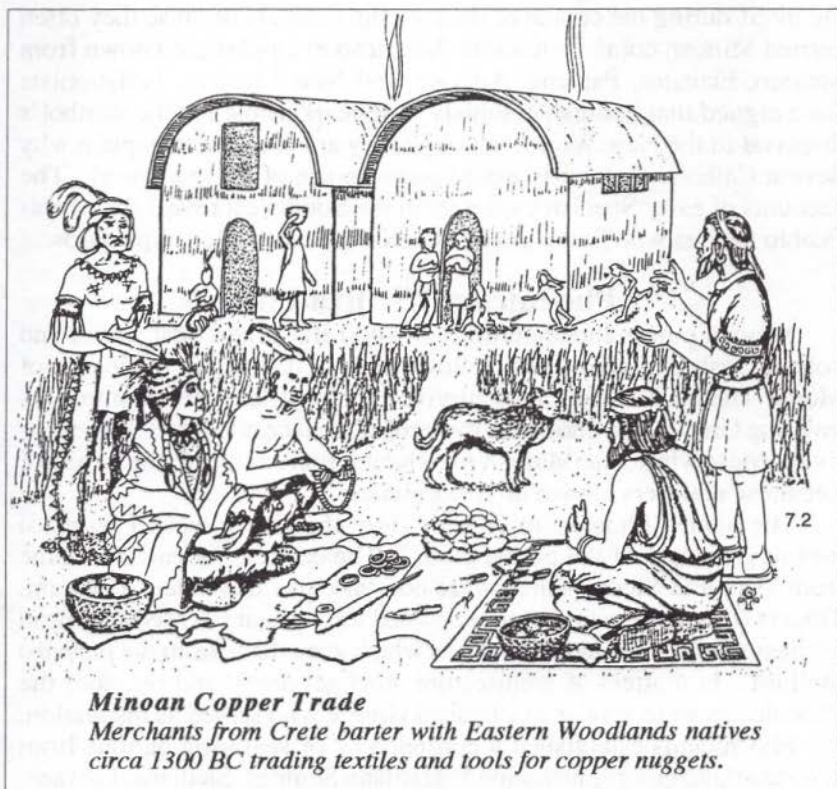
The name "Phoenician" comes from the Greek word *Phoinikoi* meaning "people of the purple cloth." The earliest Phoenicians came from Tyre and Sidon, which were coastal cities in western Lebanon. Traders from these cities were renowned throughout the Mediterranean for their purple cloth and purple dyes which were made from the *purpura* mollusk. In matters of architecture, cuisine, dress, and religion, the Phoenicians were similar to Classical Greece who served as inspiration.

Phoenicians established a confederacy of seafaring nations from diverse ethnic groups, including Palestinian Semites, Sicilians, Libyans, Berbers, Black Africans, and Iberian Celts. Their growing influence derived from extensive trade networks, construction of enormous merchant fleets, maintenance of superior naval forces, and religious solidarity. They worshiped the Sun God Baal and the Sea Goddess Tanith. By 1000 BC, Phoenician culture spread to North African territories in Libya and Tunisia. During the 9th century BC, Phoenicians founded the powerful metropolis of Carthage in Tunisia. During the 8th century BC, they established settlements on the Iberian Peninsula at Gadeira (Cadiz, Spain), at Adra, and at Tartesus (the Biblical city of Tarshish).

### Phoenician Ships & Commerce

By 800 BC, Phoenicians ruled the western half of the Mediterranean Sea. From bases near the "Pillars of Melkarth" (Gibraltar), they dominated access to the Atlantic Ocean. This position enabled them to maintain a trade monopoly with the British Isles and American colonies across the Atlantic. America was an important source of furs, lumber, gold and copper, while England was noted for its deposits of tin. The Atlantic monopoly and the resulting high prices for imports led to





**Minoan Copper Trade**

Merchants from Crete barter with Eastern Woodlands natives circa 1300 BC trading textiles and tools for copper nuggets.

continuing animosity between Carthaginians, Romans, and Greeks.

Naval battles were frequent, and the pressure to build larger fleets was incessant. Minoan ship designs were followed by more-advanced Phoenician models. Carthaginian shipwrights added a second tier of oars to war galleys, thus creating a vessel known as the *bireme*—for “two banks” of oars. Some biremes reached lengths of 200-feet and carried several hundred oarsmen. Archers and mariners stood on the upper deck, protected by a row of shields along the outside of the ship. The *bireme*’s prow was fitted with a pointed battering ram.

Modifications of the standard *bireme* design came rapidly as Greece, Rome, Persia, and Phoenicia vied for control of the seas. Shipbuilders devised the *trireme*—a huge galley with *three* banks of oars. The Mediterranean arms race had a frightening pace: as soon as one nation constructed a more-advanced warship, all the others countered with their own nightmarish innovations. During the 3rd century BC, ship designers introduced vessels with *four* banks of oars. Athenian supergalleys were nearly 300-feet long. They were propelled by one-hundred and sixty oars

and two gigantic sails. The arms race culminated with the construction of enormous wooden battleships with 800 oars. Crews of galley slaves and marines on every vessel numbered in the thousands.

An indirect consequence of the frenzied arms race was a broadening of cultural horizons and commerce. Merchants traveled extensively as they tried to meet the spiraling demands for raw materials. The workhorse of Phoenician merchants was a single-masted galley ranging in length from 80 to 150-feet. Made with a keel and ribs in the Minoan tradition, the merchant galley was an excellent sailing craft designed for speed and maneuverability. A high curving stern enabled easy landing on sandy shores; the bow often ended in the figurehead of a stallion which was the official emblem of Carthage.

Merchant galleys served as the primary transports on trans-Atlantic trade routes from the 13th century BC through the 1st century BC. The most common route took voyagers from the Mediterranean to Britain, and then across the North Atlantic to Iceland, Greenland, and the North American coast. It was a two-year journey covering 10,000 miles.

In the 6th century BC, a fleet of Phoenician vessels circumnavigated Africa in the service of Pharaoh Necho. The sailors covered more than 14,000 miles of coastal waters and ocean in about three years time. During the 5th century BC, Carthaginians commanded by Admiral Hanno founded colonies along the West African coast. According to a Greek writer, Pliny the Elder, Hanno's travels had taken him from the Gadeira to "the extremity of Arabia"—a distance of over 7,000 miles.

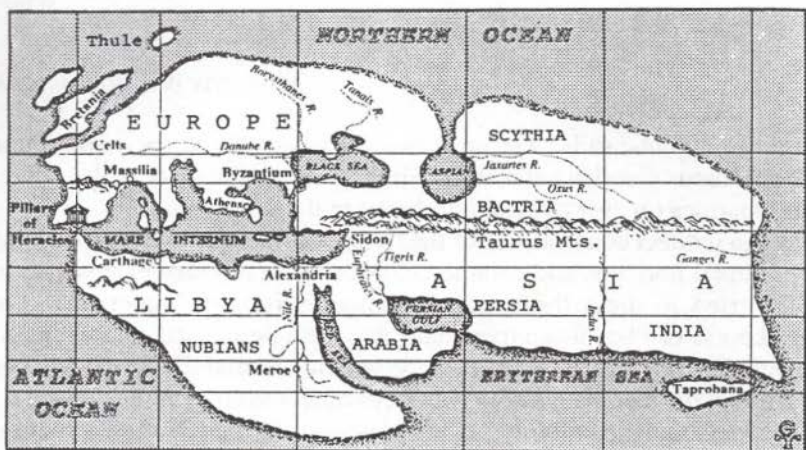
Phoenician coins and statues on the Azores suggest mid-Atlantic voyages to South America. Carthaginian merchants routinely took trips of four thousand miles by sea to reach their African colonies. Other merchants traveled to Japan, where they left stone monuments bearing Phoenician inscriptions.<sup>13</sup>

### **Phoenicia's "Secret" Colonies: Ophir, Colchis & Asqua Samal**

The world of the Phoenicians is known to us only through a few legends and geographical writings of Greek scholars. A geography from the 3rd century BC by Erasthenes describes the *Oecumene* or "Known World" of three continents: Europe, Libya (which the Romans named Africa), and Asia. This land was surrounded by *Oceanus*—the all-encompassing ocean. According to tradition, the ocean was surrounded by *Terra Incognita*—unknown lands. These foreign shores were also called the "ring continent".

Legends about uncharted lands across the Atlantic were widespread during the 5th century BC. Greek philosophers Herodotus and Avienus speculated about Phoenician colonies on continents across the Atlantic. Plato tantalized audiences with tales about an ancient civilization called





7.M1



### Eratosthenes' Map 250 BC

Greek geographer Eratosthenes lived in the Libyan city of Cyrene. His map included lands known to Greeks and Phoenicians. The map shown above is a reconstruction based on surviving fragments of his book *Geographica*. In the northwest, Thule (Iceland) was regarded as the furthest "known" land, although Eratosthenes acknowledged lands across the Atlantic. The passage between the Mediterranean Sea, or *Mare Internum*, and the Atlantic was known as the "Pillars of Heracles."

Atlantis and a "great continent" that lay beyond the western horizon.

In the 4th century BC, Theopompus and Aristotle mentioned a western continent having forested lands and navigable rivers. In 330 BC, the Greek navigator Pytheas sailed westward to "Thule." It was a week-long journey that could have taken him to Iceland or Norway.<sup>14</sup> But the name Thule (or Tile) on old maps is deceptive. During passing centuries, the name was applied to the "furthest known land," and that described a horizon moving constantly westward. Didorus Siculus, a 1st-century Sicilian geographer, indicated that the Phoenicians had discovered a large, fertile land opposite Africa—about 10,000 furlongs from the coast. That occurred, said Siculus, by the 12th century BC:

There lies out in the deep off Libya an island of considerable size. It is situated across the ocean from Libya (*Africa*) by a voyage of a number of days to the west. The land is fruitful, much of it being mountains and not a little being a level plain of surpassing beauty. Through it flow navigable rivers which are used for irrigation. The island contains many parks planted with trees of every variety and gardens in great multitudes which are traversed by streams of sweet water.<sup>15</sup>

Siculus believed that the Phoenicians kept their discovery secret to prevent competition and to keep the land as a refuge in case Carthage was invaded. They called the southern continent *Colchis* and the northern continent *Asqua Samal*, or "Great North Land." The 5th-century AD

Greek philosopher Proclus wrote that stone pillars in Egypt recorded the ancient history of lands on the far side of the Atlantic.<sup>16</sup>

Humorists and philosophers of the Aegean told fabulous stories of distant lands. Homer's *Odyssey*, written between the 12th and 6th centuries BC, identified a mythical land in the western sea called *Elysium*, meaning the "Isle of The Blest." It was an abode for warriors and kings in the afterlife where Olympic games and festivals continued for eternity. During the 15th century, European mapmakers often labeled obscure islands in the western sea as "Isles of The Blest," or "Fortunate Isles," indicating their belief that the paradise of legend was an *Earthly* place. Ancient Mediterranean legends referred to the *Antipodes* as the "Other World," the "Under World," or the "World Below." Although Western scholars often equate these terms with a fictitious *Hades*, or Hell, the ancients were simply using such words as "under," "opposite," and "other" to refer to describe a distant land on the *opposite* surface of the globe that was literally *under* their feet.

According to historian James Bailey, legends about "immortal" heroes visiting "mythical" lands across the seas often referred to the actual journeys of ancient chieftains. He believes Greek myths about the immortal Hercules traveling to the "Other World" to find the sacred apples of the Hesperides referred to a trans-Atlantic voyage. Columbus shared this belief: upon reaching the Caribbean island of Hispaniola, he declared that he had found the "Other World" of ancient legend.

Phoenicia's trade center at Tartesus (Tarshish, Spain) was portrayed in the *Bible* as the "source" of valuable commodities. However, it was actually the terminus for imports from colonies in England and America. The *true* source of Tartesus' wealth has been identified by researchers who found Tartesian inscriptions in America.

Other Phoenician ports and colonies were shrouded in mystery. During King Solomon's reign in Jerusalem (974-937 BC), Phoenician mercenaries traveled to a land called *Ophir*. Merchants required *three years* for a round-trip voyage. According to Biblical verses and Hebrew legends, *Ophir* was the location of King Solomon's gold mines. Wealth obtained from these mines played a major role in the vast building projects and commercial success of Solomon's reign. However, scholars aren't sure where the fabulous mines were located. The uncertainty is a consequence of Phoenician secrecy regarding overseas colonies. Semitic Language Professor Edward Robertson of the University of Manchester, England, reported arguments favoring sites in Arabia, East Africa, East Asia, Spain and Peru.<sup>17</sup> Round-trip voyages to all of these places *except* Peru routinely took only *one* year. Because merchants required three years to reach *Ophir*, a South American location seems likely.

Archeologist Robert Marx found evidence in Madrid's National



OLD WORLD

Cultural Diffusion

to AMERICA

Stallion's Mane Headdress



1. Greek stallion 400 BC



2. Cretan helmet 1000 BC



3. Mediterranean headdress



4. Buddhist ceremonial headdress



1. Tennessee native 1000 to 1500 AD



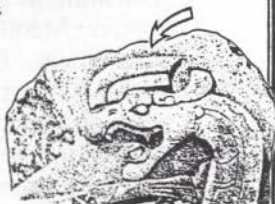
2. Aztec headdress codex Florentino 1300 AD



4. Mayan 700 AD



3. Woodlands roach



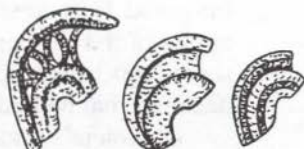
5. Olmec serpent headdress 900 BC

Smithsonian BAE



5. Trojan warriors

from Heck (1857)



6. to 8. Hawaiian war helmets 1200 to 1800 AD

7.11

Library confirming that Solomon's mines were located in South America. A 14th-century map bears a notation claiming that King Solomon found a land which he called "Bracir." Marx believes "Bracir" was an early version of "Brazil," and he supports his conclusion with evidence of Phoenician artifacts and inscriptions found in Brazil.<sup>18</sup> A 16th-century monk, Benedictus Arias Montanus, also claimed Ophir was located in South America in the region known to Romans as "Cattigara."

Evidence of Phoenician Contact

Phoenicia's secret colonies were located along several major rivers, including the St. Lawrence, the Susquehanna, and the Amazon. These locations provided easy access by dugout canoes to the mineral wealth of the interior. Modern explorers have found numerous Phoenician artifacts, inscriptions, and symbols along these rivers. Phoenician colonies occupied Ecuador, Brazil, and the eastern United States.

Mayan legends tell of a messenger of the gods named Votan who arrived from the East on the shores of the Caribbean circa 1000 BC. Votan is a derivative of the Mediterranean Wotan (also the Norse Odin). Frances Gibson, author of *The Seafarers* (1974), believes the Phoenician god Baal Yam served as inspiration for the Mayan god Canache Balam; Inca, Guarani, and Aymara names for gold (respectively *kuri*, *cuarasi*, and *kori*) are suspiciously close to the Minoan *kuro-so* and Phoenician *kharus*.

### **The American Copper Trade**

One of the world's richest copper deposits was located in the Lake Superior region of North America. Unlike the copper ores of the Middle East which required smelting, the deposits in Michigan and Ontario consisted of pure nuggets called "native copper." Some of the most accessible deposits were located on a large island called "Isle Royale" in northwestern Lake Superior. By the 5th millennium BC, curious natives fabricated blades and ornaments from the metal by hammering and grinding. Archeologists refer to the artifacts and those who made them as "The Old Copper Culture." Natives worked copper in what is called a "cold state," that is, without benefit of forging or molten-casting technology. Some of these "Old Copper" ornaments eventually reached Eastern Woodlands tribes the St. Lawrence river.

Minoan and Egyptian explorers noticed these native copper ornaments when visiting tribes along the East Coast in 3000 BC. It was a simple matter to trace the origin of copper ornaments back to their source along the trade routes between Lake Superior and the Atlantic. During the next 2,000 years, a maritime network of Algonkians Iroquois, Minoan, Celtic, and Nordic tribes transported the nuggets to Mediterranean markets. Meanwhile, Cretan miners supervised construction of thousands of mines on Isle Royale and Upper Michigan.

Abandoned mine shafts on the shores of Lake Superior are a legacy of ancient seafarers. Archeologists have determined that the mines date from 3000 BC and were present long before European pioneers settled in the region. Some of the mining tunnels extended several hundred feet beneath the surface. Local tribes insist that the mines were *not* the work of their ancestors, although they often fabricated blades and ornaments from copper nuggets found lying on the surface.<sup>4</sup> Engineers estimate that a half-million tons of copper that was removed from Michigan mines in ancient times is missing from America.<sup>5</sup> Only a small fraction of the Michigan metal has been located in native burial mounds and archeological sites, leading to speculation that the metal was shipped overseas.

Copper artifacts found in native burial mounds have resulted in further evidence of overseas contact. Although archeologists once believed the natives worked copper only in a "cold state," many of the

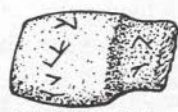




1. Punic  
200 BC  
from Georgia



2. Iberic Dedication to Baal  
New Hampshire



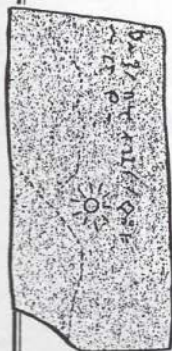
3. Iberic Script, N.J.



4. Bourne Stone 500 BC  
Cape Cod, Ma.  
Hanno's annexation  
proclamation



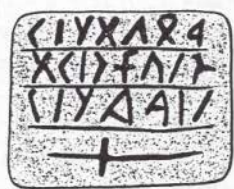
5. Minoan-Hittite Zodiac  
from Cuenca, Ecuador



6. Knapp Stone 300 BC  
Iberic, from Pennsylvania

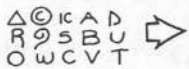


7. Ecuador  
Stone

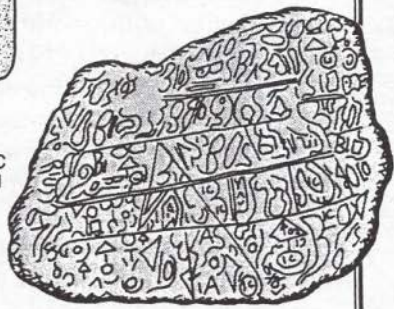


8. Punic Iberian Tablet  
Braxton, W. Va.

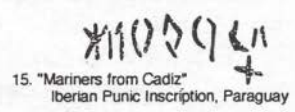
9. Cretan Inscription 1500 BC  
Ramos expedition in Brazil



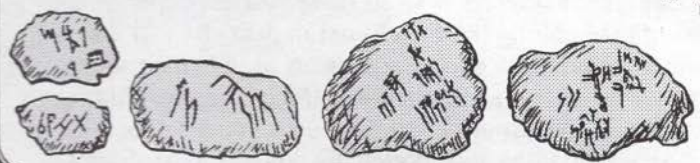
NOTE: hidden letters



10. to 14. Phoenician Inscriptions from the Amazon, Brazil 1500 to 300 BC  
Bernard Ramos expedition



15. "Mariners from Cadiz"  
Iberian Punic Inscription, Paraguay



16. Punic Inscription, Nevada

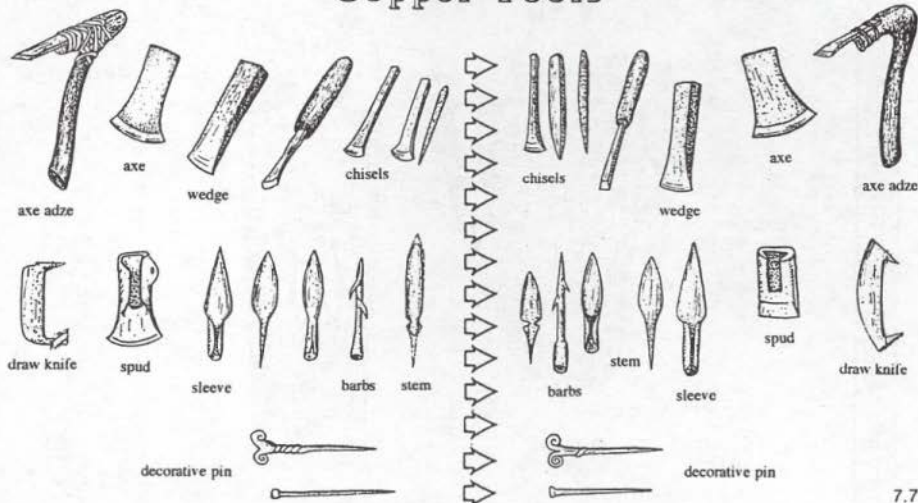
copper artifacts found in American mounds were actually produced by a process of molten casting. The New York Testing Laboratory has confirmed that artifacts found in American mounds were made using Old World casting technology. George Ellinger, a metallurgist for the National Bureau of Standards, summarized the analysis of tool specimens submitted by six museums: "The presence of cuprous oxide in the interior of the tools tested and the concavity caused by shrinking justify the conclusion that the vast majority of the ancient tools were cast."<sup>6</sup>

Recent assays reveal that some of the copper artifacts found in North American burial mounds were made from zinc-copper alloys used in the Mediterranean.<sup>7</sup> Ancient metal crafters added zinc to harden copper into a bronze alloy. The shapes of the copper tools found in American archeological sites are identical to those of the ancient Mediterranean, including chisels, dagger blades, wedges, hoes, scythes, axes and spear points. These tools often have specific modifications, including the use

Phoenicia  
2000 to 500 BC

North America  
3000 BC to 1500 AD

Copper Tools



7.7

of rivets, spines, and sockets, all of which were characteristic of Mediterranean tools. The fact that most of the tools were cast from molten metal implies that foreign craftsmen participated in their manufacture.

Archeologists note that Isle Royale mines were seldom used after 1000 BC. Changing European markets were responsible: by 1200 BC, Egyptian architectural projects were largely curtailed as Phoenician navies dominated the Mediterranean Sea and threatened Egypt with invasion. The Phoenicians or "Sea Peoples" introduced wrought iron tools throughout the Mediterranean shortly after 1200 BC.<sup>8</sup> Since iron deposits were more plentiful than copper and did not require alloying to produce hardened metal, the demand for copper rapidly declined.

Phoenician Artifacts & Inscriptions in America

Several inscriptions record Phoenician visits to North America. An ancient carving of the Phoenician mother goddess Tanit Pene Baal or Tanit was found inscribed in a North Carolina boulder. An artifact called the Grave Creek Stone was removed from a depth of 60-feet inside a native burial mound in West Virginia. Found in 1838, it contains a Punic Phoenician text from the 1st millennium BC. The Bourne Stone, found near Cape Cod, is a declaration of Phoenician territorial annexation along the east coast. Harvard scholar Barry Fell translated the Iberic Phoenician text as: "A Proclamation: By this Hanno takes possession."<sup>19</sup> Fell also translated an inscription found at Mount Hope Rhode Island in 1780 as: "Voyagers from Tarshish this stone proclaims." Isolationists





1. Bronze Sword  
from Mayan ruins  
Merida, Mx



2. Punic Urn  
1000-500 BC  
found at  
Binghamton, NY



3. Cretan Statuette  
from Amazon valley, Brazil  
Fawcett expedition



4. Grave Creek Stone (1838)  
Iberian Punic inscription  
from Grave Creek, W. Va.



7. Phoenician Coin  
500 BC from Bahamas



5. Glass Beads  
SE Woodlands  
mound



6. Mediterranean Amber  
found in Mayan tomb



8. Carthaginian Coin  
from Arkansas



9. Punic Coin  
from Alabama



10. Phoenician Coin  
from Pennsylvania



11. Phoenician Coin  
from Connecticut



12. Phoenician Coin  
Alabama (reverse of 9)

7.3

have contested both the authenticity of Fell's translations.

Another controversial inscription was found by Brazilian slaves during the early 1870's. Called the "Parahyba Text," it recounts the voyage of Phoenician merchants who traveled from Sidon in the 6th century BC:

We are sons of Canaan from Sidon, the city of the king. Commerce has cast us on this distant shore, a land of mountains. We sacrificed a youth for the exalted gods and goddesses in the 19th year of Hiram—our mighty king. We embarked from Ezion-Geber into the Red Sea and voyaged with ten ships. We were at sea together for two years around the land belonging to Ham (*Africa*), but we were separated by a storm. We are no longer with our companions. So we have come here—twelve men and thirteen women—to this shore which I, the admiral, control. May the exalted gods and goddesses favor us!<sup>20</sup>

4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

**Parahyba Inscription**

The above inscription was found in Parahyba Province, Brazil, in 1886. It tells the story of Phoenician merchants ("Canaanites of Sidon") who were blown across the Atlantic in 536 BC.

The Parahyba Text was branded a fraud shortly after its publication. However, subsequent research confirms that the inscription is authentic. Passages that were once thought to be erroneous have been verified from identical inscriptions on *bona fide* Phoenician artifacts. The inscriptions included ancient expressions and grammatical forms that were unknown during the 1800's. Cyrus Gordon, a Semitic language scholar at Brandeis University, has ruled out the possibility of forgery because the archaic language of the inscription was only recently decoded.<sup>21</sup>

In 1641, Jesuits living near Minas Gerais, Brazil, reported bronze figurines with strange writing. Antiquarians at the Vatican identified the inscriptions as Phoenician.<sup>22</sup> In 1754, missionaries reported the ruins of a stone city in the Amazon jungle also having Phoenician inscriptions.

Other Phoenician artifacts in the Americas include plates of solid gold, trade trinkets, glass beads, and coins.<sup>23</sup> Mediterranean amber was recovered from an 8th-century BC Mayan tomb. The translucent gemstone is derived from fossilized resin deposits found along the southeastern shores of the Baltic. Greeks called the Mediterranean amber *elektron*, meaning "substance from the sun." It was a popular commodity of Bronze Age trade on the Mediterranean Sea.

**Phoenician Symbols**

Numerous Phoenician motifs have been found in the early arts of Peru and Central America. Emblems of the Phoenician Mother Goddess, Tanith, appear on Mexican petroglyphs and ceramics, the Cretan sacred knot appears on Mayan stelae as a symbol of sacrifice, and the Phoenician swastika was popular in Mexico and Peru.

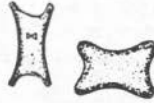
A striking example of diffusion is the Stallion's Mane symbol. Mediterranean warriors frequently used a stallion's mane, or a stylized representation of the mane, to embellish their helmets. They believed that the talisman infused warriors with a centaur's power and endurance in combat. During the 4th century BC, popularity of the symbolic Stallion's Mane helmet spread eastward into Asia with the armies of



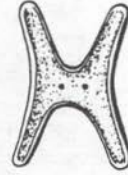
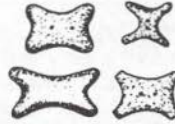
1. Greek archer  
500 BC  
ceramic relief carving



1. Mexican archer  
Monte Alban, 500 BC  
jade relief carving



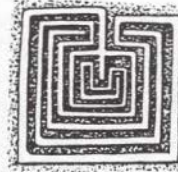
2. to 8. Copper ingots & currency  
Mediterranean 2000 to 500 BC



2. to 8. oxhide-shaped currency  
& copper ornaments  
Woodlands 1000 BC to 1500 AD

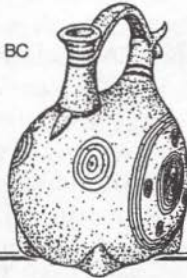


9. & 10. Minoan maze  
Knossos, Crete 1000 BC



9. & 10. Minoan maze  
New Mexico & Arizona

11. Cypriot jar  
stirrup handle  
800 BC  
British Museum



11. Nasca jar  
stirrup handle  
300 BC

Alexander of Macedonia. Buddhist monks in Tibet adopted the Stallion's Mane as a symbol of spiritual achievement. Phoenician merchants in the Pacific introduced the symbol to Polynesian chieftains. Polynesians used feathers in war helmets to mimic the shape of the Stallion's Mane. Mayan and Aztec rulers also adopted the symbolic helmet for warfare.

The Stallion's Mane inspired a unique hair style called a "roach" that gained popularity among Iroquois, Mohawk, Illinois, and Algonkian natives in the Eastern Woodlands. Phoenicia's Berber tribesman also shaved their heads except for a narrow patch down the center.

**Plants & Animals**

Phoenicians produced a special red dye for textiles from the purpura mollusks; Peruvians and Mayans also used purpura mollusks to produce red dyes. Peruvian textiles with the dye have been radio-carbon dated to 200 AD, and purpura mollusks have been found in ancient Inca tombs.

## Phoenician Hounds in Peru



Mediterranean hounds  
from a Greek vase

Peruvian hounds  
Colonial-era Peruvian illustration



Clearly, natives learned the technique in ancient times.<sup>24</sup>

Phoenicians brought dogs on their trans-Atlantic voyages. Two breeds common to the Mediterranean are similar to Peruvian dogs. One of these breeds, a type of spaniel called a *techichi*, was observed by Hernandez who was a 16th-century Spanish writer. Bones from the *techichi* were found at the pre-Columbian site of Cozumel, Mexico.<sup>25</sup>

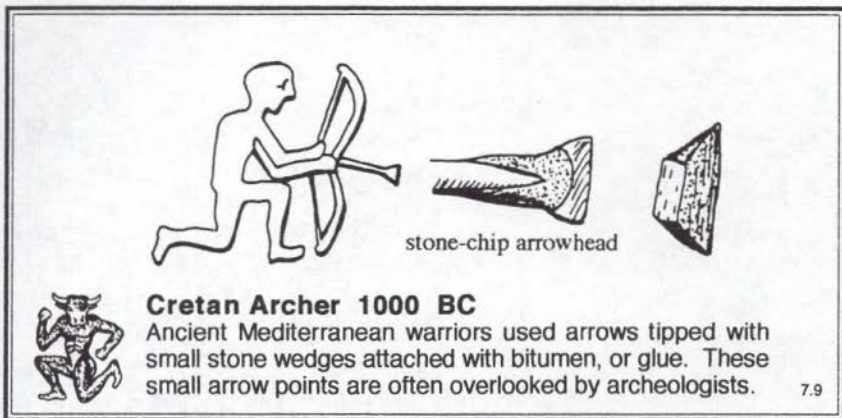
### Native Portraits & Light-Skinned Tribes

Mexican and Peruvian artists portrayed Phoenician visitors in their ceramics and stone sculptures. The similarities are particularly striking between Peruvians of the Mochica culture and Tunisians, and between Mayans and Semites. The 19th-century Brazilian explorer Homet noted the presence of an Amazon tribe called the "Syriana" which he believed were descendants of the Old World *Syriana*, or Syrians. He also observed a tribe of blue-eyed, white-skinned natives living in the Amazon.<sup>26</sup> The 16th-century Spanish conqueror Pizarro described a tribe of Amazon natives as "corn-blond."<sup>27</sup> The Amazon had its own tribe of blond-haired, blue-eyed, and light-skinned natives. In 1975, Helio Rocha, director of Brazil's National Indian Foundation, reported that the light-skinned tribe had lived in the Amazon since "remote times."<sup>28</sup>

### Impact on Native Culture

Minoans and Phoenicians were responsible for three major developments in Native American culture: the manufacture of bronze tools, the fabrication of stone buildings, and the first currency. Some authors also envision a Phoenician introduction of wheeled toys, panpipes, and terraced agriculture.<sup>29</sup>





### Cretan Archer 1000 BC

Ancient Mediterranean warriors used arrows tipped with small stone wedges attached with bitumen, or glue. These small arrow points are often overlooked by archeologists.

7.9

### Bronze Tool Manufacture in America

Isolationists used to insist that Mayan, Mexican, and Peruvian stone buildings and sculptures were produced using Stone Age technology. However, researchers confirmed that stone tools are insufficient for carving stone.<sup>30</sup>

The most important carving tool was the metal chisel. Egyptians and Cretans used forge-hardened copper chisels for their earliest stonework. Similar tools have been found in ancient American sites. Phoenicians introduced bronze tools to the Mediterranean from the Middle East. Subsequently, bronze tools were used at Phoenician colonies in North and South America. After 1200 BC, the principle Phoenician stone-carving tool was the iron chisel. Although iron tools were exported to Phoenician colonies, they are rarely found in archeological excavations due to the rapid oxidation that typically disintegrates ancient artifacts.

Because the presence of bronze in American archeological sites implies Old World contact, isolationists have been reluctant to concede that natives used bronze tools. In recent years when lab tests confirmed artifacts were made from bronze, isolationists usually called them "copper alloys" to avoid any suggestion that natives knew how to make bronze.<sup>31</sup> In 1920, Archeologist Thomas Joyce noted that: "Cast copper bells and blades contain a percentage of tin, but it may be regarded as purely accidental."<sup>32</sup> Joyce insisted that Mexicans didn't learn how to produce *real* bronze until Spanish colonists demonstrated the process.

Baron Von Humboldt, a 19th-century German archeologist, was one of the first scholars to challenge the doctrine of "No bronze before Columbus." Von Humboldt found an ancient mining chisel while on an expedition to Vilcabamba, Peru. His associates informed him that it was made of "native copper." However, Von Humboldt was suspicious of the artifact's bronze color and its distinctive "smell," so he sent the chisel back to Germany for analysis. His hunch was confirmed: the assay reported 94 parts copper to 6 parts of tin: the chisel was *bronze*. Von



Humboldt extended his search to Mexico. According to the natives Von Humboldt interviewed, ancient Zocatallan natives also used copper-tin alloys for manufacturing cast bronze weapons.<sup>33</sup>

Robert Gordon of Yale University's Kline Geology Laboratory reported the presence of bronze metalworking at the Inca mountain fortress of Machu Picchu.<sup>34</sup> According to analysis of Peruvian artifacts, native smiths made bronze from copper-arsenic and copper-zinc alloys during pre-Inca times (that is, prior to 1200 AD). They made bronze from copper-tin alloys during the Inca period and practiced a variety of sophisticated techniques including soldering, welding, annealing, acid etching, gold plating, gilding, ferrous smelting, and wire extraction.

Many of these arts were derived from Phoenician craftsmen who enhanced native American culture by creating a wealth of options for personal adornment and artistic expression.<sup>35</sup> Phoenician metal tools and stone-working technology ultimately enabled natives to produce lasting stone monuments and buildings.

### **Mediterranean Stone Architecture in America**

Minoans and Phoenicians provided the inspiration behind native American stone architecture. Phoenicians were renowned throughout the Mediterranean for their stone crafts. They built King Solomon's temple and the palace of King David.<sup>36</sup> Their temples at Gadera and Carthage were the envy of other lands. Not surprisingly, the earliest stone structures of the Americas are similar to those of Phoenicia.

As happened in the Old World, the advent of metal technology in the Americas led to extensive construction of stone temples, pyramids, palaces, fortifications, and whole cities. The earliest native American architectural designs show strong Mediterranean influences. Monte Alban, Mexico, has stepped terraces and rectangular buildings which are similar to those in the Minoan palace at Phaistos, Crete. Megalithic stone walls at Cuzco, Peru, are identical in appearance and technique to those of Gizeh, Egypt. At Persepolis, Greeks used corbeled arches to support interior ceilings and passageways. Peruvians also used corbeled arches to support underground passageways at Tiahuanaco, and Mayans used corbeled arches as the primary roof supports for thousands of temples in Central America. The Castillo at Chavin deHuantar, Peru, was built with a system of air-conditioning ducts which are similar to a system of ducts used in the Cretan palace at Knossos.<sup>37</sup> Perhaps the most bizarre architectural similarity consists of crude, rock-hewn thrones found in Greece, Assyria, and Machu Picchu, Peru.

Metal tools made possible the construction of ancient America's most remarkable ceremonial center—Teotihuacan, Mexico. This metropolis of nearly 500,000 inhabitants was the center of New World

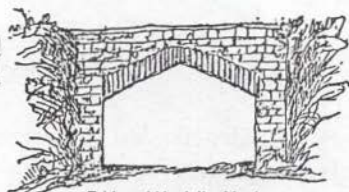




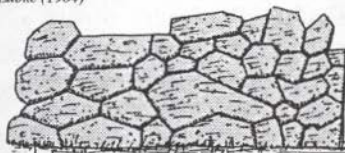
Arch at Delos, Greece  
from Lubke (1904)



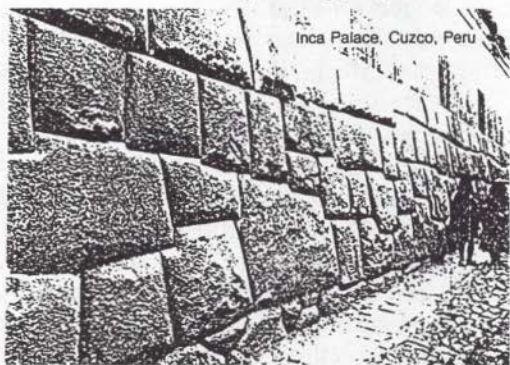
undressed feet  
Acropolis, Athens



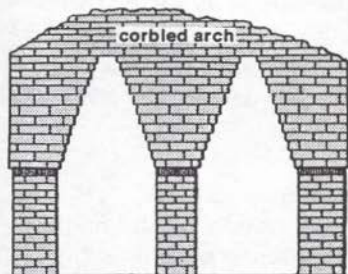
Bridge at Huejutla, Mexico  
from Bancroft (1883)



cyclopean wall, Greece  
after Donnelly (1976)



Inca Palace wall, Cuzco, Peru  
irregular stones; from Wright (1908)  
NOTE: stones with undressed feet



Huanoaco castle, Peru  
from Dunbar (1895)

## Minoan-Phoenician Masonry

Early New World stone buildings reflect ancient Mediterranean technology. The earliest structures were of cyclopedic construction made of huge fitted stones. Later structures used corbeled arches and rec-tangular stones. Peruvian masons used Mediterranean techniques to cut rock at quarries using cables coated with abrasives to saw the rocks. Small stubs or "feet" at the bottom of building stones at the Palace of The Incas in Cuzco, Peru, and at the Acropolis in Athens, Greece, were remnants of where the stones were broken from rock quarries. Usually, the stubs were removed by grinding or battering the surface—a process called "dressing."

commerce and culture between 500 BC and 500 AD. It was dominated by two stone-lined pyramids: the Pyramid of the Sun and the Pyramid of the Moon. The Pyramid of the Sun stood 207-feet high and was equal in circumference to the Pyramid of Khufu in Egypt. Major boulevards several miles long passed through palaces, residential areas, and public markets. However, the metropolis fell victim to changing climate, invasion, or epidemics. By 1000 AD, it was virtually deserted.

## The First Native Currency

During the Minoan and Phoenician mining operations near Lake Superior, Woodlands tribes became familiar with oxhide-shaped tokens



and ingots which the Mediterranean merchants used for trading. Natives adopted both the trading practices and the oxhide-shaped tokens for their own commercial networks. The tokens were valuable because they provided a medium for exchanging different kinds of goods or for saving the value of commodities for future use. With the previous system of bartering, traders had to exchange goods and services directly. Introduction of oxhide currency establishes a *significant* Phoenician contribution to the growth of Native American commerce.

During the 16th century, European explorers were amazed by the high level of commercial development they witnessed in the Americas. There were trade networks reaching thousands of miles; there were codes of commercial conduct; and there were several kinds of currency, including wampum, oxhide tokens, and beads. Although native ingenuity developed the networks and codes, the inspiration for oxhide currency was from the Old World. Natives even developed a trade language, the *Mobilion Jargon*, which incorporated both native and foreign words. Use of the jargon facilitated trade among tribes and foreign traders speaking different languages.

### **Old World Consequences of Exploration & Trade**

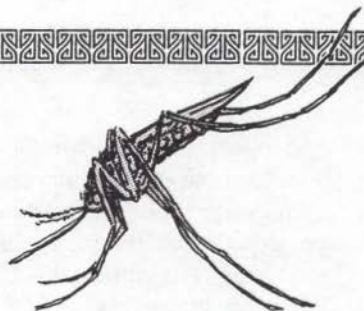
We have already considered the importance of New World resources to the commercial success of Judeans, Phoenicians, and Minoan traders. We have acknowledged the role of Isle Royale copper in the construction of pyramids, palaces, and cities throughout the Mediterranean. Of equal importance were advances in science and human learning which resulted from the growing awareness of the Earth's global shape.

Phoenician voyages led Mediterranean scholars to realize that the world was much larger than once believed. Some merchants who traveled sea routes to Asia and the Caribbean circumnavigated the globe. The Greek geographer Strabo believed the Phoenicians had indeed accomplished this feat. The result of long-distance voyages across the ocean was the realization that the world was a globe and not a flat disk as many once believed.

In spite of travel restrictions imposed by Phoenician navies, Greek geographers and astronomers achieved striking breakthroughs concerning the nature of the Earth and its relationship to the universe. In the 6th century BC, the famed mathematician Pythagoras and the Greek astronomer Nicetas of Syracuse declared the Earth to be a sphere. Nicetas added that the Earth rotated on its axis and revolved about the sun. Two centuries later, Aristotle confirmed the spherical shape during an eclipse, when he observed the Earth's shadow passing over the surface of the moon. And during the 3rd century BC, the Greek geographer Eratosthenes accurately calculated the Earth's circumference within 200



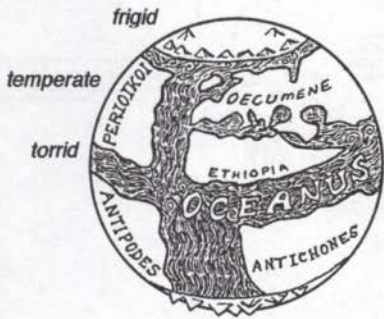
## Ancient American Epidemics Malaria



During the 5th century BC, Greek historians recorded outbreaks of a "new disease" causing high fever, chills, and anemia. Greek physicians described the symptoms of the disease and searched for a remedy, however they were unable to find a cure. Modern epidemiologists call the disease malaria. The sudden appearance of a tropical disease in Greece, which is a maritime nation situated in a temporal climate, implies overseas transport of the disease. It was one of a number of New World diseases brought to the Old World by voyagers such as Phoenicians traveling across the oceans. The disease is caused by a protozoan parasite transmitted by the anopheles mosquito. Malaria is spread over long distances by infected people and by transport of water containers. Infected mosquito eggs can survive in dried water containers, such as bottle gourds, for several months. Sailors traveling to overseas colonies brought infected mosquito eggs back to their home ports. Fatalities occur from acute infections and secondary illnesses such as pneumonia. Most infected people survive for long periods with chronic illness.

Due to the traditional belief that epidemic diseases were not transmitted across the oceans until *after* 15th-century Spanish voyages, scholars once assumed malaria originated in tropical Africa. However, there is substantial evidence that malaria was present in America *before* the Spanish arrived. Archeologist Victor Von Hagen believes tropical America was the source of the disease, because 16th-century Spanish chroniclers reported that the disease was found throughout the American tropics at the time of the first Spanish explorations.<sup>40</sup> Ancient Peruvians were so familiar with the disease, they already had an effective antidote to offer sick Europeans. The native cure was *cinchona* bark which contains the anti-malarial drug quinine. Europeans learned about the drug from Peruvian medicine men.<sup>41</sup>

In 1493, Columbus returned to Hispaniola (Haiti) with 1,300 men. According to historical reports, the men were healthy *until* they began building a new colony in the vicinity of a swamp; many of the colonists became sick with fevers and lethargy which they blamed on the *mal aria*, or "bad air" of the swamp environment.<sup>42</sup> Clearly, the Spaniards suffered a malarial epidemic *after* reaching the New World. A similar fate befell the Ponce DeLeon expedition to Florida in 1513. Many of Ponce's troops succumbed to *malaria* during their trek through the Florida swamps.<sup>43</sup> According to historical records, the region was *already* infested with malaria at the time of the first Spanish incursions.



### Crates' Globe of Earth 150 BC

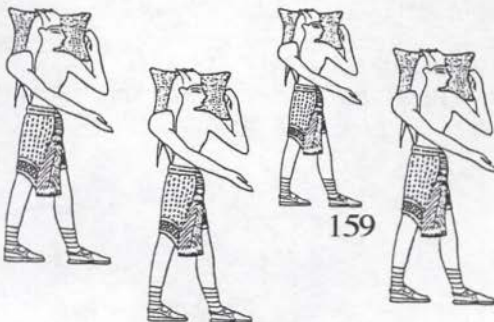
A globe by Crates of Mallos, Greece, is known only through the writings of Strabo. The globe was constructed to explain the wanderings of Ulysses who Crates believed had sailed across *Oceanus*—the ocean. Ulysses stayed for seven years on the Isle of a sea nymph—Calyppo. This isle was near Ogygia (probably Greenland) which the Greek biographer Plutarch said was located in the northwest Atlantic. Crates credited Homer with discovery of the Earth's spherical shape. Polar regions (or frigid zones) were held to be uninhabitable due to cold. A people called Ethiopians were thought to live on both sides of a torrid zone at the Equator. Lands across the ocean, in Perioikoi and the Antipodes were known as "the Fortunate Isles."

miles of its actual size by measuring the angles of shadows cast by the sun at two cities, Aswan and Alexandria, on the Nile river.

Eratosthenes achievement enabled Greek explorers to calculate the relative positions of the continents. He also anticipated the "Columbus proposal" of sailing west to the Orient. Eratosthenes reasoned that such a voyage was a "theoretical possibility," however, he cautioned against such an expedition because of the formidable distance.<sup>38</sup>

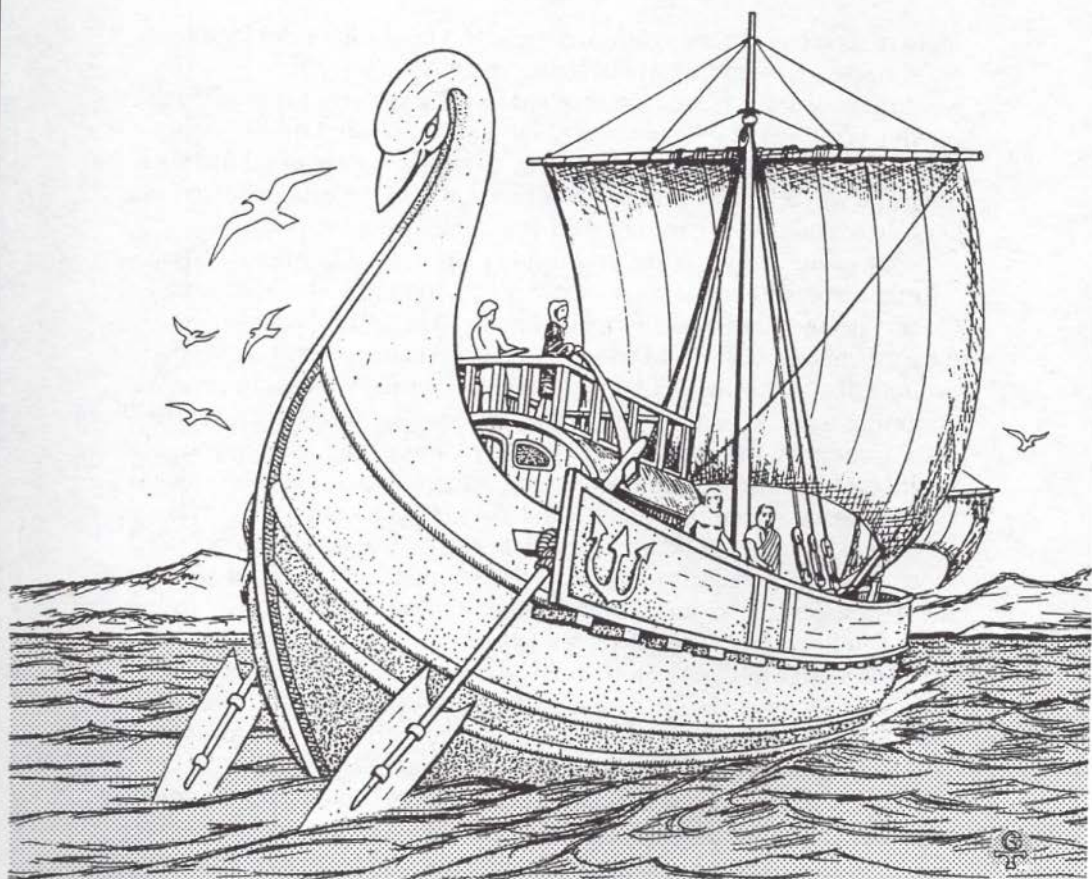
One astute scholar of the 2nd-century BC, Crates of Mallos, offered a further caution against westward voyages to the Orient: according to Crates, there were two continents in the way. He called them *Peroikoi*—the northern continent, and *Antipodea*—the southern continent. *Antipodea* is Greek for "opposite foot;" in geographical terms, it meant land on the "opposite side" of Earth from the *Oecumene* —or "the Known World." As Director of the Pergamum Library, Crates was in the enviable position of having access to the latest mariners' charts. He constructed a globe based on sailors' reports and Homer's 8th-century BC epic of Ulysses—known to modern scholars as the *Odyssey*. Crates believed Ulysses had sailed across *Oceanus* to the Antipodes; so his globe showed the Antipodes across the sea from Europe. Some philosophers called these foreign lands "The Fortunate Isles."

Knowledge of Crates globe survived in Europe for six centuries, and Roman scholars of the 4th century attested to its accuracy.<sup>39</sup> However, the achievements of Greek scholars did not endure: when plagues ravaged medieval Europe and priests burned *pagan* manuscripts, ancient knowledge regarding the shape of the Earth was lost. Time and again, succeeding generations had to relearn the lessons of ancient geography.



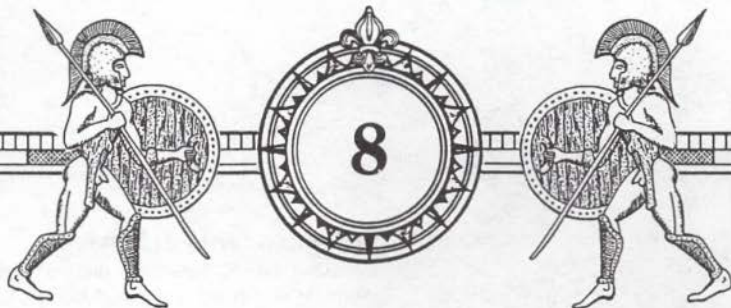


Mexican sculpture of Quetzacoatl—god of wind



### ***Romans near Brazil***

*Wine merchants sail along the coast of South America,  
circa 200 AD.*



## **GRECO-ROMAN TRADERS**

(146 BC—900 AD)

The rise of the Roman Empire radically altered trans-Atlantic commerce. In 146 BC, Carthage fell to Roman invaders, ending the Third Punic War. Refugees from Carthage fled to American colonies, and the Phoenician monopoly over New World trade came to an end.

Meanwhile, Roman legions continued their campaigns until the entire Mediterranean was subservient to Rome. In 43 AD, Julius Caesar's armies added southern England, the *Tin Isle*, to the Empire's domain. The Roman advance was halted by Pict warriors in central England and Germanic barbarians in Western Europe. Roman legions and administrations were too busy keeping the Empire under control to even consider launching an invasion of unknown territories across the Atlantic. Consequently, cultural diffusion across the Atlantic during the era of Roman influence occurred at the hands of merchants instead of warriors.

Some merchants traveled as far as Iceland, which the Romans called *Ultima Thule*, or the "furthest land." It was clear to Roman philosophers that merchants would eventually connect with former Phoenician colonies. That belief was expressed during the 1st century AD by the Roman philosopher Lucius Seneca. Seneca predicted the discovery of New Worlds across the Atlantic:

In after years shall Ages come,  
When the Ocean shall unloose the bounds  
Of things, and show vast ample lands;  
New Worlds by Sea-men shall be found,  
Nor Thule be the furthest bound.<sup>1</sup>

Seneca's prophesy came true within the century. Archeologists have identified 2nd-century Roman shipwrecks near Brazil, Honduras, and New England. These remains and numerous Roman coins, oil lamps, and other artifacts found in America confirm the fact that many unknown Roman seafarers succeeded in finding Seneca's "New World."





### Athenian Owls in Mexico

Mexican artistic traditions dictated that animals and birds be shown from a full frontal or profile view. The one exception is the owl. Curiously, owls with heads cocked to the side were emblems for Athens, Greece.

## Greco-Roman Civilization

Roman conquest united former rivals and established a lasting peace which historians call the *Pax Romana*. Merchants traveled the entire Mediterranean Sea under the *aegis* of Rome. Pro-business advocates in the Roman Senate decreed massive building projects, including highways, markets, and coliseums. These facilities greatly improved commerce and helped to build a uniform, regional culture. Roman administrators imposed a standardized currency, thereby encouraging the movement of products between metropolitan areas. Uniform contract laws and the formation of merchant guilds raised the status of merchants and vastly improved the standard of living for millions of Roman citizens.

However, voyages beyond the Empire were fraught with high costs, piracy, and uncertainty. Most merchants lost interest in American colonies due to the great distance involved and changing market demands. Because iron replaced copper as the most utilitarian metal, there was no longer a need for American copper. Caribbean gold, North American furs, and exotic plants were the only New World imports of substantial value. During an era of tranquility lasting several centuries, the Empire's attention focussed on Syria in the eastern Mediterranean. Syria was the terminus for Persian caravans bringing highly-prized Oriental imports, including cotton, silk, spices, and incense.

Most Romans regarded cotton as a luxury, because it was far superior to coarse linens and native wool produced by Mediterranean clothiers. However, cotton was not sufficient for the refined life-style of the upper class. Senatorial wives and concubines preferred the most expensive and delicate fabric available at Persian markets. Romans called the nearly transparent fabric *seres*—which was the name for Chinese silk. Persians refused to trade silk for anything but gold, leading the social critic Lucius Seneca to bemoan the immodest fashions and expensive tastes of Roman ladies. He was convinced their obsessions would lead to "moral decay and economic ruin."<sup>2</sup> Passing centuries proved him right on both counts.

The silk trade had lasting impact Mediterranean culture. Greek artists portrayed the symbolic power of silk by showing godly figures

with scarfs of silk billowing above their heads. Likewise, Roman sculptors portrayed nobles, such as Augustus, with silk draped over an arm to signify immortality. These artistic images spread eastwards to India and China. The style even reached Tajin, Mexico, where a Toltec deity is portrayed in Roman-style with a scarf draped over his arm.

### The Roman Merchant Marine

From one end of the Mediterranean to the other, vast fleets of merchant galleys plied the waters of the Roman Empire. Ships called *pontos* reached lengths in excess of 100 feet. Their distinctive hulls featured swan-shaped sterns. Archeologists have found numerous sculptures and murals which detail the *pontos*' features. Most vessels had a single mast and a bowsprit (or large boom projecting over the prow). There were two sails—a main sail and the *artemon*, or “spritsail.”

The largest merchant vessels were giant grain freighters called *frumentariae*. These elongated versions of the *ponto* measured 200-feet or more in length and carried up to 1200 tons of grain. Their cargo capacity was about ten times the storage space of Columbus' flagship, the *Santa Maria*. Mid-sized vessels carried several hundred tons of cargo, including textiles, marble building materials, ceramics, copper ingots, and wine casks. Roman passenger ferries were equally impressive. During the 1st century, passenger versions of the *frumentariae* transported up to 600 travelers between ports on the Mediterranean Sea.<sup>3</sup>

By the 2nd century, Roman merchants made regular trips to China. Romans called the Far Eastern kingdom *Serica* which is a name derived from the Roman word for silk. According to ancient Greek historians, Alexander of Athens made the first “official” voyage to China in 120 AD.<sup>4</sup> Two Roman fleets followed Alexander's route circa 170 AD. Romans traded with merchants at ports along their route, leaving evidence of their voyages for modern archeologists. Roman ceramics, oil lamps, and beads have been found at archeological sites in Southeast Asia.<sup>5</sup> By the 6th century, Canton (or Hong Kong) was crowded with Romans, Egyptians, Persians, Hindus (or Indians), Arabians, and Jewish traders who made regular voyages to the Asian metropolis.<sup>6</sup>

Several navigational tools helped sailors find their way to foreign ports. Greeks and Romans used magnetic compasses. Although historians usually credit introduction of compasses to 13th-century Arabs, a Greek legend attributes the compass to a 12th-century BC hero named Hercules who used a golden cup with a floating magnet.<sup>7</sup> Greeks called the magnet *Lapis Heracles*. In the 12th century BC, the Greek poet Homer gave another account of the mariner's compass. Homer's *Odyssey* related that Greek sailors used a device which enabled them to sail through fog and darkness without fear of shipwreck.<sup>8</sup>

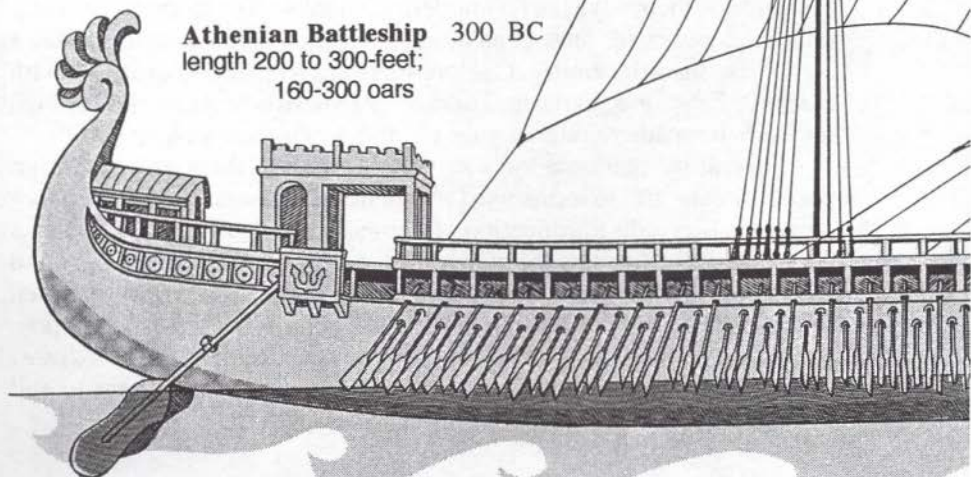




## **Mediterranean Ships** 300 BC to 500 AD



**Judean  
Cargo Ship**  
300 AD  
length: 80 to 150-feet



**Athenian Battleship** 300 BC  
length 200 to 300-feet;  
160-300 oars

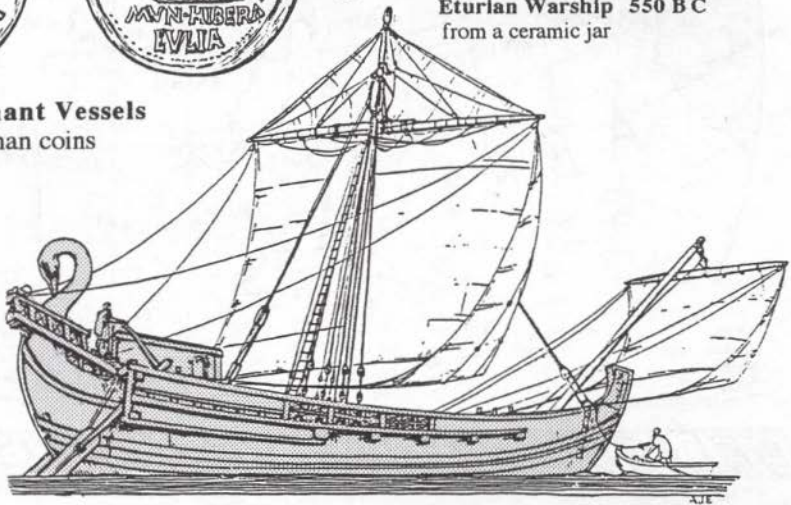
*Greco-Roman Traders*



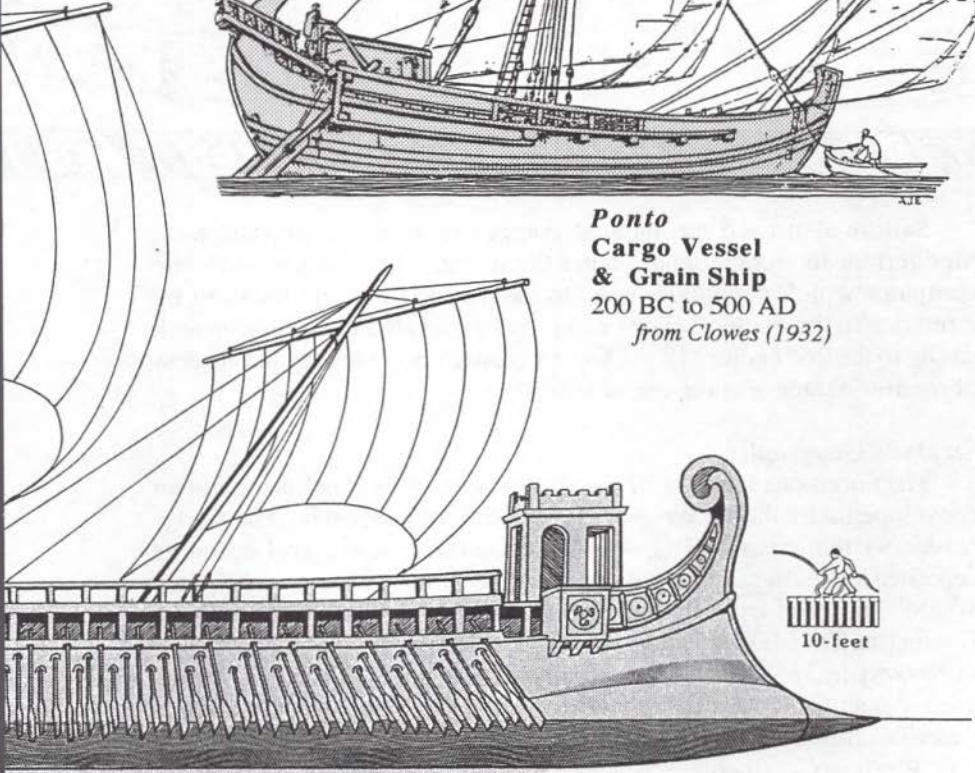
**Merchant Vessels**  
on Roman coins



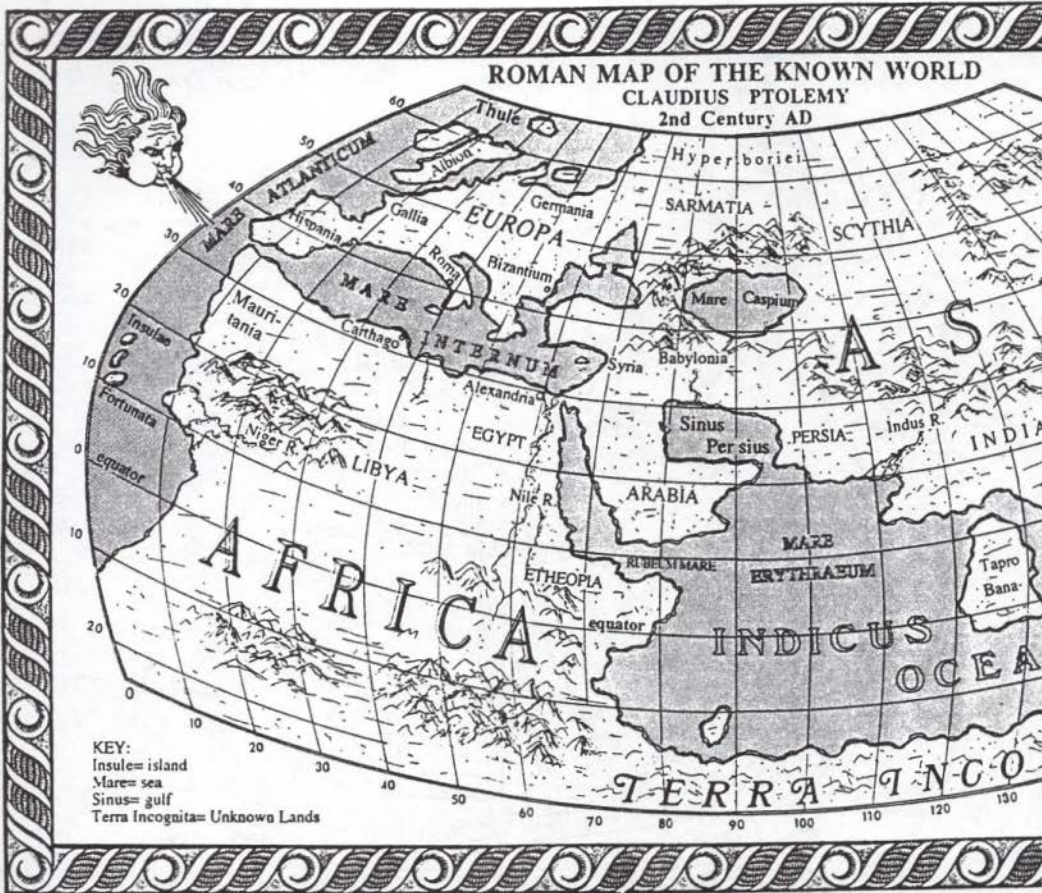
**Etrurian Warship 550 B C**  
from a ceramic jar



**Ponto**  
**Cargo Vessel**  
**& Grain Ship**  
200 BC to 500 AD  
from Clowes (1932)



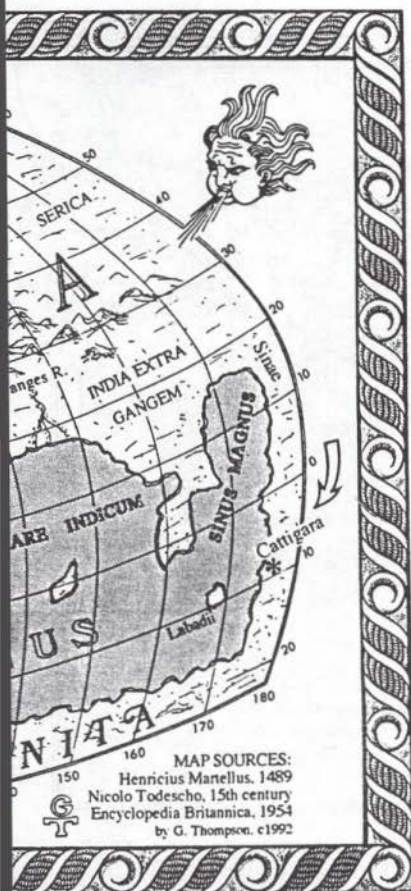




Sailors also used mechanical computers as a navigational tool. Mediterranean archeologists found the remains of a bronze analogue computer which navigators used to determine time and location by reference to the zodiac.<sup>9</sup> The device was excavated from a shipwreck dating to the 2nd century BC. Of even greater importance to the success of maritime trade was the use of maps.

### Strabo's Geography

The enormous territory of the Roman Empire was delineated in an encyclopedia by the Greek geographer Strabo of Amasia. His *Geography*, written circa 25 BC, was based on charts and travel accounts deposited at the Alexandrian Library in Egypt. The *Oecumene* or "Known World" stretched from Iberia (Spain) to Serica (China). Northeast of Britain (the Tin Isle) was Thule—a name which the traveler Pytheas gave to Norway in 325 BC. As sailors pressed westward, *Ultima Thule* was used sequentially as a designation for Norway, Iceland, and North America. Strabo referred to distant lands called *Epeiros Occidentalis*, or the "Western Continents."<sup>10</sup>



## Ptolemy's Map: Cattigara & South America



This map is a reconstruction of Ptolemy's 2nd-century Roman map. It is based on 15th-century European maps, which in turn were based on 11th-century Arabic copies of more ancient copies of the original. The Inquisition burned ancient European copies of Ptolemy's map in an effort to eradicate pagan influences on Christian European culture. Ptolemy's map shows the South American city Cattigara across the Pacific (Sinus Magnus) from Asia. In 1571, the monk Benedictus Arias Montanus designated the region of Cattigara as the biblical *Ophir*--source of King Solomon's gold. West of Africa on the map are *Insulae Fortunata*, or "Fortunate Isles." According to myths, these islands were situated across the Atlantic. In the far northwest was *Thule* (Iceland) which Romans regarded as the frontier of the "Known World." In the North is Hyperborea—a land presumed to have a temperate climate.

8.M1

### Ptolemy's Map Showing South America

In 140 AD, the Roman cartographer Claudius Ptolemy of the Alexandrian Library in Egypt compiled a world map based on contemporary nautical charts and mariners' reports. The map extends for 180-degrees of Earth's circumference and accurately portrays the relative geographical positions Europe, Africa, India, and Asia.<sup>11</sup> Both Europe and Asia were exaggerated in size. Ptolemy attributed the layout of his map to the work of an associate, Marinus of Tyre. However, none of Marinus' maps have survived. Ptolemy's "map" is only a reconstruction based on copies found in Moslem archives.

The most intriguing feature of Ptolemy's map is a strip of land shown at the far-eastern tip of Asia. This unnamed land extends 20-degrees south of the equator and connects with *Terra Incognita* stretching east from Africa. Historians have faulted Ptolemy for this blatant inaccuracy; there is no such land reaching south from Malaya. However, Argentine anthropologist Dick Iberra-Grasso believes the eastern land on Ptolemy's map actually represents South America.<sup>12</sup> Professor Iberra-Grasso points out that Ptolemy located a city called "Cattigara" on the eastern land



OLD WORLD  
FACES

IN ANCIENT AMERICA



**Roman Charioteer**  
sculpture 200 AD



**Creek Natives**  
likened to  
"Roman Senators"  
by artist  
John Trumbull<sup>60</sup>  
1790



Smithsonian  
Institution  
BAI



**King Hadrian**  
Palestine sculpture  
76-138 AD



**Roman Merchant**  
ceramic sculpture 200 AD  
found inside a Mexican pyramid

8.7

lying 10-degrees *south* of the equator. According to Ptolemy's associate, Marinus of Tyre, Cattigara was located 80-degrees *east* of Asia which would place it near South America. The vague location of Cattigara was mentioned in the diary of a 2nd-century merchant, Alexander of Athens. His ship headed due east from Borneo across the Pacific Ocean on a voyage lasting "innumerable days." Finally, he reached Cattigara on the shore of a distant continent. Iberra-Grasso believes Ptolemy knew an important city was located across the Pacific, but his map was too small for an accurate rendering. His map probably shows South America—however poorly conceived it may be.

Was there a "Cattigara" in South America? During the 16th century, Spanish cartographers and navigators believed there was. It is clearly shown on Sebastian Munster's map of 1540. It was the initial destination of Florentine explorer Amerigo Vespucci in 1497. He planned to stop at Cattigara on his way to China, but he couldn't find a passage through South America to the Pacific. In 1505, Bartholomew Colon (brother of Columbus) drew a map showing Cattigara on the west coast of South America at a latitude 10-degrees *south* of the equator. That is precisely where Cattigara was located on Ptolemy's map.<sup>13</sup> It is also the present location of the Peruvian city Cajamarca.



## Macrobius Map 440 AD

This map is a "zonal map" that shows Earth as a sphere of climatic zones: polar areas—*frigida*, the Equator—*pervista* (hot), and between are the temperate areas—*teperata*. The southern continent or "Antipodum" represents South America. Some historians assume this is simply a "fictitious" *Terra Australis*—or legendary southern continent.

Mercator's maps follow those of Marco Polo by showing Cattigara in Asia. This is another oft-repeated case where foreign travelers brought along the name of their homeland and attached it to a distant colony.

## Macrobius Map

A 5th-century map by the Greek geographer Ambrosius Macrobius was one of several preserved by European monks during the Middle Ages. It appeared in a 15th-century manuscript—by which time it was merely a curiosity of ancient history. However, we can see in the map a legacy from Strabo, Crates, Eratosthenes, and Homer. The most impressive feature of the map is a "southern continent" called *Antipodum*—the Antipodes of Greek legend. Although historians have mocked this supposedly "non-existent" southern continent, *Antipodum* is a fairly accurate representation for a continent which sailors reported across the oceans from Africa and Asia. This land (South America) was also known to lie below the Equator. It was portrayed about as well as can be expected considering the available knowledge and technology.

To the northeast beyond India, Macrobius indicated a great gulf—the *Sinus Magnus* of later maps. This gulf is none other than the Pacific Ocean. Beyond this gulf lies a peninsula representing North America.



## Ancient American Epidemics

### Bubonic Plague, Typhus, Pestilence

Contact between Roman Era voyagers and Native Americans resulted in the spread of epidemics across the seas. Bubonic plague caused Mediterranean epidemics by the 1st century AD. The disease is characterized by fever, lethargy, and a purplish coloring of the skin. It is caused by infection with the bacterium *Bacillus pestis*. Some scholars believe North Africa was the source of the disease, because plague symptoms were first described in ancient Libya.<sup>64</sup> However, tropical America is an equally-likely source: the region is infested with plague-carrying fleas and rodents. Plague ravaged the Roman Empire in AD 165; plagues lasted for two decades between 250 AD to 270 AD. As many as 5,000 people died every day in Rome, while Alexandria, Egypt, lost two-thirds of its population. Other epidemics of cholera, smallpox, yellow fever, and measles struck the Empire with great ferocity. Whether these diseases originated in the Old World or the Americas is unknown. Plague was probably carried across the seas in such innocuous items as furs and clothing even though crews seemed healthy. Plague is suspected in the collapse of the Southeast Woodlands Hopewell culture circa 400 AD. It may have played a role in the collapse of Mexico's Teotihuacan trade center circa 500 AD. One 15th-century plague struck Iceland before reaching Norway—suggesting a western source for the epidemic.

According to Hugh Thomas, author of *Conquest* (1993), Pre-Columbian Mexicans were familiar with typhus and had a name for the disease—*matlazahuatl*. They also had a name for influenza: *cocoliztli*. The disease was a major killer throughout the world in ancient times. In spite of popular beliefs regarding Spanish importation of infectious diseases to the New World, the first documented epidemic of smallpox did not occur until three decades after Columbus landed in Hispaniola.

Bishop Diego de Landa noted in his *Relaciones* (1573) that natives of Yucatan had an epidemic of an unknown disease 50 years before arrival of the Spanish in 1518. Natives perished from a disease that was characterized by "large pimples and offensive odors." Another pestilence circa 1432 AD involved contagious fevers which lasted for a day before infected people swelled up, burst open, and died.

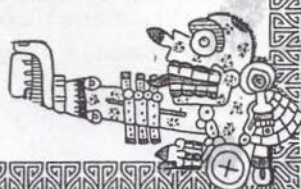
Flies, lice, and mosquitoes brought along on transoceanic voyages carried numerous diseases. Due to the ubiquitous presence of these silent predators, the true origins of most ancient epidemics will probably never be known.



Ilceck (1857)



small pox or measles  
on Mexican death god  
Mictlantecutli  
Vatican Codex,  
1450 AD



from Selser (1902)

**Legends: Epeiros Occidentalis, Alter Orbis, Hyperborea,  
Gorgades, Satyrides, Hesperides, & Asqa Samal**

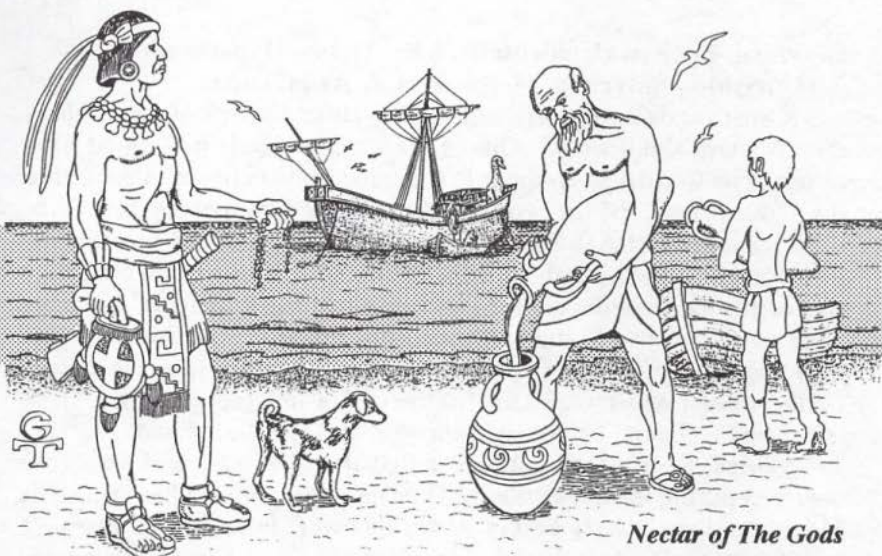
Romans and Greeks had many legends about *Epeiros Occidentalis*—the “Western Continents.” One of these fabled lands was called *Alter Orbis*. The Roman geographer Pomponius Mela believed *Alter Orbis*, the “fourth part” of the world, was inhabited by people called the *Antichones*. In 44 AD, Mela reported that two “Indians” (or Hindus) were found along the northern shore of Germany after a storm blew their ship across the western ocean. What became of these “Indians” after they were turned over to Roman authorities is unknown. Roman voyagers who reached the Tin Isle (Britain) heard stories about Bran, the ancient Celtic voyager who traveled to “Northern Isles” in deep antiquity. These isles were Iceland, Greenland, Labrador, and Newfoundland.

Stories about exotic islands called the *Gorgades* and *Satyrides* emerged during the 1st century AD. The Latin philosopher Pliny The Elder described islands west of Africa that were inhabited by apes. He called them the “Gorgon Islands,” or “Gorgades.”<sup>14</sup> A Greek sailor named Euphemus claimed he visited islands in the Atlantic where red-haired natives wore horses tails and engaged in brutish orgies.<sup>15</sup> The islands, which Euphemus called the *Satyrides*, sometimes appeared on Medieval charts in the Atlantic west of Africa; sometimes they were placed in the Pacific—east of Malaya. A Greek geographer of the 2nd century, named Pausania, reported islands in the western Atlantic which were inhabited by red-skinned natives. He described their hair as being fashioned after the mane of a horse.<sup>16</sup> Indeed, natives of several Eastern Woodlands tribes wore their hair in such fashion. It was called a “roach.”

Another land of Greek legends was the *Hesperides*, or “Land of Golden Apples.” The name comes from a group of maidens, the *Hesperides*, who were assigned to guard the golden apples of the Goddess Hera. Her domain was situated along the western edge of the Atlantic Ocean. Isolationists dismissed this legend as a possible reference to North America, because apples originated in the Middle East. Presumably, there were no apples in North America until the 17th century. However, scholars are uncertain whether the legends referred to apples or tomatoes, because Europeans called both fruits “apples,” and the tomato, or “Love Apple,” was native to America. In light of the Greek myth about *golden apples* in the *Hesperides*, it is intriguing that the first tomatoes which Europeans found in America were of the *golden* variety. Spanish merchants called them *pomos de oro*—or “golden apples.”<sup>17</sup>

Scholars have debated the locations of the *Satyrides*, the *Gorgades*, and the *Hesperides* for decades. Isolationists contend that Euphemus and Pliny were simply referring to the Canary Islands, the Cape Verde Islands, or the Azores west of Africa. However, ancient scholars actually





### *Nectar of The Gods*

*Roman merchants transfer wine from amphoras to Mexican jugs, circa 200 AD.*

believed the fabulous islands were located in the *Far West*. Martianus Capella, a 5th-century Latin attorney, declared that the Hesperides were situated *beyond* the Gorgades “in the most secret recesses of the sea,” and Father Dicuil, a famous Irish geographer of the 9th century, claimed that the Gorgades were situated *beyond* the Canaries.”<sup>18</sup>

Several ancient scholars believed there was continental land toward the far west. The 3rd-century Roman educator, Claudius Aelianus, insisted there was a huge island on the far side of the Atlantic which was known to the Phoenicians.<sup>19</sup> A 5th-century Greek philosopher, Proculus, reviewed Egyptian records during his visit to Alexandria in 445 AD. He reported documents confirming Egyptian knowledge of a distant continent in the western sea.<sup>20</sup>

In 75 AD, the Greek biographer Plutarch described the sea route to the Western Lands customarily taken by ancient sailors:

West from Britain lies the Isle of Ogygia (Greenland), and from there—equidistant—are three other islands to the west in the general direction of the setting sun in summertime. The natives have a story that Cronus (*the god Saturn*) is confined by Zeus to one of these islands which lies along the edge of the ocean. It is about 5,000 stades from Ogygia. Some areas of the sea are slow of passage—others are frozen.

Plutarch's text accurately describes the customary route to America across the North Atlantic. Greek legends referred to the inhabitants of the western lands as *Hyperboreans*—meaning “people dwelling beyond the north wind.” The name was appropriate, because voyagers sailing west commonly endured the Arctic winds near Iceland and Greenland, before they reached their destination: North America.

During the 5th century, a band of Christian monks fled the Vandal invasion of Morocco. They sailed across the Atlantic to a huge wilderness they called *Asqa Samal*, the “Great Northern Land.”<sup>22</sup> A returning Christian recorded their story on a stone tablet in North Africa. For many centuries, people who passed by the memorial read about a land of refuge across the seas in North America.

### **Evidence of Roman Commerce with America**

American farmers have found dozens of Roman artifacts in ploughed fields; epigraphers have interpreted Roman inscriptions found in several states; and archeologists have identified the remains of several Roman shipwrecks. These remains attest to numerous visits by ancient Roman mariners.

#### **Greco-Roman Shipwrecks in America**

Heaps of amphoras, or ceramic wine casks, mark the location of Roman shipwrecks in America. In 1971, a scuba diver from Maine found two amphoras at a depth of 40-feet in Castine Bay. Scholars at the Early Sites Research Society identified the amphoras as Iberic Roman from the 1st century. A third amphora was recovered from the Atlantic shore near Jonesboro, Maine. Another wreck was discovered in 1972 off the coast of Honduras. Scuba divers found a heap of amphoras lying on the bottom of the Caribbean. Scholars identified the amphoras as coming from North African ports, and they applied for a permit to excavate the wreck. Honduran officials denied the request because they feared further investigation might compromise the glory of Columbus.<sup>23</sup>

In 1976, Brazilian diver Roberto Teixeira found Roman amphoras lying on the seabed near Rio de Janeiro.<sup>24</sup> Archeologist Robert Marx investigated the shipwreck and retrieved several amphoras for scientific analysis. Elizabeth Will, a Classical Greek History professor at the University of Massachusetts, identified the amphoras as Moroccan. They had been manufactured at the Mediterranean port of Zillis during the 3rd century AD. Marx brought up thousands of pottery fragments from the shipwreck before he was denied a permit to continue excavation.<sup>25</sup> Brazilian authorities feared that further evidence of ancient Roman voyages might undermine the fame of Pedro Alveres Cabral who is regarded as the “official” Portuguese discoverer of Brazil.<sup>26</sup>



8.4

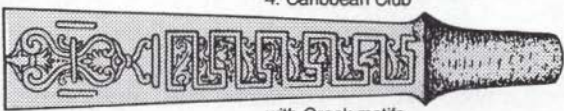


1. Steel Sword  
Iberic inscription  
Concord, NH



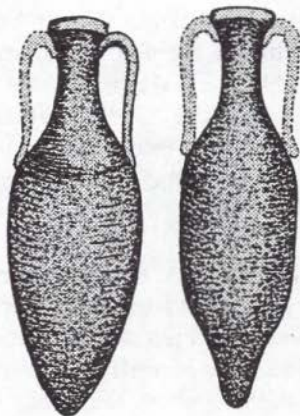
Carb floral pattern enlarged  
compare with Greek floral  
pattern on Goddess of  
Spring (facing page)

British Museum



4. Caribbean Club

with Greek motifs



2 & 3. Roman Amphoras  
250 AD Brazil (after Marx, 1984)



Roman ceramic head of 2nd century  
found during pyramid excavation  
Caliztlahuaca, Mexico

after photograph in Carter (1988)



5. Roman oil lamp  
200 to 400 AD, Conn.



7. Ceramic Vial, Al.



8. Glass Bead  
Rumney, NH



9. Bronze Knife  
Michigan



6. Roman oil lamp  
Coosa, Al.

Roman Coins found in America



1. & 2. Tetradrachm  
N. Carolina 288 AD



3. Maximianus Hercules coin  
N. Carolina 305 AD



4. Antoninus Pius  
Columbus, Ga. 161 AD



5. Fayetteville, Tn.  
190 AD



6. Constantine coin  
Massachusetts 337 AD



7. Beverly, Ma.  
375 AD



8. Septimius Severus coin  
Grafton, Ms. 211 AD



9. Sextantius of Nero  
Ohio 68 AD



10 to 12. Beverly, Ma. 375 AD



10. Thurium medallion  
Red river, Ok., 100 BC



12. Greek Tetradrachm  
175-164 BC  
Cass Co., Ill.

8.3



Greek floral pattern  
Goddess of Spring

Thompson (1992)

### Roman Coins, Lamps, Swords & Sculptures

Further evidence of Roman trade with native tribes has come from the farms and seashores of America. Two Roman coins were found near Fayetteville, Tennessee, in 1819. One was of Antonius Pius (138-161 AD); the other was of Emperor Commodus (180-192 AD). They were discovered several feet deep beneath trees thought to be several hundred years-old. Archeologists found a 4th-century Roman coin in a burial mound at Round Rock, Texas. Beachcombers near Beverly, Massachusetts, have collected numerous coins embossed with faces of Roman emperors between 337 AD and 383 AD. A hoard of hundreds of Roman coins was found off the coast of Venezuela dating to 300 AD.<sup>27</sup> Robert Marx reported a hoard of Roman coins found in Brazil.<sup>28</sup> Other coins dating between 50 BC and 750 AD have been found in North Carolina, Ohio, Georgia, Tennessee, and Oklahoma.<sup>29</sup>

Distinctive Roman oil lamps have been found in America. The squat ceramic vessels have been reported in Alabama, Connecticut, and Peru.<sup>30</sup> A professional archeologist, Frank Glynn, found one lamp during excavations in Connecticut. Fearing ridicule from colleagues, Glynn sent the lamp to Cambridge, England, for identification. Cambridge Museum curators confirmed the artifact's authenticity: it was a Roman lamp from the eastern Mediterranean.<sup>31</sup>

Numerous weapons, tableware, drinking vessels, articles of personal adornment, and building ruins attest to the presence of Roman-era explorers and settlers in America. Robert Marx found a bronze *fibula*, or clasp, in Guanabarra Bay, Brazil. The clasp was used to fasten Roman clothing. Explorers touring Ohio in the 1800's discovered a cave with ancient murals portraying people dressed in Greco-Roman costumes, including *togas* (full-length robes), *cargasus* (cloaks), and *sabucalas* (or waistcoats). Antiquarian Josiah Priest, concluded that the murals were evidence of Greco-Roman voyagers before Columbus.<sup>32</sup> Laborers found a bronze sword in Mayan ruins near Merida, Mexico.<sup>33</sup> Burnt bricks and a Roman sword were found near an ancient wall in Bedford County, Tennessee.<sup>34</sup> Explorers found a bronze Roman chalice near the Roanoke river in Virginia and a bronze Athenian medallion near the Red river in Oklahoma. And farmers have picked up dozens of bronze Roman buttons from freshly-ploughed fields in Tennessee.<sup>35</sup>

In 1933, Archeologist Jose Garcia Payon of Mexico's National Museum found a ceramic head inside a Mexican pyramid at Calixtlahuaca. It came from beneath a cement floor dating to the 11th century AD. Scholars identified the artifact as a 2nd-century Roman sculpture. Due to the fact that it was uncovered during a museum-sponsored project, there is no dispute regarding the artifact's authenticity.







Historian Zvi Dor-Ner mentioned that a fragment of a Roman Venus was found at an archeological site in Veracruz, Mexico.

In the mid-1800's, French archeologist Charnay excavated at the Mexican site of Tula. He found some unexpected artifacts, including the tibia and femur of an ox, iron tools, toy ceramic chariots with wheels, porcelain, and the neck of a glass bottle that was "iridescent like ancient Roman glass." Charnay suspected that his archeological site might have been contaminated by historic rubble; however, historian Jean Du Pouget (*Prehistoric America*, 1895) suggested another possibility: the items might have been imported to Tula by ancient mariners.

### Inscriptions

Some of the most intriguing artifacts of Greco-Roman visitation are the seafarers' written testimonials. A 5th-century, Latin inscription on a boulder near York Harbor, Maine, marks the location of an off-shore reef.<sup>36</sup> An Iberian slogan engraved into the blade of a sword found in Concord, New Hampshire, warns opponents that the weapon is made of "death-dealing, hand-wrought steel."<sup>37</sup> A Byzantine memorial inscription was carved into a rock tablet near Cripple Creek, Colorado.<sup>38</sup> Robert Marx reported a Latin inscription on stone ballast taken from the seabed at Kingston Bay, Jamaica.

### Roman Symbols in America

Mexicans adopted several Mediterranean religious motifs. Romans used the apex, or pointed cap, as the symbol of the high priest.<sup>39</sup> Toltecs and Aztecs used the apex as an emblem of Quetzalcoatl who was an ancient Mexican priest. By some accounts, Quetzalcoatl was a bearded foreign prophet who came from beyond the Atlantic to instruct Mexicans in new methods of architecture, metal-working, and agriculture. The Greek sun charioteer or snake-footed deity, *Anguipede*, was also a common Hebrew emblem for Jehova.<sup>40</sup> Mayans and Aztecs used the snake-footed deity to represent gods of festivals and fertility. The Greek goddess Aphrodite was also known as the "Lady of The Serpent Skirt."<sup>41</sup> Aztecs had a goddess called *Coatlícué* who wore a skirt of serpents. Her name meant: "She of the Serpent Skirt."<sup>42</sup> Serpents represented transformational cosmic powers in both the Old World and the Americas. Among ancient Mexicans, it was customary to present the goddess *Coatlícué* with the first fruits and flowers of spring. The tradition survives in modern times, although the fruits and flowers are now brought before Mexico's modern Goddess, the Virgin of Guadeloupe.

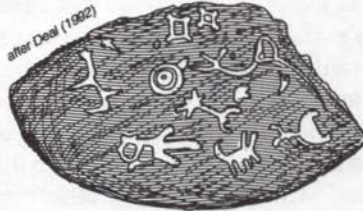
Few Mediterranean motifs are more distinctive than the Athenian Owl, whose body is shown in profile with the head facing the viewer. Similar owls are seen in 14th-century Mexican *codices*, or picture books.



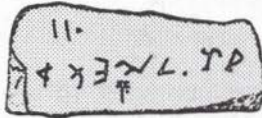
Jewish Artifacts



1. & 2. Ten Commandments tablet from pre-1860 stone mound Newark, Oh.



Deal's Zodiac Petroglyph Los Lunas, N. Mx. 107 BC



3. Bat Creek Stone Bat Creek, Ten. 150 AD

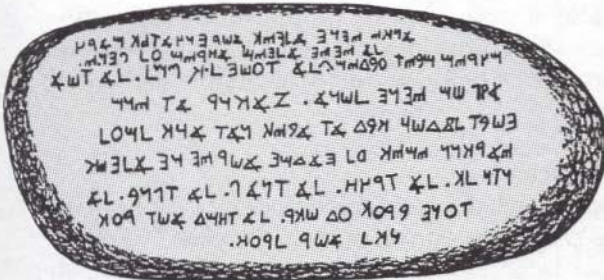
Solomon's Seal Mexican Motif Uxmal 1200 AD



8.11



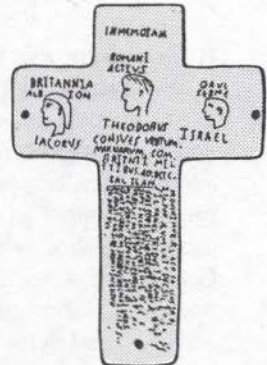
Copan, Honduras. Stairway of Inscriptions 800 AD



5. Los Lunas Inscription Ten Commandments N.Mx. 300 AD



4. Bat Creek buckle



6. Calalus Tablet Tucson, Az. 8th cent.



7. to 9. Early Hebrew Inscriptions Brazil, 1500 to 300 BC



10. to 14. Bar Kokhba Coins 100 to 200 AD SE Woodlands

A Greek heritage for this motif is apparent, because Mexicans consistently used a profile view to portray all other birds in the *codices*.

### Hebrew Refugees

Archeologists have found two examples of a unique Jewish emblem, Solomon's seal, at two sites in Central America: Uxmal and Copan. The motif at Copan was incorporated into a hieroglyphic stairway.



Some Roman-era artifacts found in America were left by refugees from Roman persecution. In 70 AD, the Roman Emperor Titus destroyed Jerusalem following a brutal siege. A 2nd-century revolt was led by the Jewish hero Simeon Bar Kochba. According to an ancient Jewish historian, Flavius Josephus, "The Hebrews fled across the sea to a land unknown to them before."<sup>43</sup> The land they sought was *Epeiros Occidentalis*—North America.

Evidence of the Jewish exodus to America was found in a burial mound at Bat Creek near Knoxville, Tennessee. During excavations in 1885, archeologists from the Smithsonian Institution removed a tablet from deep within the mound. Called the "Bat Creek Stone," it had several unknown characters written on the surface. The archeologists assumed they had found an example of Chief Sequoyah's 19th-century Cherokee writing system—called a "syllabary."<sup>44</sup> However, scholars familiar with Mediterranean writing suspected that the inscription was Phoenician. Cyrus Gordon, Brandeis professor of Mediterranean Studies, determined that the writing was a Paleo-Hebrew script similar to writing on Judean coins of the 2nd century AD. He translated the inscription as: "A comet for Judea," or "A star for the Jews."<sup>45</sup>

Professor Gordon's estimate of the artifact's age was subsequently confirmed by radio-carbon analysis of a piece of wood originally found with the tablet. In 1989, Smithsonian researchers supervised analysis of a wood fragment from the Bat Creek mound. They determined that the artifact was interred between 32 AD and 769 AD.<sup>46</sup> Researchers also examined sheet-copper bracelets found with the tablet. Their analysis revealed that the bracelets were made from a zinc-copper alloy commonly used in the Roman Empire between 45 BC and 200 AD.<sup>47</sup> Thus a Jewish heritage for the artifacts is confirmed.

Ancient Jewish coins and Hebrew inscriptions of the Ten Commandments provide additional evidence of early voyages to America. Judean shekels dating from the period of the Second Rebellion against Rome (132-135 AD) have been found in Missouri, Tennessee, and Kentucky.<sup>48</sup> In 1860, a tablet inscribed with an ancient version of the Ten Commandments was found beneath a pile of stones near Newark, Ohio. According to curators at the Ohio Archeological and Historical Society, the artifact predates colonial settlements in the region.<sup>49</sup>





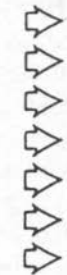
Augustus 25 AD deified mortal



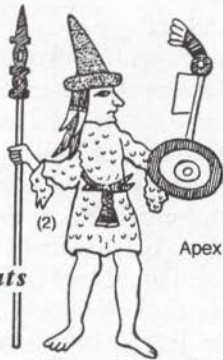
(2)

Apex Hat

silk scarves



cone hats



Mexican Codice 1625



Mexican Divinity at El Tajin 1200 AD

Gargon Charchemish



(4)

medusa gargons



(5)

Greek Double Flute 200 BC



Double Flute (5) Colima, Mx. 100 AD

double flutes



(1)

Anguipede (Serpent Foot) Roman Sun Charioteer

serpent feet



Tezcatlipoca 1450 AD Mexican Serpent-Foot God

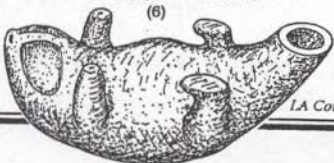
LA County Museum



(6)

Roman oil lamp 100 AD

oil lamps



Colima oil lamp Mexico, 200 BC-500 AD

(6)

LA County Museum

Ancient voyagers carved the Ten Commandments on a boulder near Los Lunas, New Mexico. Epigraphic specialists and historians have argued for decades whether the “Los Lunas Stone” (or Decalogue stone) is an authentic artifact—or a collegiate prank. Presently, the evidence favors authenticity. Geologist George Morehouse reports that a heavy patina on the stone is indicative of an age between 500 to 2,000 years. Harvard scholar Robert Pfeiffer regarded the inscription as “Old Phoenician;” Barry Fell identified linguistic peculiarities in the text that are characteristic of 4th-century Hebrew manuscripts;<sup>50</sup> and Cyrus Gordon noted linguistic peculiarities similar to texts in the Jerusalem Museum dating between the 3rd and 4th centuries AD.<sup>51</sup> At the same site, artist-archeologist David Deal (author of *Ancient America*, 1992) has identified a Mediterranean zodiac—possibly of the 2nd century BC.

The most controversial evidence of Hebrew voyagers is a hoard of lead tablets discovered in 1924 near Tucson, Arizona. Called the “Calalus Texts,” they were excavated by field crews from the University of Arizona Museum. The tablets tell the story of a band of Hebrew refugees who fled Charlemagne’s conquest during the 8th century and sailed to a land across the Atlantic known as “Calalus.” Written in a semi-literate style with Greek, Hebrew, and Latin phrases, the texts include numerous quotes from well-known Mediterranean manuscripts, such as Vergil’s *Georgics*. Some phrases used in the texts, such as *Dei gratia* (“By the grace of God”) were common mottos in Medieval Europe, while many of the symbols found on the tablets mimic those of the Masonic Order.<sup>52</sup> Thus, some scholars suspect a hoax. Historian Cyclone Covey of Wake Forest University cautions against premature dismissal of the artifacts. He explains that the semi-literate script on the tablets is similar to inscriptions found in ancient Jewish catacombs.<sup>53</sup>

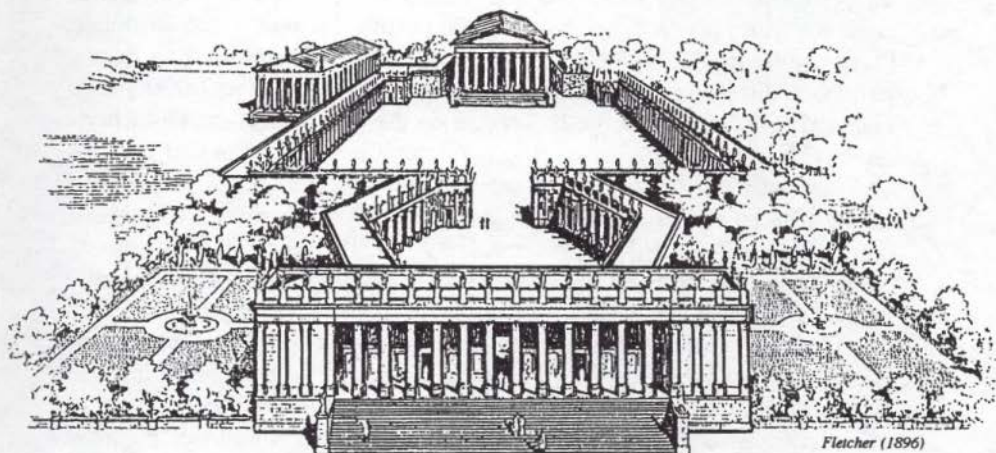
Other investigators recorded the use of Hebrew words among aboriginal peoples. In the 1700’s, English trader James Adair heard Choctaw and Chickasaw warriors chanting *Yohewa*, or “Jehova.” The natives also used the Hebrew word for winter—*kora*, and the expression *Illeht Kaneha*—meaning “Gone to Canaan.” In 1871, Hebrew scholar Jose Melgar heard Mexicans near LaVenta using many Hebrew words. These included the words for father (*abba*), daughter (*bat*), son (*ben*), king (*moloc*), and god (*elab*). The corresponding Mexican words were *abagh*, *batz*, *been*, *molo*, and *elab*.<sup>54</sup> Archeologist Jose Garcia Payon of Mexico’s National Museum concluded that ancient Jewish refugees had settled in Mexico. And a 19th-century Jewish traveler, Antonio DeMontezinos, was startled when his Peruvian guide greeted him like a long-lost brother with the words *Shema Israel*.<sup>55</sup>



OLD WORLD



to AMERICA



1. Colonnade at Baalbek, Lebanon 200 AD

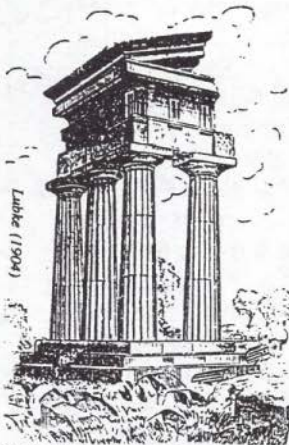


5. Market of One Thousand Columns  
Chichen Itza, Mexico



### Roman Architecture in MEXICO

In the 10th century, Mexicans began using a new style of architecture adopted from the Roman Empire. Roman architecture was characterized by round stone columns which lined the fronts of temples and markets such as the court of Baalbek in Lebanon. Mexicans used similar columns made from round sections of solid stone or composed of small, rounded bricks which were covered with stucco.



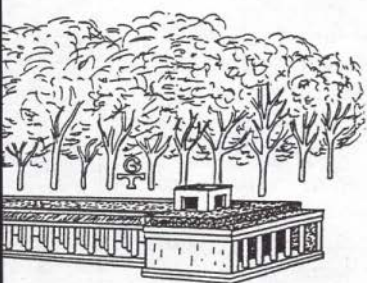
2. Sectional Columns  
Greek Temple at Agrigento



- after Fall (ESOP - 1989)
- ☒
  - ⊕
  - ⊗
  - ▮
  - ⊕
3. Roman Masons' Marks



4. Composite Columns at Pompeii  
100 BC to 70 AD



reconstruction after Tatiana Proskouriakoff (1948)



from Uxmal (nd)

6. Sectional Column  
at Tula, Mx.

- after Fall (ESOP - 1989)
- ☒
  - ⊕
  - ⊗
  - ▮
  - ⊕

7. Masons' Marks  
Comalcalco,  
Mexico



8. Composite Column  
La Quemada  
Mexico, 1200 AD

8.12

Romans also used "composite" columns when solid stonework was too costly. The jewel of Mexico's Puuc architecture was the *Mercado*, or Market of One Thousand Columns at Chichen Itza. At the Gulf coast city of Comalcalco, Mexican natives built palaces and pyramids from fired bricks which were rare in Mexico but common in Rome. Brickmakers in both areas used similar' markings to identify bricks.



## Trans-Atlantic Plant Exchange

A 6th-century Roman herbal declared "Different herbs are brought to-and-fro over all the world for the welfare of the Human Race."<sup>65</sup> Pineapples from the American Caribbean were imported to the Mediterranean. They were portrayed on bronze mirrors of the 3rd century BC. Italian Botanist Domenico Casella identified pineapples on murals at Pompeii dating prior to the 70 AD eruption of Mount Vesuvius.<sup>66</sup> The plant was also the subject of a Pompeii relief carving. Nevertheless, historians traditionally credit a 16th-century Spanish explorer, Ovido, with making the "first" illustration of a pineapple. American squash is another plant shown on Pompeii murals, and American pumpkins were illustrated in a 6th-century Roman herbal.<sup>67</sup> Remains of the common garden bean (*Phaseolus vulgaris* also



Greek Mirror  
300 BC

pineapple

called the Haricot bean) have been found in ancient Peruvian burials.<sup>57</sup> During the 5th century BC, Greek writers Aristophanes and Hippocrates referred to the garden bean as *dolickos*.<sup>56</sup> Spanish archeologist Miguel Oliva uncovered remains of *maize* (American corn) in 3rd-century grain silos at the ancient city of Ullastret along the Mediterranean coast. The discovery was reported in Donald Cyr's *Eclectic Epigrapher* (1993). John Parkinson's *Theatre of Plants* (1640) noted that the Roman herbologist Theophrastus and Pliny the Elder both mentioned an unusual grain as large as whole ears of wheat. According to Parkinson, this was the same grain that was later called *Fruentum Turcicum*—i.e., *maize*. Roman tobacco pipes of the second century have been known for ages from relief sculptures and excavations. Small clay pipes are found in association with Roman relics at archeological sites throughout Great Britain and Ireland. Tobacco historian Jerome Brooks reported that one maverick archeologist detected nicotine on Roman-era pipes and dared to mention his discovery. Afterwards, he was severely ridiculed.

Voyagers also brought Roman plants to America: researchers found remains of Old World barley at the 2nd-century archeological site at Comalcalco, Mexico.<sup>62</sup>



Pompeii Pineapple  
50 BC

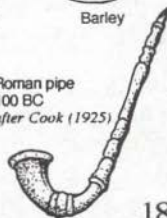


Common Garden Bean

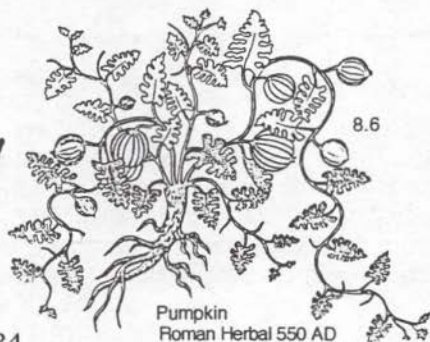


Barley

Roman pipe  
100 BC  
after Cook (1925)



184



Pumpkin  
Roman Herbal 550 AD

## **Greco-Roman Impact on Native Culture**

Following the collapse of Mayan civilization in the 9th century, Central American societies became more receptive to foreign influence. Native artisans borrowed ceramic designs from Rome, and native priests incorporated Roman symbolism, beliefs, and deities into their own religion. Mexican warriors devised their own version of the Roman sword using a slab of wood lined with obsidian glass shards. The most profound foreign impact was expressed in the realm of architecture.

Traditional Greco-Roman architecture was dominated by the columnar facade. Temples in Rome, Athens, and many other principle cities were lined with perfectly round marble columns surmounted by ornate, sculptured capitals. The situation in Native America was much different: round columns were virtually unknown in stone architecture prior to the 10th century. Beginning in about the 10th century, Mayans and Toltecs began using round columns to support roofs of public buildings. They also used miniature columns as decoration. Archeologists call this innovative architecture the "Puuc Style."

Toltec stone-workers used metal tools to fabricate round columns from rectangular blocks. The result was a stone building lined along the front with round columns similar to those of Mediterranean temples. However, most Mayan cities lacked sufficient metal tools and experienced carvers required for fabricating round columns. Mayans compensated for these deficiencies by constructing cores of irregular stones and applying stucco to complete the appearance of perfectly rounded columns. This method of building composite "pseudo columns" reveals the Mexican obsession with round columns. Square pillars would have supported wooden roofs just as well and required substantially less labor. The same technique of creating pseudo columns from rubble and stucco was used in rural Mediterranean villages where people could not afford the perfect marble columns demand by Classical Greek architecture. Mayan architects, like their counterparts in rural Mediterranean villages, used simple square cap-stones instead of ornate capitals.

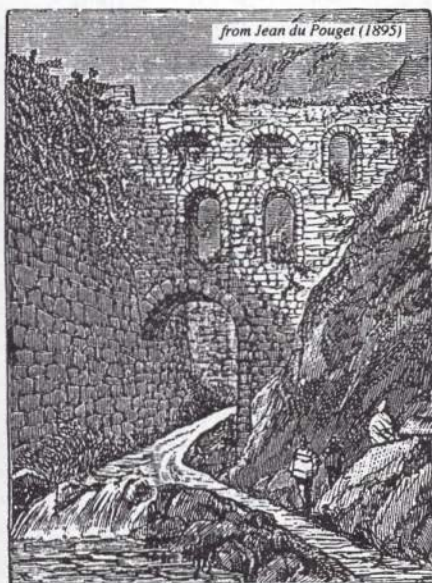
Mayan temples, including those at Chichen Itza and Tulum stood amidst courtyards of round colonnades. One plaza at Chichen Itza was called the "Court of a Thousand Columns." During rainy seasons, the Court's wooden roof provided shelter for conducting business and rituals. The buildings of Chichen Itza bear a striking resemblance to the markets and forums of Roman cities. Stone pillars and the markets they supported were an important innovation for the Mayans. Stone pillars were invulnerable to termites; they were also more resilient against tropical storms which often devastate the Yucatan Peninsula.

At the Mexican city of Comalcalco near the Gulf Coast, archeologists found further evidence of Greco-Roman influence. Beginning in



## AMERICAN DISCOVERY

the 2nd century, natives of Comalcalco used fired bricks for the first time in Mayan architecture. Elsewhere in the Yucatan region, the principle building materials were limestone, adobe, and wood. Although some isolationists believe Mayan craftsmen *could have* invented the technology for firing clay bricks, they have no explanation for the frequent use of Roman brick-makers' symbols (or mason's marks) which were inscribed on the bricks. Archeologist Neil Steede reports that the symbols used at Comalcalco include the same motifs preferred by craftsmen in the Roman Empire.<sup>61</sup>



Inca Aqueduct—Rodadero, Peru

When historian Jean Du Pouget toured Peru in the late 1800's, he noticed fortifications that reminded him of Roman and Egyptian architecture. Due to his belief that the New World was culturally isolated before Columbus, he presumed that these similarities were coincidental. He applied the same rationale to the Inca aqueduct built along the Rodadero river. According to testimonials of local scholars, the structure was standing before the Spanish came in the 16th century. However, this structure employs two tiers of rounded stone arches—often referred to as “true arches.” This style of architecture was a characteristic of the ancient Mediterranean. Consequently, the Rodadero aqueduct represents a strong argument for Greco-Roman cultural diffusion.

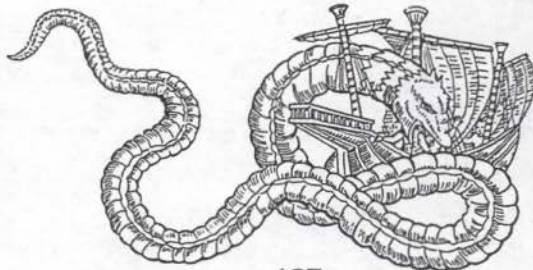
At Mayapan, a 12th-century city built under direction of the Toltec god-king Kukulcan, natives used another foreign architectural feature: stone fortifications around the city's perimeter. Fortified cities were uncommon in Central America, so archeologists assumed that intertribal relations were generally more peaceful than in the Old World. Native warriors were ill-prepared for the kind of warfare which Europeans brought to their shores. According to archeologist George Andrews, “The enclosing wall at Mayapan represents a distinctive spatial concept more analogous to medieval cities in the Old World than anything in the New World.”<sup>63</sup> Mayapan's fortifications suggest that the apocalypse of Native cultures had already begun long before arrival of the *tules*—the native term for Spanish Conquistadors.

## Impact on The Old World

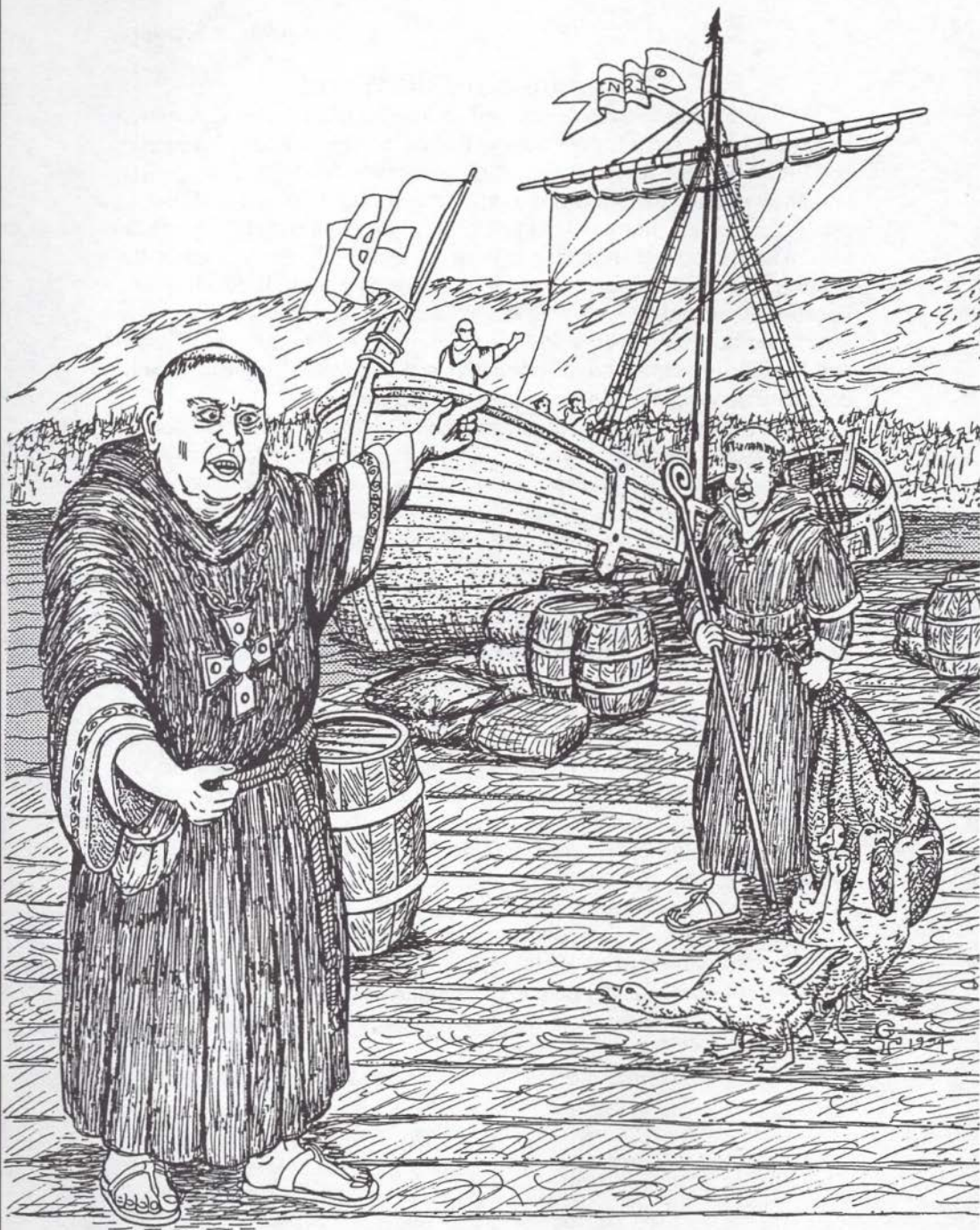
While Roman citizens indulged in unbridled hedonism, America became a haven for refugees fleeing Roman tyranny. Roman emperors had little tolerance for independent religious beliefs or non-conformists, and they sought to exterminate any group which posed a threat to established order. Jews and Christians were frequent targets of persecution. Those who had ships fled to America during the early years of the Empire. The western lands were a continuing threat to the authorities, because oppressed peoples who knew about the overseas sanctuary also nourished hopes of fleeing Roman tyranny. Abundant Greco-Roman and Jewish artifacts found in America reveal that many heretics and non-conformists succeeded in their quest for freedom.

Meanwhile, the western continents and mythical isles were not the primary focus of Roman attention. Wars, plagues, monumental building projects, gladiatorial games, and the Persian silk exchange kept the public occupied with regional affairs. Officially, lands across the Atlantic were *Terra Incognita* (or Unknown Lands), even though many people knew of their existence through myth, rumor, and the stories of returning seafarers.

Germanic tribes invaded Rome in the 5th century, causing the collapse of the already weakened Empire. For nearly a thousand years, European survivors struggled through a period of ignorance, feudalism and pestilence known as the "Dark Ages." Worship of pagan gods dwindled, while Christianity emerged as the guiding spirit of European civilization. A network of monasteries and churches replaced the bureaucracy of Rome. The goal of this network was to preserve the heritage of Christian salvation. Meanwhile, the legacy of American exploration, commerce, and discovery was lost, because monks preserved only those documents having "relevance to salvation." Priests often burned pagan manuscripts in an effort to "purify" the libraries of Christian Europe. Among the items they sought to eradicate were the priceless Roman maps of Ptolemy and Marinus of Tyre. The fires of religious passion spread a plague of ignorance across the continent; and devout Christian seafarers learned to fear the Atlantic Ocean because priests called it "The Sea of Darkness."

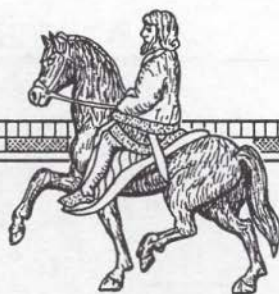






***Voyage to The Land of Promise***

*Brendan, abbot of Clonfert, supervises loading of a Medieval Irish ship for a voyage across the Atlantic, circa 565 AD.*



## WELSH & IRISH ROVERS

(3000 BC—1200 AD)

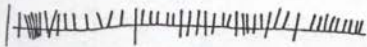
New England is a repository of relics from ancient European civilizations. When 17th-century Colonists settled in the region, they found remains of prior voyagers from Ireland and Wales. Subterranean chambers, circular stone monuments, and earthen mounds lay scattered across the wilderness. These megalithic structures reminded colonists of ancient Celtic monuments in England, Ireland, and Brittany. Along the Ohio river, explorers found ruins of Medieval villages like those of Northern Europe. During the 1800's, antiquarians uncovered iron-smelting furnaces, rusted swords, wagons, and stone houses lying *beneath* foundations of Colonial dwellings. Were these remains of a legendary Celtic civilization called *Mag Mel* or *Avalon*?

### Legacy of The Druids

New England's megalithic structures were built by Celtic voyagers and their descendants. Ancient England's warrior clans were called *Picts* and *Bri-tons*; the Irish were known as the *Fir-blog*, or "skin-boat people."<sup>1</sup> Between the 5th and 2nd millennia BC, Celtic tribes from Northern Europe invaded England and Ireland. They brought a distinctive Neolithic culture having large-stone monuments called "megaliths." The term megalith derives from two Greek words: *me-gas* (large) and *lithos* (stone). The most common types of megaliths were subterranean chambers, circular monuments, massive stone enclosures called "dolmens," and upright stone slabs called "menhirs." Dolmens are often referred to as "balancing stones," because they consist of huge "capstones" balanced on top of several upright boulders. When first constructed, *dolmens* were covered with earthen mounds. The mounds eroded during passing centuries often leaving the huge stones exposed. Dolmens having flat, table-like capstones are often called *cromlechs*. *Menhirs* (upright stones) were used to mark important astronomical alignments, enabling priests to calculate the times for planting and harvesting crops.<sup>2</sup>

In ancient times, a group of highly-educated Celtic priests called "Druids" lived in England, Ireland, and Brittany. They were responsible for making astronomical observations and mediating disputes between





1. Equinox Ogam inscription, Anubis Cave, Ok.

2. Celtiberian inscription, Monhegan Island, Maine

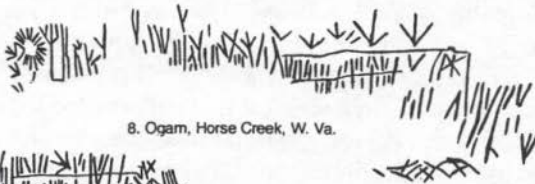


3. Iberic script, Vermont Late Bronze Age

4. Mabo's Marker, St. Vincent, Antilles (c. 800 BC)



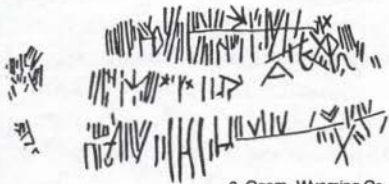
5. Celtic Memorial Vermont



8. Ogam, Horse Creek, W. Va.



7. "Eye of Bel" S. Woodstock, Vt.



6. Ogam Wyoming Co., W. Virginia

9. Gaelic Script Ardmore, Ok.



9.10



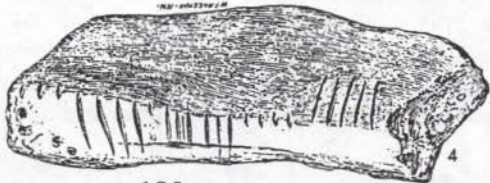
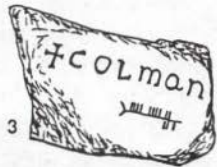
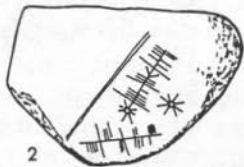
Celtic dolmen covered with earth France, circa 5000 BC

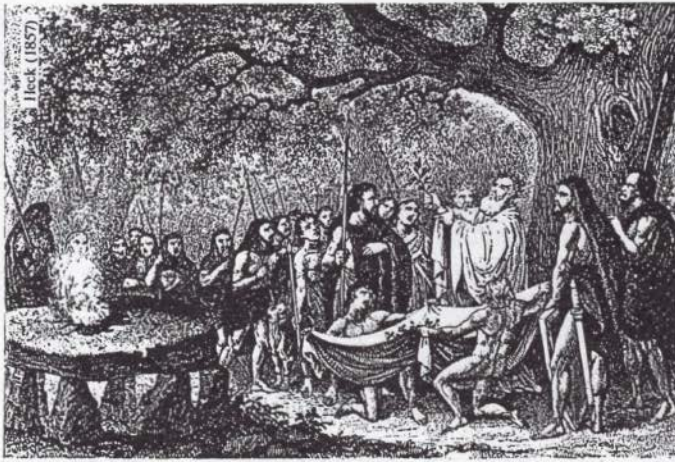
Morgan (1925)

**Celtic Ogam Writing**

Ancient Celtic priests called *druids* wrote with an alphabet consisting of long and short marks called *ogam*, or "grooved writing." Examples from Ireland include: 1) Trinity Menhir, Dublin; 2) Aultagh Ogam Stone; 3) Clonmacnoise Ogam Stone; and 4) Toppid Mountain Stone.

9.3





## Druid Ritual

A Celtic priest raises mistletoe before a cromlech altar.

Celtic tribes. A 1st-century BC Roman writer named Pomponius Mela informed Julius Caesar that: "Druids profess to know the size and shape of the world, the movements of the stars, and the will of the gods."<sup>3</sup>

Druids brought astronomical skills and calendar computers to America. At North Salem, New Hampshire, archeologists found subterranean chambers and *menhirs* dating to the late 3rd millennium BC. Harvard scholar Barry Fell identified an inscription found at the site as a dedication to Baal—the Celtic Sun God.<sup>4</sup> This confirmed the site's function as a center for Celtic astronomical observation. Fell also noted that the dedication was written in a Druidic script called "ogam."

### Ogam Inscriptions

American scholars failed to recognize New England's Celtic inscriptions, until Barry Fell's pioneering research in the 1970's. His controversial book, *America BC* (1976), identified numerous Celtic inscriptions consisting of parallel grooves called "ogam." The name of the Celtic writing style derives from the Greek word *ogme*, meaning "grooved writing." Fell applied the word "ogam" to grooved writing in America, after noticing similar inscriptions in Ireland which were first translated by an English scholar, Charles Vallancy in 1784. By the 20th century, Celtic scholars in the British Isles had already established a firm foundation of ogam research, including discovery of a key to interpreting Gaelic ogam found in a 12th-century Irish text, *The Book of Ballymote*.

Prior to Professor Fell's disclosure, American archeologists generally assumed the New England inscriptions were merely "tally marks" used by primitive natives for counting. However, Fell demonstrated that so-called "tally marks" actually conformed to the conventions of Druidic writing. There was one exception: New England Druids developed an abbreviated script using only consonants. Fell believes the earliest American inscriptions refer to Druid deities. His interpretation for the



## AMERICAN DISCOVERY

ogam letters "M-H-M-B" on a stone tablet from Vermont was: "Mahair-Mabona"—the Druid Mother Goddess.

Although Professor Fell's translations are often controversial, he has passed the test of independent confirmation demanded by science. His translation of an inscription found at Anubis Cave, Oklahoma, identified the site as an observatory for the vernal equinox. Robert Meyer of Catholic University independently confirmed the accuracy of Fell's translation. Other scholars took video equipment to Anubis Cave and observed the setting sun at the equinox precisely as Fell had predicted.

### Irish Voyagers

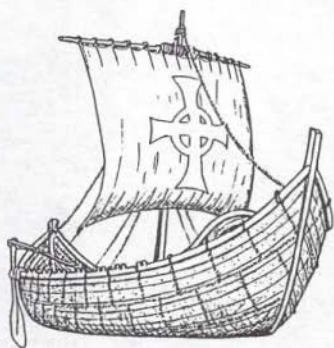
Between the 1st century BC and the 10th century AD, the British Isles endured frequent invasions. In 55 BC, Caesar's Mediterranean warships crushed the Celtic fleet off the coast of Brittany. Roman invasion of England drove Celtic survivors to Ireland and across the seas to America. Additional refugees followed Saxon invasions during the 5th century and Norse invasions of the 9th century. Irish refugees established settlements in North America that became known to ancient travelers as *Mag Mel*, *Hy-Breasail*, and *Irland Mikla* (or Great Ireland).

Pagan voyagers were followed by Catholic monks either seeking to evade Vikings or carrying out pledges to evangelize their heathen kin in the New World. In a tale called "The Voyage of O'Corra's Sons," three monks are said to have visited a strange land across the sea. The Irish monk Dicuil recorded Catholic settlements in Iceland circa 825 AD. Within the century, Viking invaders forced them to flee to *Mag Mel*.

### Legends of *Mag Mel* and *Hy-Breasail*

According to Celtic myths, the original inhabitants of Ireland fled to a Paradise across the sea called *Mag Mel*. The superstitious Celts believed their predecessors had supernatural powers, so they called the aboriginal inhabitants "fairies." The land where they fled, *Mag Mel*, was presumed to be a Paradise of Fairies. Another name for the isle was *Tierna Nog*—"Land of Eternal Youth." Over the course of many centuries, heroic Irishmen sailed to *Mag Mel* with hopes of finding priests (or fairies) who preserved the wisdom of their ancestors.

Many Irish legends refer to a paradise across the western sea.<sup>5</sup> In "Cormac's Adventures in The Land of Promise," the king of Ireland is said to have made a seven-month voyage across the North Atlantic circa 248 AD. When the Formorian clan was defeated in battle, survivors are said to have fled to a land across the sea. In a tale called "The Voyage of Bran," the hero sailed toward the setting sun where he found an "isle" 150 times the size of Ireland. In another tale, the heroic youth Cuchulainn sailed to the distant Paradise in the 10th century with hopes



### **Irish Curraugh 500 AD**

Common coastal trader and fishing boat was made from thin strips of wood lashed to a frame of steamed and bent saplings. These were covered by two layers of rawhide soaked in lard. Skin boats were durable and light-weight.

of marrying a fairy princess. Some writers believe this lad was the inspiration behind legends of Kukulcan arriving in the Yucatan peninsula during the 10th century. In a later episode of Cuchulainn's life, he sends his charioteer to the "Other World" ahead of his return to the overseas paradise. In "The Voyage of Tergue," the hero Sean is lost at sea for nine weeks before arriving at a strange land in the west. This land is also encountered in "The Voyage of O'Corra," "Colloquy of the Ancients," and "The Voyage of Maeldun." Lots of Irish folkheroes sailed west; they all found land.

During the Late Medieval period of Irish history (in the 14th century), the western Paradise was known as *Hy-Breasail*, meaning "Golden Kingdom" or "Blessed Land." Orthodox historians have concluded that legendary lands inhabited by fairies are of no consequence to American discovery. On the contrary, some Irish sailors reported seeing more than fairies on voyages across the Atlantic. One celebrated voyager was a highly-respected priest from County Galway named Brendan of Clonfert.

### **Brendan & The Land of Promise**

During the 6th century, Abbot Brendan of Clonfert gained such great esteem among the parishes of County Galway that he was known after his death as "Saint Brendan." The priest's popularity in Galway was assured following construction of his second monastery, and he achieved national fame for his zeal as an evangelist. He often traveled to distant counties in a skin boat called a *curraugh*, and following a seven-year Odyssey on the Atlantic Ocean, he became an international celebrity. Even a thousand years after his death, Brendan's fame was commemorated by Spanish maps showing an island in the mid-Atlantic called *Brendan's Isle*. The story of Brendan's Atlantic voyage was known to Spanish sailors, including Christopher Columbus who mentioned efforts to find Brendan's Isle in his ship's log of 1492.<sup>6</sup>

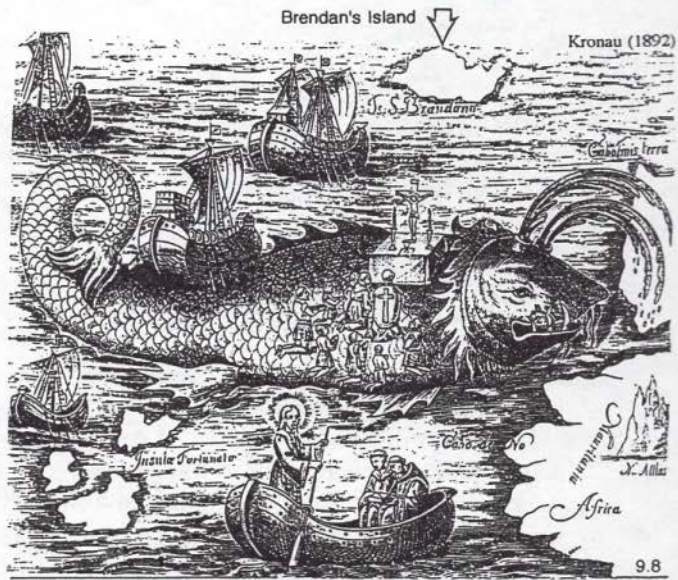
The story of Brendan's voyage was conveyed for many generations as an oral tradition. Eighth-century monks wrote down the tradition in two documents: *Vita Brendani*—"The Life of Brendan," and *Navigatio Sancti Brendani*—"The Voyage of Saint Brendan."



# Saint Brendan's Voyage

565 to 573 AD

This 19th-century engraving was based on a Medieval painting. It shows Brendan's ship stranded on the back of a whale. This serves to convey the miraculous nature of the trip. Above the whale is an *Isle St. Brandano* or Brendan's Island which was supposed to lie somewhere in the North Atlantic.



The *Navigatio* relates Brendan's seven-year expedition on the Atlantic in the company of 17 missionaries. They landed upon an "island" that was actually a whale; they witnessed a mountain erupting from the sea; they viewed schools of fish swimming in crystal-clear water; they shared communion with 24 brethren at a monastic hideaway; they stopped at an island whose parish had three choirs; and they sailed past a land that was destitute of vegetation. Eventually, they reached a vast paradise called "The Land of Promise" where they began an overland journey. After a 40-day trek across mountains and forests, they came to the banks of a great river which flowed towards the interior. That was the furthest they traveled into the Land of Promise. Because the land seemed endless and the monks were anxious to return home, they headed back to the coast and resumed the voyage to Ireland.

Some scholars regard Brendan's description of continental land as proof that the abbot's expedition reached America; isolationists insist the account is "pure fantasy." Outright dismissal of Brendan's tale is unwarranted: although fanciful in parts, much of the *Navigatio* is substantiated by known geological phenomena. Brendan's account of crystal-clear water accurately describes reefs in the Bahamas; and the description of a mountain arising from the sea is an accurate report of under-water volcanoes near Iceland. Fanciful descriptions like landing on a whale reflect the Medieval fascination with miraculous incidents; however, they do not justify dismissal of the *Navigatio* as a work lacking historical importance. The monk's sojourn at a monastic hideaway and the isle of "three choirs" point to established Christian congregations in North America. Indeed, Norse sagas confirmed that Irish Christians lived in an overseas colony called *Ireland Mikla*.

### **Norse Legends of Irland Mikla or Great Ireland**

According to Norse sagas, Irish refugees and Catholic monks settled in North America before the 10th-century. The *Greenlander's Saga* reported Irish settlements in Iceland, Greenland, and North America prior to Norse occupation of Vinland (Massachusetts) in the 11th century. *Eric The Red's Saga* told how Norse explorer Thorfinn Karlsefni captured two Irish children near Cape Cod who informed him of a territory called *Vitramanland*, or "Ireland The Great." The Danish *Eyrbyggja Saga* told of an 11th-century Norse expedition that found a thriving Irish settlement called *Vitramanland* in North America.<sup>7</sup> In the 1130 AD manuscript *Landnamabok* (or "Book of Land Taking"), Danish historian Frode related the misfortunes of an Icelandic merchant named Ari Marsson who landed in *Great Ireland*: "Marsson was forced by stormy seas to land at Hvitramannaland—which some call Great Ireland. It lies westward in the sea near Vinland the Good."<sup>8</sup> Frode also reported that the residents of Great Ireland were devout Catholics: they would not allow Marsson to leave until he was baptized.

### **Maps of the New World:**

#### **Great Ireland, Albania, Brasil, & Brendan's Isle**

Irish settlements in North America were also known to 12th-century Persians. Arabian geographer Al-Idrisi mentioned in his 1154 AD world atlas a land called *Irlindah-al-Kabirah*, or "Great Ireland." According to Al-Idrisi, Great Ireland was located beyond Iceland.

In 1605, Icelandic historian Bjorn Jonsson recorded the acquisition of a New World map "at least two centuries old." The map was brought to Iceland in 1568 by Erlend Thordsen, parish priest of Staden. Jonsson noted that the map was of Albania or Vitramannaland "which merchants formerly called *Hibernia Major* or *Irland Mikla*" (or Great Ireland). Thordsen's map shows a land called "Albania" situated between Florida and the Hudson river. A similar map by Jon Gudmundsson circa 1600 AD is in German archives. It has Albania at the latitude of Normandy.

Medieval geographers were very familiar with a distant land called "Albania." Al-Idrisi's *Tabulata Rotunda* indicates such an island northeast of Norway. A similar "Albania Isle" is shown north of China on the 12th-century Henry Mainz world map. Albania is indicated as a region of land northeast of Russia on the Anglo Saxon Map of the 10th century, the Psalter Map of 1200 AD, and the Borgia Map of 1450.

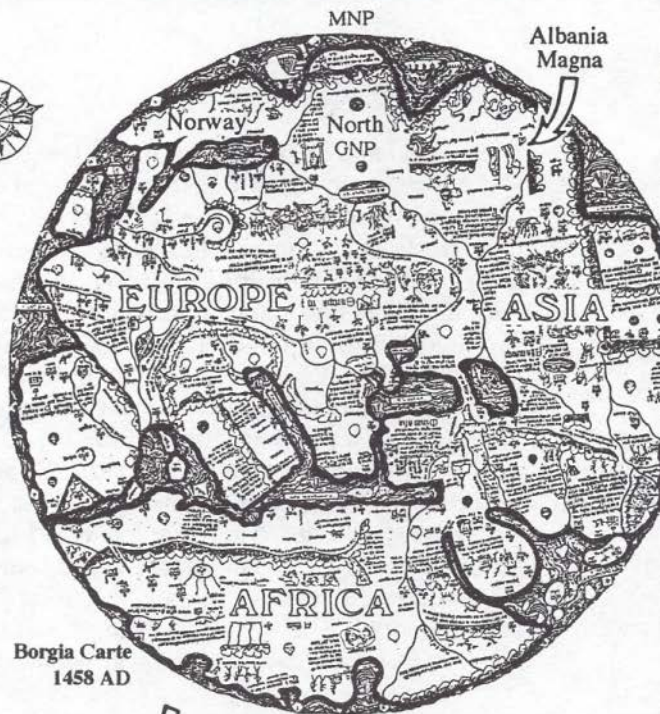
The reason why mapmakers showed Albania northeast of Norway is because Medieval mariners followed compass directions—not true geographical coordinates. Compass bearings are inaccurate near Hudson's Bay due to a phenomenon called magnetic declination. Lands which sailors thought were north of Norway were actually located far to the





## Northern Albania or Great Ireland

A northern region or isle called "Albania" appears on most Medieval world maps. The Borgia Carte (right, 1410-1458 AD) has Albania Magna northeast of Russia and north of China. Al-Idrisi's *Tabulata Rotunda* (below, 1154 AD) has Albania Island northeast of Norbeza (Norway). Norse sagas of the 11th century identified Albania as the current name for the old Irish territory of "Irland Mikla"—a.k.a. "Hibernia Major," "Hvitramannaland," or "Great Ireland." The sagas clearly establish that Irland Mikla was beyond Norse settlements in Greenland and Vinland—that is, it was west of Labrador.



Borgia Carte  
1458 AD



Albania magna



Tabulata Rotunda  
al-Idrisi 1154 AD

west. The location of Albania is correct on Thordsen's map because geographers used accurate celestial coordinates by the 16th century.

Geographers placed a large island in the mid-Atlantic called "St. Brandon's Isle" to honor the abbot's discoveries. The uncharted isle is shown on a 1448 map by Portuguese cartographer Andrea Bianco and on a 1492 terrestrial globe by German geographer Martin Behaim. During the 16th century, explorers verified that there were no islands in the mid-Atlantic, so they named one of the Caribbean islands to commemorate Brendan's voyage. Theodore deBry Leod's 16th-century chart placed *Ysla de S. B.*, or "Brendan's Isle," near Barbados.<sup>9</sup>

Medieval sailing charts also featured the legendary Irish *Hy-Breasail*, or "Blessed Land," along with numerous mythical isles. In 1367, Italian cartographer Pizigano prepared a map of Europe with an island called *Ysla de Brasil* directly southwest of Ireland. However, no island exists in that location. Many historians regard Pizigano's *Brasil* and Brendan's

Borgia Carte from an ancient Russian manuscript  
version of al-Idrisi's map after Latovici (1887)

Isle as “pure fantasies,” akin to Medieval representations of Paradise near China. However, the placement of Brasil was an attempt to report information given the limitations of current knowledge. Later maps, like the Paris Map of 1490, place Brazil in the vicinity of Labrador and Newfoundland. Eventually, the name caught up with its true location.

### Seagoing Capability: The Swan & The Curraugh

Julius Caesar described Celtic vessels in his *Commentaries on The Gallic Wars* (55 BC). The single-masted ships were built in the shape of gigantic swans; their oaken hulls withstood assaults from Roman battering rams; and their oxhide sails were impervious to fire arrows.



Although Caesar acknowledged the superiority of his adversary's ships, the Roman navy proved more cunning and mobile. Roman *biremes* surrounded individual Celtic battleships like a swarm of hornets. In the confusion, Roman marines used scythes to cut the rigging of Celtic ships rendering them immobile. Celts who managed to escape the Roman victory probably sailed merchant galleys. Medieval illustrations of these vessels portray ships with “wales and strakes” reinforcing the exterior sides of hulls. Some refugees sailed *curraughs*, or skin boats.

Traditions of skin-boat manufacturing have survived in Ireland and Wales. Modern fishermen continue to build vessels from ashwood frames and oxhides. In 1977, British author Tim Severin proved that skin boats were suitable for extended ocean travel. His 36-foot replica of a Medieval *curraugh* sailed 2,600-miles from Ireland to Newfoundland.

### Artifacts of Iron Age Settlements

During the 17th and 18th centuries, settlers in New England and the Ohio Valley found relics left by earlier inhabitants. Some of these were arrowheads and ceramic pots which frontiersmen attributed to natives. However, settlers also found abandoned fortresses, buried copper tools, rusting swords, and round burial mounds which reminded them of pagan mounds in northern Europe. These ruins and decaying artifacts were all that remained of *Great Ireland*.

By the early 19th century, public interest in buried artifacts and abandoned fortifications intensified. Many people believed the relics were evidence of a “lost civilization.” In 1812, a group of ancient history enthusiasts founded the American Antiquarian Society in Worcester, Massachusetts. The goal of these “antiquarians” was to solve the mysteries of America's past.



W = Western Settlement (Wester-Bygd)  
 E = Eastern Settlement (Oster-Bygd)  
 L = St. Lawrence river

after Arlington Mallory (1951)

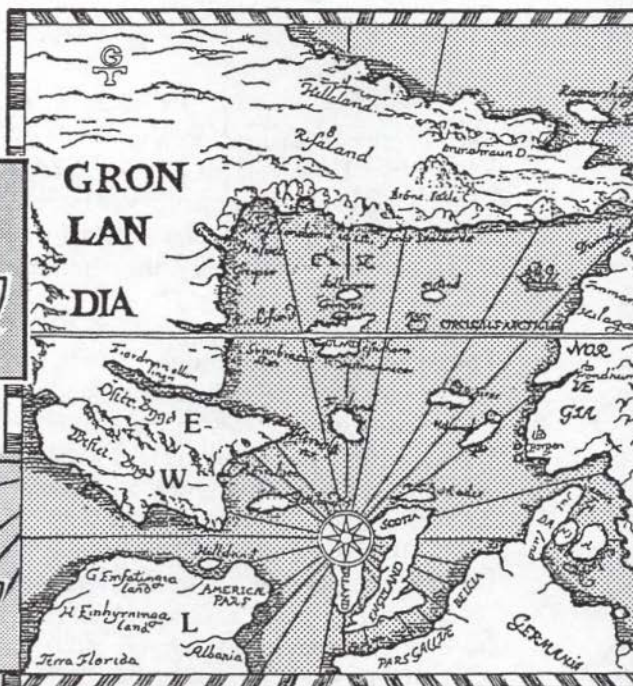


Erlend Thordsen Map 1568 AD

after Paul Herrmann (1954)



section from the Gudmundsson map



Jon Gudmundsson Map circa 1600 AD

## Western Albania or Great Ireland



Albania magna

Erlend Thordsen's copy of a 16th-century North Atlantic map circa 1568 (above left) shows Albania in its correct position on the East Coast of North America. It is situated east of Einhyrningialand (Canada) and south of the St. Lawrence river. Norse sagas of the 11th century clearly establish that Albania (formerly Great Ireland) was beyond Norse settlements in Greenland and Vinland—that is, west of Labrador. So the position on Thordsen's chart corresponds to historical record. A similar map by Jon Gudmundsson circa 1600 more clearly shows Albania (Great Ireland) in relation to Europe. The distortion of Greenland on Gudmundsson's map shows the difficulties caused by use of compass coordinates. This map shows *Wester-Bygd* (the "Western Settlement" on Greenland to be southwest of *Oster-Bygd* when in fact its true position is actually north! A compass deviation error exceeding 50° was to blame. The map is similar to a chart which Claudius Clavus produced in 1424.

One of the leading antiquarians was Josiah Priest, author of *American Antiquities and Discoveries In The West* (1833). During the early 1800's, Priest toured abandoned fortifications in the eastern United States. Near Cincinnati, Ohio, he surveyed a circular-shaped fortress that encompassed three acres of land within an earthen wall 7-feet high and 20-feet wide. He also surveyed remains of ancient fortresses along the Ohio river at Newark, Hamilton, Fort Hill, and Chillicothe. Because the fortifications were similar to Iron Age earthworks of Northern Europe and had been abandoned prior to 17th-century Colonial settlements, Priest was convinced they were remains of a "vanguard" civilization from Europe.

In North Carolina, Priest's associates uncovered a masonry wall with stones set into cement, and they found fired bricks in Missouri. Priest realized that fired bricks and masonry walls were further evidence of ancient Europeans, because fired bricks and masonry were not used by native tribes. Near the Gasconade river in Missouri, antiquarians found ruins of an ancient town with masonry houses arranged along streets. Priest noted the similarity of ancient dwellings and construction methods to those of Europe. Priest noted that: "These discoveries rank with the architectural works of Europe in the 9th and 10th centuries."<sup>10</sup>

At ancient sites in the Ohio Valley, antiquarians uncovered rusted mirrors, swords, metal helmets, ceramic dishes, part of a steel bow, a 14th-century glass bottle, an optical lens, and a statue of the Catholic Madonna.<sup>11</sup> In a mound near Marietta, Georgia, they found remains of a silver-plated scabbard. Priest reported "no sign of the sword itself, except a streak of rust its whole length."<sup>12</sup> From the evidence of earthworks, masonry, iron artifacts, and the Catholic statue, Priest concluded that Europeans had occupied the Ohio valley in antiquity. "It would appear from all this," he wrote, "that Europeans had made extensive settlements in various places extending over an immense range of this country."<sup>13</sup>

### Irish Horses in America

Settlers of Great Ireland had horses and wagons. Most likely, they rode Celtic ponies brought from the British Isles. The Norse history of Vinland written in the *Eyrbyggja Saga* (1250 AD) told of horses in Great Ireland. According to the saga, Bjorn of Iceland reached the western lands called "Great Ireland" after his storm-driven ship landed on an unknown shore. An Irish rescue party riding horses brought him to their camp.<sup>14</sup> In the late 1700's, a New Yorker discovered ancient iron fittings for a wagon buried several feet beneath the ground. Josiah Priest concluded from this evidence that pre-Columbian settlers had used horses and wagons. Winnipeg natives told French explorers that white settlers riding horses had occupied the region in ancient times. Pierre Gaultier noted tales of whites whom the natives called *Ouachipounnes* riding horses in western Canada. A 1740 French map designated a Fort des Blancs—or "Fort of Whites" to represent the presumed location of the *Ouachipounnes*. But they were never found.

Orthodox historians dismiss tales of whites riding horseback as "fiction." Nevertheless, several horse skulls have been excavated from pre-Columbian mounds in Michigan.<sup>15</sup> Irish horses were the most likely ancestors of a native breed called the "Chicasaw" which Colonial settlers found in Tennessee and the Carolinas.





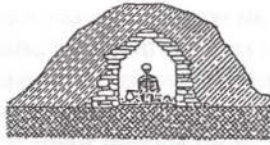
OLD WORLD

Cultural Diffusion

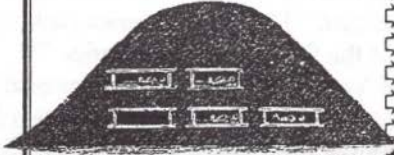
to AMERICA



1. Corbeled Chamber  
New Grange, Ireland 3000 BC



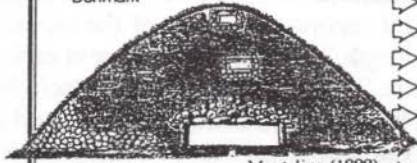
1. Corbeled Chamber  
Fish Mound, Iowa



2. Burial Mound  
Denmark



2. Grave Creek Mound, W. Va. 200 AD



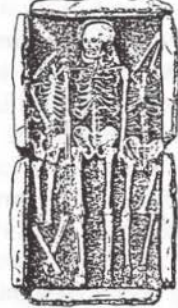
3. Burial Mound  
Holland



3. Stone Chamber at Dunleith, Ill.



4. & 5. Stone Cysts, Denmark



4. Stone Cyst burials  
Mill Creek, Ill.

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9.12

### Linguistic Evidence of Contact

Although Irish settlements had been abandoned by the time 17th-century colonists reached the Ohio frontier, native tribes were still using Gaelic words. Josiah Priest reported that a 17th-century Jesuit who traveled in Canada and a Scotsman who lived in Florida encountered natives using Gaelic.<sup>16</sup> Antiquarians believed that native tribes acquired Gaelic words as a result of ancient contacts with Irish settlers.

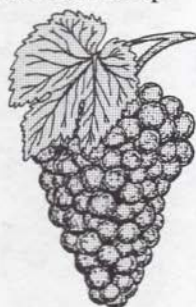
Modern scholars identified several Gaelic loan-words used by native tribes. Barry Fell recognized the Celtic word *Ammo-iasgag* as the Algonkian *Amo-skeag*. The Celtic word means "stream of small fish,"

while the Algonkian name means “the river where one takes small fish.” Another Algonkian river, the *Pis-cata-qua*, means “river of white stones.” An almost identical Gaelic word, *pios-cata-cua*, means “pieces of snow-white stone.” A mountain in New Hampshire which the natives called *Cowisse-waschook*, or “proud peak,” is similar to the Gaelic *Cuise-achstuce*, also meaning “proud peak.”<sup>17</sup> Gaelic words such as *ban* (woman), *cladan* (snowflake), *monadh* (mountain), and *cuithe* (gorge) have almost identical Algonkian forms with the same meaning: *bhan-em*, *kladen*, *monad-en*, and *cuiche*.<sup>18</sup>

### Plant Diffusion: Irish Grapes in Vinland

Norse sagas provide the first clues that ancient Irish immigrants brought grape vines to North America. According to the *Greenlander's Saga*, Leif Ericson named the territory around his North American camp *Vinland*, because there were abundant grapes or “vines.”

Discovery of wine grapes was of great importance to Norse Catholics because they needed grape wine for communion services. The cool Arctic climate prevented Greenlanders from growing their own wine grapes. Before *Vinland's* discovery, the only source of wine was the trans-Atlantic trade from Bergen. The excessive cost and scarcity of wine led desperate priests to beg the pope for permission to use fermented berries or currants instead of wine grapes. However, the pope refused.<sup>19</sup>



Norse claims that *Vinland* was a source of *real* wine grapes raises the issue of how grape vines reached North America. Botanists have determined that wine grapes (*Vitis vinifera*) originated in the Near East about 6,000 years ago. N.W. Simmonds, author of *The Evolution of Crop Plants* (1976), noted that wine grapes were typically transported by Catholic monks. Orthodox historians believe wine grapes didn't reach North America until the 17th century. However, Norse sagas and accounts of Brendan's voyage are evidence that Irish monks brought grapes to America before the 10th century AD.

Historical accounts also confirm that grapes reached the East Coast prior to the 17th century. French explorer Jacques Cartier reported: “great stores of vines” near the St. Lawrence in 1535. And a letter by the French-Florentine explorer Verrazano in 1524 reported that:

We saw in this country many vines growing naturally, entwining themselves about the trees, climbing as they do in Cisalpine Gaul, which if they were dressed in the right way of cultivation by husbandmen, they would produce without doubt the best of wines, because often the fruit of that drinking is agreeable and sweet. It is not different from our own.<sup>20</sup>



## AMERICAN DISCOVERY

### Welsh Voyages

During the 11th century, Norman invaders wreaked havoc along the coast of Wales. Some Welsh clans fled to a legendary land called *Avalon* across the western sea. Subsequent conflicts between Anglo-Saxons and Welsh clans led to more westward migrations. Legends of those voyages were part of English folklore in the 15th century when Spain declared a monopoly over trade with islands in the Western Atlantic. The legal basis of that claim was the Columbus voyage of 1492. However, King Henry VII of England advised the Spanish monarchs, Ferdinand and Isabel, that the British had a *prior claim* to the western isle of *Avalon*.

### Legends of Avalon

According to a Welsh legend called "The Spoils of Annwin," curiosity inspired King Arthur's voyage to *Avalon* in the 6th century. Another legend recorded by Geoffrey of Monmouth told of a wounded Arthur who was carried back to *Avalon* by three fairy princesses. The Welsh term for Arthur's eternal abode was *Ynys yr Afallon*, meaning "the Isle of Apples." Orthodox historians believe *Avalon* is merely a copy of a Greco-Roman legend about the *Hesperides*—also an "Isle of Apples."



Isolationists dismiss suggestions that America was the legendary Isle of Apples because apples (*Malus pumila*) are regarded as an Old World fruit—that is, until *after* Columbus. Colonists began importing apples in 1633; but they weren't the first. New England historical accounts dating to the 17th century reveal that *old-growth* apple orchards were already being cultivated near native villages when the first colonists arrived.<sup>21</sup> A New England traveler named Longstreth reported "thousands of apple trees near Annapolis" during his visit in the 1690's. And S.A. Beach (author of *The Apple*, 1905) reports that when General Sullivan marched against the Cayuga and Seneca tribes of western New York in 1779, his soldiers found "peach and apple orchards that were bending with fruit."

Historian Astri Stromsted (author of *Ancient Pioneers*, 1974) notes that early 16th-century French maps designated the northeastern region *Paradise Terrestre* or *le paradis*. Such names on ancient maps implied fields of grain and orchards. Thus, America probably was a land of apples and the *Avalon* of legend.

### Prince Madoc

A monument near Mobile, Alabama, proclaims Welsh Prince Madoc ab Owain Gwynedd the "Discoverer of America in 1170 AD." Madoc's voyages played an important role in early disputes between the British and Spanish over New World trade and sovereignty. After British

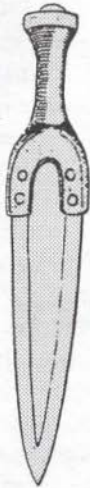
envoys warned Spain not to assume exclusive ownership of New World territories, Spanish authorities instructed their explorers to look for evidence of Welsh settlements in a region called *Florida*. In 1540, Hernando DeSoto began a four-year march from Florida to the Mississippi river. According to the accounts of three survivors, DeSoto's expedition found abandoned fortifications in Florida. Spanish authorities attributed these ruins to Welsh settlers.<sup>22</sup> Since the forts were no longer occupied, there was some uncertainty regarding England's claim.

Although isolationists routinely discount legends of Madoc's expeditions, trans-Atlantic voyages by the Welsh prince have historical confirmation. In 1584, British historian David Powel edited a Medieval Welsh document by Cardoc of Llancarfan called *Historia Cambria, or History of Wales*. The revised version of Llancarfan's document mentions three Madoc voyages: the first was a scouting venture into the western Atlantic; the second involved exploration of the North American wilderness; and the third was a colonial enterprise which brought ten ships including women and livestock across the Atlantic. As was the case with Brendan's *Navigatio*, the *Historia* was based on oral traditions. During the 16th century, Spanish historians accused Powel of inventing the Madoc legends in a vain effort to usurp Spain's New World territorial claims. Welsh scholars insisted that Madoc's legends were part of a Welsh heritage existing many centuries before Columbus.<sup>23</sup> Spain effectively conceded the British argument of *prior* voyages and settlements by granting British merchants access to New World territories.

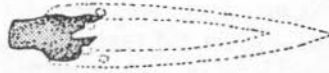
### Native Legends

Shawnee Chief Blackhoof retold an ancient legend of a race of white people who used iron tools and lived in Florida before the Spanish arrived.<sup>24</sup> His tale was recorded during the 1800's and preserved in Henry Schoolcraft's *Indian Tribes of North America*. An aging Cherokee Chief, Oconostota, told antiquarians that bands of white people from across the Great Water had landed near the mouth of the Alabama river before moving inland. They built stone fortifications near the Highwassee river. After several years of warfare, the whites left the territory and settled in Kentucky. The Asoonset tribe of New England also had a legend about strangers who had sailed up the river in "wooden houses" to conquer the resident tribes.<sup>25</sup> Alabama natives informed Benjamin Bowen in 1854 that an ancient race of white people called the Welegens (a Welsh clan) had resided for a time along the Conesauga Creek. Ohio tribes had a tradition of white settlers living along the Ohio river; elders claimed a great battle had taken place between natives and white settlers near the Falls of Ohio. Antiquarians confirmed these legends when they found Welsh artifacts throughout eastern North America.

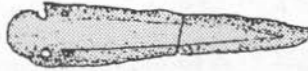




3. Celtic Bronze Dagger  
(reconstruction of 1 & 2)



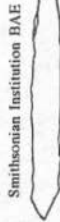
1. Bronze Dagger (fragment)  
North Salem, NY.



2. Bronze Dagger (fragment)  
Merrimackport, Ma.



4. Iron Chisel  
N. Carolina  
Mound



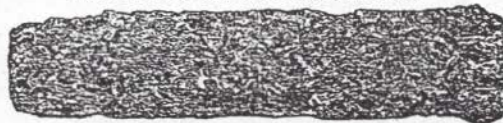
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7. Iron Celt  
N. Carolina  
Nelson Mound



6. Celtic Coin  
minim 200 AD  
Champaign, Ill.



8. Iron Blade (fragment) Nelson Mound, N. Carolina



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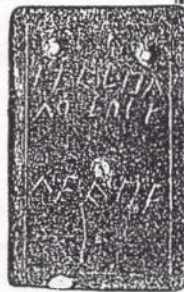


5. Memorial Marker  
Vermont dolmen

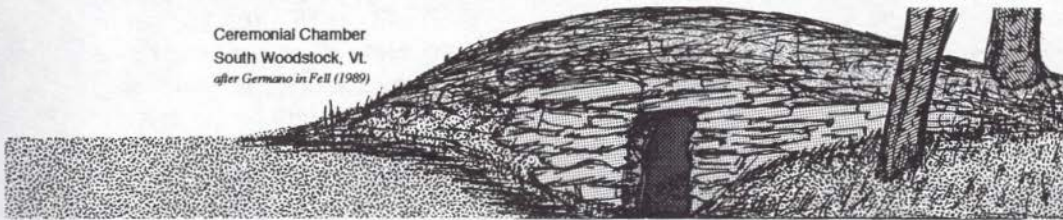
Burial Tablets



Rayner's Mound  
Piqua, Ohio 1890  
from Moorehead (1910)



Ceremonial Chamber  
South Woodstock, Vt.  
after Germano in Fell (1989)



Welsh Artifacts in America

Antiquarians identified the remains of 12th-century Welsh fortifications at DeSoto Falls, Alabama, and at Fort Mountain, Georgia. Another fortress, the Old Stone Fort near Chattanooga, Tennessee, had moats, gates, and wall arrangements which were characteristic of old Welsh forts. In 1799, frontiersmen found 6 skeletons near Jeffersonville, Missouri. Inside the graves were metal emblems bearing the Welsh mermaid-and-harp insignia and a stone tablet with the Latin inscription: "Virtuous deeds meet their just reward."<sup>26</sup> In the 1800's, antiquarians

uncovered armor breastplates near Louisville, Kentucky, that also bore the mermaid-and-harp insignia. Nearby, they found a tombstone inscribed with the date 1186 AD.<sup>27</sup> These artifacts are consistent with native legends of battles with ancient white immigrants; they confirm Welsh accounts of 12th-century voyages to Avalon.

During the 1800's, farmer Joe Halsted plowed up artifacts in his fields near Auburn, New York. The artifacts included brass tools, helmets, iron axes, and swords. Halsted hammered some of these artifacts into farm implements on his own forge; he sold the remainder for scrap. When antiquarians asked him about his harvest of metal, Halsted estimated that he had removed 800 pounds of artifacts from the earth. Josiah Priest surmised that Halsted's farm was situated above the remains of an old Danish or Welsh village.

### Welsh & Native Descendants in America

Early colonists reported numerous encounters with native tribes whose physical features and language betrayed a European heritage. The earliest record of Welsh-speaking natives is a letter written in 1568 and deposited in Colonial archives. In the letter, frontiersman John Hawkins reported speaking Welsh with a tribe he called the "Monacans."<sup>28</sup> In 1600, Captain Peter Wynne of Jamestown reported Welsh-speaking natives living near the James river falls. Another Jamestown resident, George Percy, observed natives with iron, and he saw a native boy with "a head of hairs of perfect yellow and a reasonable white skinne."<sup>29</sup> In 1666, Tuscarora natives captured colonist Morgan Jones in the Carolinas. According to recorded testimony, Jones used Welsh to convince his captors to spare his life.<sup>30</sup> Another Welshman was captured by Welsh-speaking natives along the Carolina coast. His captors claimed to be the descendants of voyagers who had come from an island across the Great Sea.<sup>31</sup> A frontier army captain named Isaac Stewart visited the "McCedus" tribe on the Red River in Oklahoma. His account was reported in the *American Museum Journal* of 1787. Natives of the McCedus tribe were light-skinned and had reddish hair. Tribal elders claimed their ancestors came from across the Atlantic to the Gulf Coast. They were driven west by invading Spaniards.<sup>32</sup> In 1770, Captain Abe Chaplain reported a conversation with Welsh-speaking natives.<sup>33</sup>

The most controversial evidence of Welsh voyagers in ancient America concerns the Mandan tribe of the Missouri Valley. The Mandan tribe was an amalgamation of natives from the Lacota, Arikara, and Hidatsa tribes. They also included Welsh clans. In 1738, French explorer Pierre Gautier deVarennes found a tribe of "fair-skinned" Mandans living near Bismarck, North Dakota. They lived in domed houses arranged along "streets" which were similar to those of European



Native Village with Palisade, Florida



## Palisades & Earthworks

Native tribes of the Eastern Woodlands often built stockades around their villages for defense. Palisades (left) surround a Florida village. During the 17th and 18th centuries, frontiersmen found ruins of ancient fortifications along the Ohio and St. Lawrence river valleys (right). These ancient forts were encompassed by moats, trenches, masonry walls, and remains of palisades. Typically, natives didn't dig earthworks because they lacked shovels. The presence of iron-smelting furnaces inside many of the abandoned forts confirms the ruins are those of ancient European settlements.

9.14

settlements. He heard natives speaking Welsh and saw native women with white skin and blond hair.<sup>34</sup> They honored an ancestral spirit called *Madoc Maho*, possibly a Mandan version of the Welsh Prince Madoc. In 1764, Maurice Griffith visited a Mandan tribe. He called Mandan warriors: "white men in red men's dress who understand Welsh."<sup>35</sup> At about the same time, James Girty completed his *Welsh-Indian Vocabulary* listing Welsh loan-words used by the Mandans. George Catlan, a 19th-century artist, commented on the striking European features, blue eyes, and pale skin of Mandan natives.<sup>36</sup> Catlan compiled a list of Mandan words that had the same meaning in Welsh. In 1804, William Clark of the Lewis and Clark Expedition observed Mandan women with blond hair and blue eyes.<sup>37</sup> A May edition of the *Louisville Advertiser* from 1819 includes the account of a meeting that took place between a Welsh-speaking army lieutenant named Joseph Roberts and a Welsh-speaking chief of the Asguawa nation located 800 miles southwest of Philadelphia.

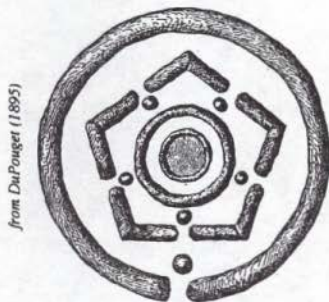
During the passing centuries, the Welsh component of Mandan society gradually faded into to the stronger native heritage. Inter-tribal warfare and a smallpox epidemic in 1836 decimated the Mandan population. By the mid-19th century, there was nothing left of the Welsh-Mandan tradition except for pioneer accounts of earlier centuries.

## Impact on Native Culture

Irish and Welsh refugees introduced North European culture to native tribes living in the Eastern Woodlands of North America. They traded European tools and jewelry for native copper, grains, and herbs. Loan-words from Welsh and Gaelic contributed to the trade language used throughout the Eastern Woodlands. Contact between Europeans and native tribes influenced native construction of log buildings and palisades.

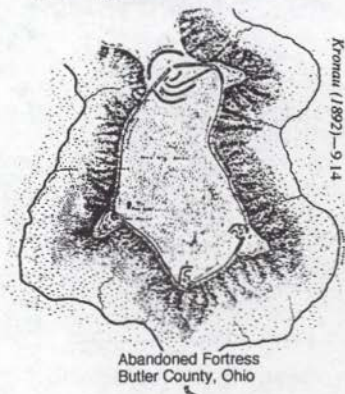
When French trappers paddled canoes up the St. Lawrence river,

## abandoned fortifications—eastern North America



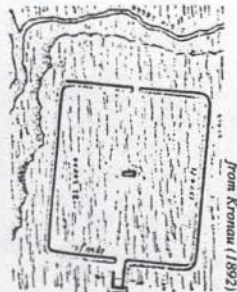
from DuRoiquet (1895)

abandoned earthworks  
Wisconsin



Kronau (1892)—9.14

Abandoned Fortress  
Butler County, Ohio



from Kronau (1892)

Abandoned Fort  
with earthworks  
Indiana

9.14

they observed palisades surrounding Iroquois villages. Other frontiersmen saw native stockades in the Mississippi valley, along the Alabama river, in Ohio, New York, and Canada. Native fortifications used blockhouses which were similar to those of European forts. However, they didn't surround their stockades with earthworks because shoveling and moat construction were not part of their heritage. Trade with Welsh and Irish settlements enabled natives to obtain the metal axes they needed for building palisades.

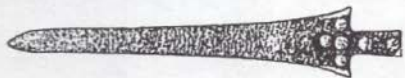
### Metal Casting & Forging Technology

Isolationists once argued that Native Americans only worked metal in a "cold state" without the use of smelting, casting, or forging.<sup>38</sup> The only native metals were lead, gold, silver, and copper. Whenever iron was found, isolationists assumed it was derived from a meteorite.

The theory that natives had not progressed beyond the Paleolithic stage of culture served the isolationist purpose of explaining how natives used copper and iron without developing metal-casting technology. However, immigrants from Iron Age Europe were in a position to provide natives with metal tools in exchange for food, furs, and raw materials. In this manner, native tribes benefited from the latest technology without having to invest long periods of experimentation that are typically required for developing metal-casting technologies. Accordingly, North American tribes experienced a quantum leap from the Stone Age to the Metal Age as a consequence of their association with Irish and Welsh immigrants.

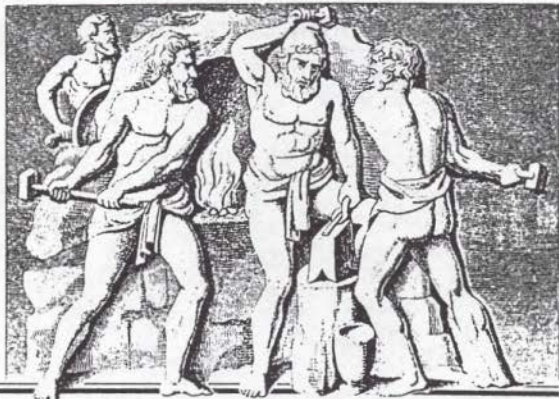
For many years, the foremost authority on ancient Iron Age settlements in America was a metal engineer named Arlington Mallery. He is co-author of *The Rediscovery of Lost America* (1979). Mallery found evidence of iron smelters throughout the northeastern United States:





## Wrought Iron

Smiths beat an iron bar into a blade. The Iron Age swept Europe between 1500 and 500 BC, and iron replaced bronze as the most favored metal for manufacturing tools and weapons. Iron was obtained from mineral-rich peat which was reduced in crude earth-and-stone furnaces. 9.6



Heck (1857)

Neither the magnitude nor the capability of the prehistoric iron industry in America will ever be known, even approximately. When I climbed Spruce Hill to examine the ruins of the ancient stone wall there, I came upon piles of ancient iron slag and immediately began a search for the ancient iron furnaces in which the slag had been produced. The discovery by my associates and myself of 20 or more ancient smelters during the following two years in a very small area of Ohio depended upon a series of fortuitous incidents.<sup>39</sup>

At the summit of Spruce Hill, Mallery found the crumbling remains of a fortress whose perimeter extended for two miles. The masonry walls consisted of more than 200,000 tons of limestone carried 400 feet up the hill from a nearby quarry. The top of the hill was covered with slag remains from an iron smelter. Mallery determined that the metal came from peat, using a process that had been developed in Northern Europe where iron ores were unavailable. Mallery's research was hampered by poor preservation typical of iron relics: "As soon as we removed the slag for laboratory examination," he wrote, "the iron began to disintegrate." His associates experienced the same difficulty with rusted swords and axes found in ancient fortifications: the fragile artifacts turned to dust upon exposure.

Mallery identified two types of smelters in the Ohio Valley: a primitive hearth furnace characteristic of Celtic Europeans, and a more advanced masonry furnace of Nordic design. In the hearths and adjacent areas, his associates uncovered iron axes, shovels, and burned peat. They also found copper axes, chisels, and blades. Mallery deduced that the tools were fabricated from molten metal. The New York Testing Laboratory confirmed his assessment; the copper tools were produced by a molten casting process. The iron tools were not derived from meteoric iron; they were forged.<sup>40</sup>

Many of the ancient iron tools found in the Ohio Valley were manufactured by a process called *cladding*. Northern European smiths developed the process in which thin sheets of metal were welded together

to form a tool of substantial strength. Tests at the Battelle Memorial Institute verified that Mallery's Ohio Valley artifacts were made by a cladding process that predated the 17th-century Colonial period.<sup>41</sup>

The ancient fortifications are no longer standing. Mallery witnessed their destruction in the 1940's and lamented their loss:

At one time, hundreds of such structures were strung along the St. Lawrence river, across New York, and into Ohio, but for the most part they have vanished as wreckers have pulled them down to salvage the stones for new buildings.<sup>44</sup>

### **Bubonic Plague in Native America**

Epidemics, such as bubonic plague, decimated the inhabitants of ancient America's urban areas. While excavating earthworks along the Ohio Valley, Mallery encountered heaps of skeletons that were poorly buried. Mallery deduced from the size of the bones and their association with iron tools that they were European settlers who had succumbed to an epidemic between the 9th and 14th centuries. Because this time period is roughly the same period when bubonic plague devastated Europe, Mallery believed the plague had traveled across the ocean in ships carrying infected passengers, rats, or furs infested with fleas.

Welsh and Irish settlers weren't the only ones in trouble. Archeologists report that native metropolitan centers also experienced drastic declines during the 12th and 13th centuries. Mallery's account provides solid evidence that an epidemic as severe as bubonic plague ravaged ancient America. The decline and abandonment of native urban centers significantly reduced the ability of America's Native Peoples to withstand the 17th-century European invasion.

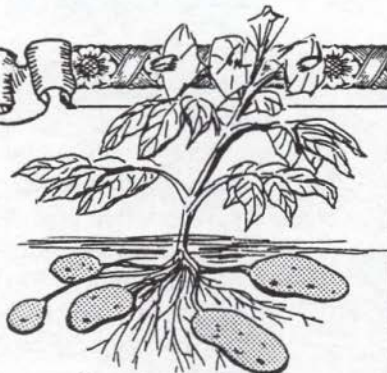
### **Old World Impact**

Contact with the Americas opened the way for refugees to a haven across the Atlantic. This haven was the inspiration behind legends of an overseas paradise of Mag Mel, Avalon, and Tierna Nog. Some voyagers returned to the Old World seeking news of relatives; others came back as merchants. They brought tobacco, maize, and potatoes. On return voyages to America, they took along iron tools, glass beads, and ceramic dishes. These items were often found when antiquarians dug up burial mounds along the East Coast—leading to speculation that an advanced civilization had preceded later European colonies. Orthodox archeologists assumed mounds containing European relics were simply of 17th-century colonial construction even though pioneers claimed the mounds were already present when the first European settlers arrived.

Celtic trade across the North Atlantic brought American tobacco to Roman enclaves of the British Isles during the 2nd century. Therefore,



## The Mysterious Case of Irish Potatoes



The origin and dispersal of potatoes is a matter of amusing speculation. The potato is native to Peru. Spanish historians assume Columbus and his followers were responsible for importing potatoes to Europe. They believe the first spuds (called *papas* or roots) reached Ireland during the ill-fated attack of the Spanish Armada in 1588.<sup>42</sup> Presumably, potatoes floated ashore from sinking Spanish ships and inquisitive Irish fishermen plucked the tubers from the surf and started potato gardens. However, there is no evidence Spaniards were actually eating potatoes or carrying them on Armada warships.

Botanist Henry Hobhouse (*Seeds of Change*, 1985) believes someone from the British Isles brought the first potatoes to Ireland, and he argues that Ireland was the *first* country to adopt potatoes for human consumption. Prior to 1650, potatoes were used primarily as cattle food in Europe, although the potato was already a staple in the Irish diet.<sup>43</sup> Irish scholars credit Walter Raleigh or Francis Drake with importing the plant. Presumably, Drake picked up a load of potatoes in 1586, when he visited Peru on his trip around the world. A monument in Offenburg, Germany, praises Drake for bringing potatoes to Europe. In 1597, Gerard's *Herbal* called potatoes the *Battata virginiana*, or potato of Virginia, leading to speculation that potatoes came to Europe from Raleigh's Virginia colony.<sup>44</sup> Virginians called the root *Openauk*. Gerard mentions that potatoes were also known as a crop of Norumbega—which was the name of a Norse-Celtic nation that occupied much of the East Coast of North America.

A 16th-century Spanish botanist, Petrus Cieza de Leon, suggested that potatoes were known to the Romans. He mentioned in his *Chronicle* of 1550 that: "One must consider whether this plant was known to the ancients. Theophrastus (Book I, *History of Plants*, Chapter 11) gives information concerning *Arachidna* which seems to me to agree very well with this—especially in relation to the history of the root." Botanist John Bauhin translated Cieza's remarks in his Latin *Phytopinax* of 1596; an English version was presented in W.G. Burton's *The History and Social Influence of the Potato* (1949).

Most historians have dismissed Norumbega as a fable, thus Gerard's mention of the Celtic role in potato importation is typically ignored. Cieza's mention of Roman knowledge of the plant is likewise ignored—largely because it seems impossible.

No one knows for sure. The most reasonable hypothesis credits ancient Celtic voyagers long before Raleigh, Drake, or Columbus.



it is not surprising that people in both areas used similar pipes. Archeologist J.E Meyers noted that: "Some Native American pipes show considerable similarity to the early clay pipes of Europe."<sup>45</sup> Tobacco use posed a significant social problem in England by the 15th century; and by the 17th century, social reformers called it "the scourge of the devil."

Celtic importers brought a hardwood, *Brasilium*, from South America to Ireland. In the 15th century, the wood was shipped from Ireland to Paris where it was used to panel the Louvre. When the Portuguese took possession of Brazil, the red-colored wood was one of their primary imports to Europe.

*Maize* was a significant import to the British Isles by the 14th century. Historian James Whitall noticed paintings in the Scottish mausoleum of Earl Sinclair that corresponded to New England "flint corn" or *maize*. In 1552, the botanist Targus noted that an early name which Germans used for *maize* was "Welsch korn"—implying that Welsh voyagers imported the native American grain to Europe.

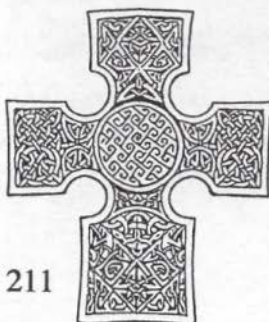


The most important plant brought to the British Isles was the potato (see "Focus" article). Early Celtic voyagers brought the plant to Ireland where it became a staple in the peasant diet.

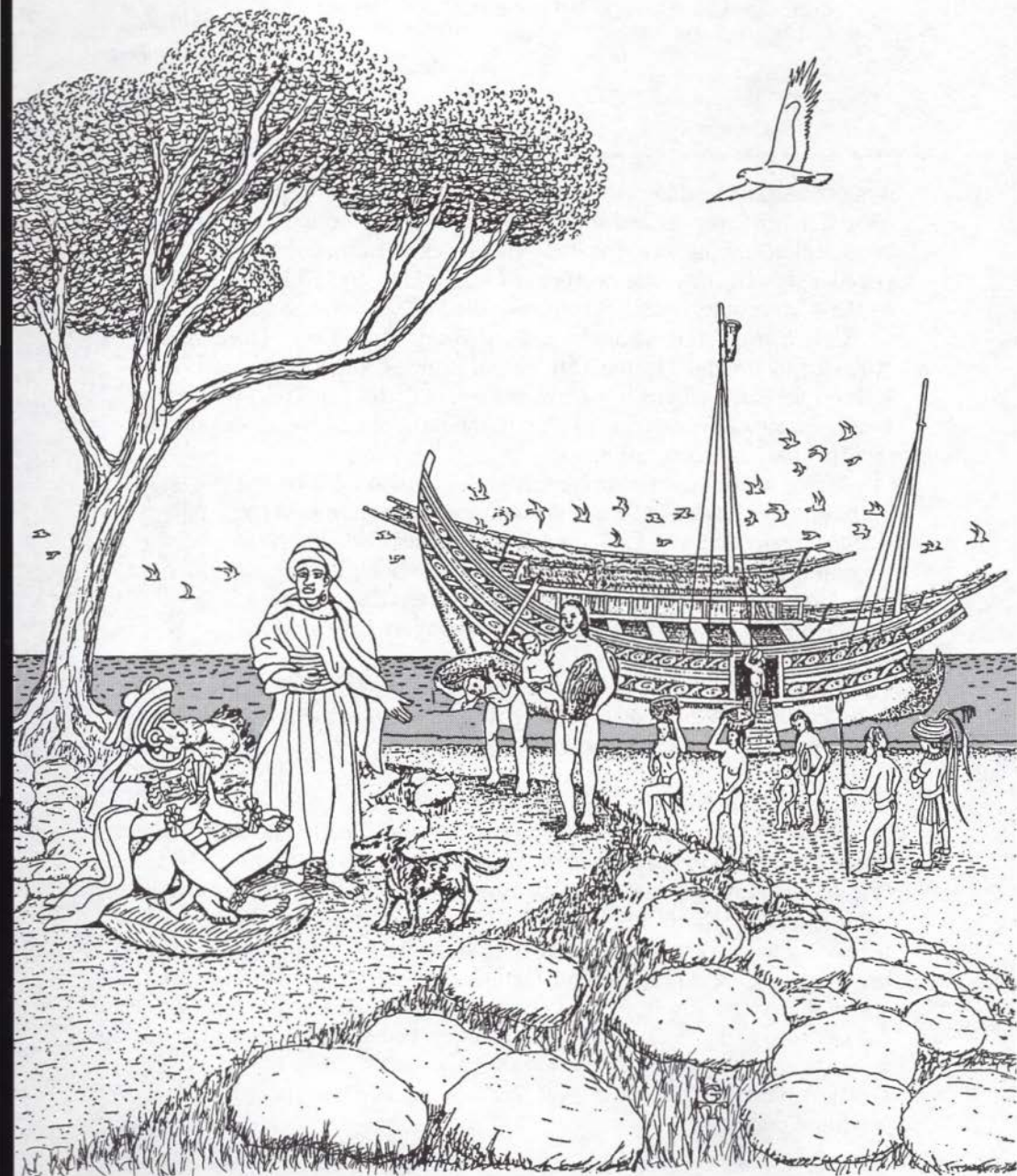
### Search for The Blessed Isles

Belief in Brendan's Isle of Promise and the equally enticing Celtic Brazil influenced the cavalcade of American discovery. By the mid-15th century, Portuguese and Spanish sailors seeking these western isles stumbled upon the Canary Islands, the Azores, and the Cape Verde Islands. These were important way-stations for 16th-century voyagers heading west. Portuguese and Danish explorers searched for Brazil above the Arctic Circle west of Greenland. And British explorer John Cabot dared to sail west in the 15th-century, because he expected to use *Breasail* as a way-station on his search for a sea route to China. These voyages were the pioneering efforts that assured the success of later maritime endeavors.

Celtic Cross  
Rossie-Priory Stone







***Indonesian Traders in Guatemala***

*Merchants from the Banda Seas arrive with a cargo of iron, textiles, and slaves, circa 500 AD.*



## **HINDU SEAFARERS** (100-1500 AD)

Gold was the driving force behind commerce between Southeast Asia and Central America. Many Southeast Asian merchants were called “Hindus,” because much of their religion and cultural heritage derived from the ancient traditions of India. Hindus supplied Mayan and Columbian tribes with iron tools, textiles, and slaves in exchange for Colombian gold. Intimate relationships developed between Hindu merchants and American natives leading to diffusion of religious beliefs, architectural styles, and domesticated plants.

Commerce across the ocean brought prosperity to the island kingdoms of Indonesia and to the Mayan Confederacy. Mayans used imported slaves to build much of their jungle civilization. Meanwhile, Mayan gold and New World imports brought prosperity to maritime kingdoms throughout Southeast Asia. Overseas trade continued until the 16th century, when simultaneous European invasions of Southeast Asia and Central America obliterated commercial alliances, native markets, and merchant organizations.

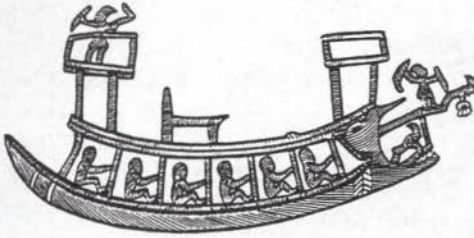
### **Hindu Civilization**

Historians have traced India’s ancient civilization back to the 9th millennium BC, when an oral tradition called the *Rig Veda Mantra* preserved the core of Hindu philosophy. The oral tradition was recorded in Sanskrit by the 1st millennium BC. Scholars believe the oral tradition began in the 9th millennium BC, because one of the *Vedas*, or “sacred hymns,” relates that India’s ancient calendar began in 8576 BC. Ancient Hindus were obsessed with time and astronomy. They were one of only three ancient civilizations believing that the Earth’s age exceeded several million years (the others being Egypt and the Mayan Confederacy). The *Vedas* reveal that ancient Hindus knew the Earth was spherical and that it revolved around the sun. According to a verse from the *Rig Veda*: “As Ratha (the sun) rests firm on its axle, the planets and stars are moving and depending on it.”<sup>1</sup>

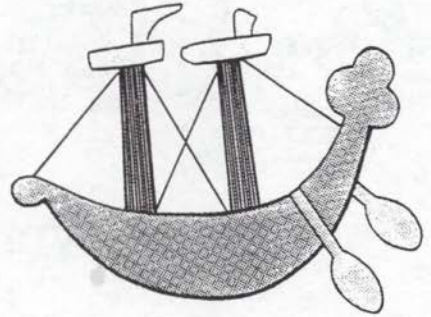
Ancient gods dominated the Hindu landscape; every aspect of life



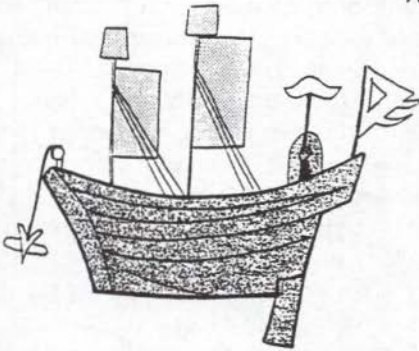
# Hindu Ships



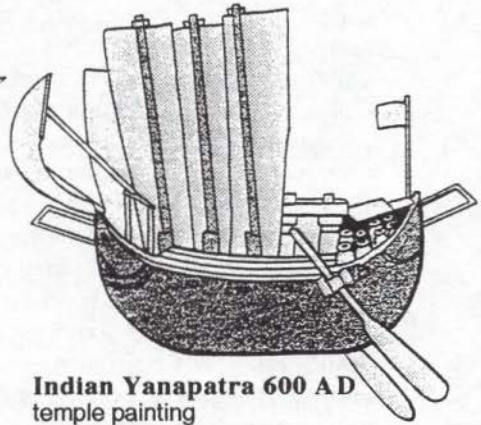
**Indonesian Galley 800 AD**  
bronze model



**Indian Merchant Vessel 200 AD**  
Andhra cave painting

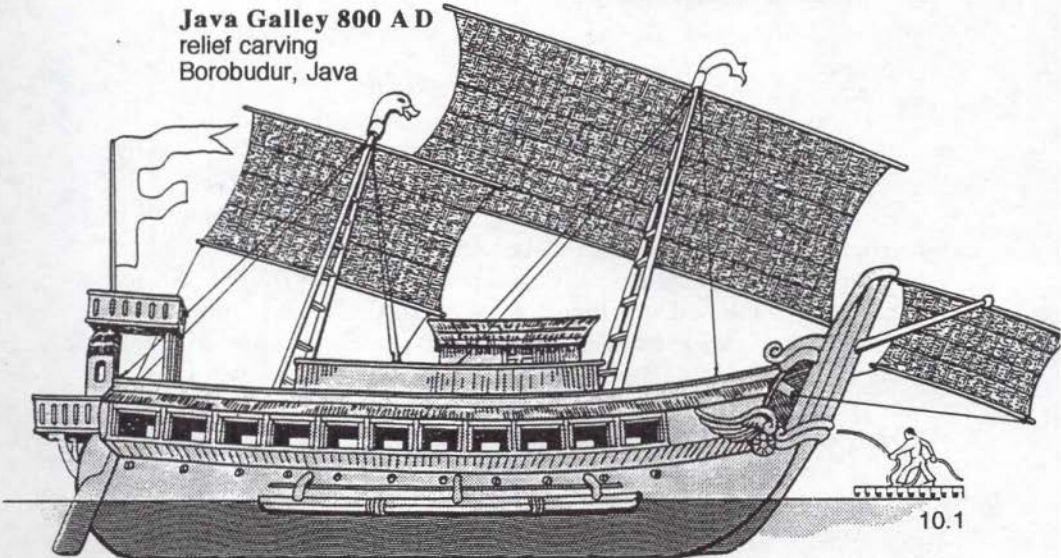


**Cambodian Junk 1200 AD**  
from a stone carving at Angkor



**Indian Yanapatra 600 AD**  
temple painting

**Java Galley 800 AD**  
relief carving  
Borobudur, Java



was sacred. Each locality worshipped provincial deities in addition to the principle gods of the Hindu pantheon. Some Hindus expressed their devotion in orgiastic rituals by piercing their bodies with spines, hooks, and knives. More sedate Hindus favored meditation in serene environments; hermits contemplated Nature's mysteries in secluded caves.

During the 1st century AD, Hindu merchants expanded their operations into Southeast Asia. They moved steadily from one village to the next while establishing trade networks and marrying into local families. In this manner, they bridged the barriers between rival tribes and forged an effective, inter-tribal commercial network. Trade in cotton, silk, teak, brass, gold, iron, beads, cowrie shells, and spices brought wealth to the principle ports of Cambodia, Burma, Malaya, and Indonesia and led to formation of new monarchies throughout Southeast Asia. New rulers coveted India's ornate stone architecture because they recognized in its permanence a way to achieve immortality. In response to the growing demand for their services, stone carvers traveled throughout the region building thousands of temples for the glory of Hindu deities and kings.

Overseas trade favored merchant clans and pirate colonies which were located on Indonesia's remote islands. Independent clans engaged in transoceanic ventures that were beyond the range or interests of regional merchants, and they escaped both taxation and government regulation. Their principle business was the slave trade. Pirates captured young men and women in islands along the Banda Sea and ferried them across the Pacific for sale to Mayan and Colombian merchants. This was the beginning of America's earliest transoceanic slave trade.

In the 9th century, the Khmer civilization of Cambodia became the dominant power in Southeast Asia. The 12th-century Emperor Jayavarman VII extended Khmer rule into Malaya, Burma, Thailand, and Vietnam. His capital city at Angkor boasted the most beautiful stone temples of the empire. However, following Jayavarman's reign, epidemics of typhus, malaria, cholera, and plague devastated the empire. By the 14th century, revolts, famine, and invasions led to the empire's collapse. Jungle vegetation steadily encroached on the ruins of Angkor, creating a macabre scene of thick roots and vines engulfing the facades of a once-great civilization. Travelers in the region noticed an uncanny similarity to ruins of Mayan temples across the seas in Central America.

### **Seagoing Capability & Ships**

Hindu merchants sailed a variety of junks, outriggers, and galleys. India's 5th-century BC manuscripts, the *Puranas* and *Jatakas*, tell of epic voyages from India to Malaysia and Indonesia. The round-trip distance was nearly six thousand miles.<sup>2</sup> Seafarers were accustomed to traveling east with the Spring monsoons; reliable trade winds carried them home



SYMBOLS-1

CENTRAL AMERICA



serpents emerge from mouth & ear spools

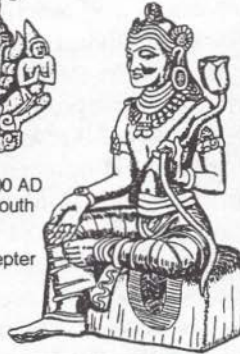
1. Kali-- Hindu deity

3. Lotus Elf Tibet 1800



2. Cambodian Makara 800 AD deity emerges from mouth

4. Lotus Scepter Java 1000 AD



1. Mayan solar deity at Tikal 800 AD serpents emerge from mouth & ear spools



3. Lotus Elf Jaina Maya 900 AD



2. Serpent of Time 1400 AD Mexican Monument of The Sun

4. Lotus Scepter Palenque, Mx. 850 AD

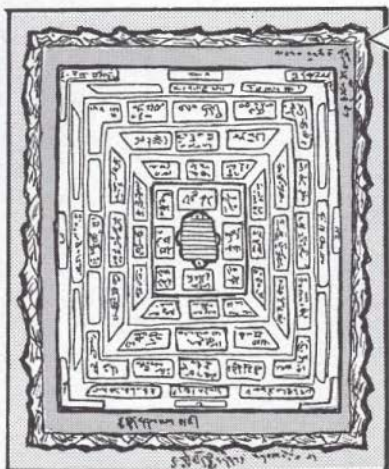


10.4

in the fall. During the 1st century AD, Hindu merchants sought gold in Siberia. This was a risky venture: pirates and the Chinese navy attacked Hindu vessels. After suffering numerous setbacks on the Siberian route, Calcutta merchants turned their attention towards Indonesia.<sup>3</sup>

Extensive maritime trade between India and the islands of Indonesia is well documented and illustrated. A 1st-century Hindu manuscript, the *Periplus*, mentions two-masted ships with dual rudders mounted on the sides in the fashion of ancient Mediterranean vessels. The ships are portrayed on 2nd-century Indian murals. Chinese chronicles of the same era describe seven-masted Hindu vessels 160 feet in length carrying 700 passengers and 1000 metric tons of merchandise.<sup>4</sup> Buddhist records of a 5th-century pilgrimage from Ceylon to Java report vessels large enough to carry 200 passengers. Indian murals dating to the 6th century portray ships with three masts, a bowsprit, and side rudders. Tenth-century murals carved into the walls of a shrine at Borobudur, Java, portray galleys with triangular masts and outriggers.

It was not unusual for crews to sail thousands of miles on the Indian Ocean. Pacific crossings, though hazardous, were not beyond the capability of either ships or seamen.



ring continent



## Hindu World Map

This map from Tibet is variously dated between the 2nd century BC and the 7th century AD. Early Hindu maps like this one portray Earth in a cosmological fashion as a square. The Known World, centered on India, is surrounded by an ocean, and beyond the ocean lies a ring continent of mountains. The ring continent represented the Hindu concept of *Patala* (America) as a land that lay across the seas in every direction from the perspective of India. The map was found in the Tibetan-Zang-Zung Dictionary (date unknown) and is presently in the Tibetan Bon Foundation, Delhi.

## New World Legends & Maps

Hindu geographers identified lands across the Pacific on the other side of Earth. The lands were known as *Patala*—which is variously translated as “The Opposite Land” or “The Land of Gold.” Another name used for America was *Patal Desha*. According to the *Vishnu Purana*, there were seven regions below Asia—of which *Patala* was the most beautiful. The Muni Narada, a Hindu sage, is said to have visited the civilizations of *Patala* and declared their achievements among the most impressive on Earth. Narada described a paradise where the Nagas (snake gods) were honored and musicians played flutes and drums. The Hindu epic *Mahabharata* told of a great battle in which Hindu armies were aided by the rulers of *Patala*. The victory led to the marriage of a Hindu prince, Arjun, to a *Patalan* princess—Alupi.

The German ethnographer Eduard Seler, author of *Myths of Pre-Columbian America*, noted a traditional Mexican song about ships and tribes coming across the seas to a land they called “Pantla.” Hindu historian Chaman Lal believes Hindu *Patala* and Mexican *Pantla* refer to the same place: America.

Hindu cosmological maps usually show lands across the ocean from Asia by the 7th century AD. These maps are similar to those of most Old World societies: older maps generally portray Earth as a square; circular shapes are common by the beginning of the 2nd millennium. The Americas are shown as a ring continent of mountains across the ocean that surrounds Africa and Eurasia. India, of course, is at the center.

## Evidence of Contact with America

Ancient voyagers who reached American shores brought Hindu symbols, artifacts, diseases, crop plants, and animals. Their visits are mentioned in native traditions. Mayans adopted numerous weapons, trade practices, and rituals from traders and missionaries.



SYMBOLS-2



Hand Eye motif  
India, 8th century



3. Priest with disk  
& ribbons  
SE Asia 500 AD



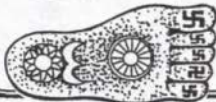
2. Hand-held  
eternal fount  
SE Asia  
1000 AD



4. Disk & Ribbons  
the Yin-Yang knot



5. Swastika, symbol of  
eternity & good fortune



6. Buddha's footprint



Hand Eye motif  
Mississippi Valley  
1200 AD



1. Hand-held  
eternal fount  
Mexico  
200 BC



3. Priest with disk  
& ribbons  
Mexico 1400 AD codice

4. Disk & Ribbons  
El Tajin, Mx.



5. Mayan Swastika



6. Footprint  
with  
swastikas 10.5

Symbols

Mexican archeologist Miguel Covarrubias noted many surprising similarities between the arts of Southeast Asia and Central America. His book, *The Eagle, The Jaguar, and The Serpent* (1954), was an illustrated catalogue of similar serpent motifs, similar decorative panels with miniature warriors grasping lotus stems, similar trophy skulls with inscribed scroll designs, and frequent portrayals of elephants. In spite of these close similarities, Covarrubias realized that he was treading on hazardous "academic turf" to suggest that Central American cultures owed a heavy debt to Oriental influence:

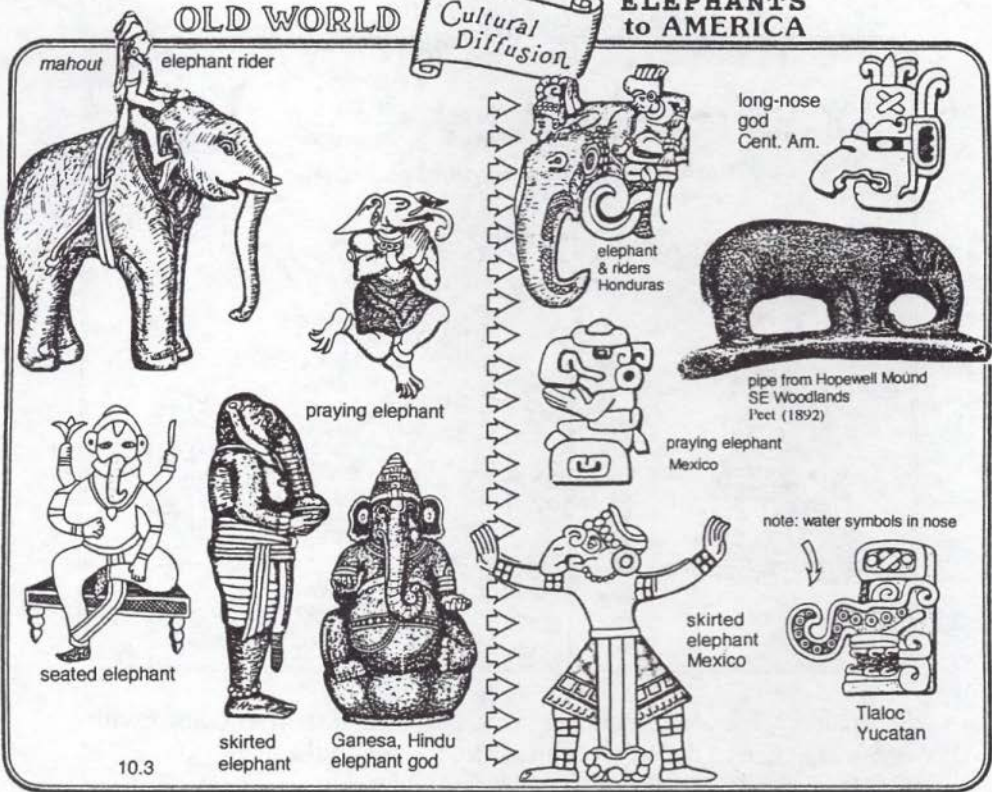
I have always been struck by similarities in the concepts and styles of the arts of America, eastern Asia, and the South Seas, and have become hopelessly guilty of subversive, diffusionist convictions. The theories of Rivet, Gladwin, Heine-Geldern, and others have all helped to clarify my own impressions on the matter of cross-Pacific contacts.<sup>7</sup>

The presence of elephants in Mayan art is particularly controversial, because North America's mammoths were extinct by the time Mayan culture flourished in Central America. Diffusionists argue that elephants

# OLD WORLD

## Cultural Diffusion

# ELEPHANTS to AMERICA



mahout elephant rider

long-nose god Cent. Am.

elephant & riders Honduras

pipe from Hopewell Mound SE Woodlands 1'ect (1892)

praying elephant Mexico

note: water symbols in nose

praying elephant

skirted elephant Mexico

Tlaloc Yucatan

seated elephant

skirted elephant

Ganesha, Hindu elephant god

10.3

in Mayan art constitute evidence of transoceanic contact. Elephants were common in Asia, and the elephant-god, Ganesha, was a powerful deity in the Hindu-Buddhist pantheon.

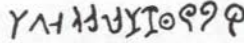
Artifacts featuring elephants and elephant deities were common in ancient American cultures. They are evident in effigy mounds and stone pipes of the North American Woodlands; and they are featured as the long-nosed deities on temple facades of the Yucatan peninsula. Mayan long-nosed deities have the same characteristics as elephant gods in Southeast Asia: they are portrayed in a seated position while in prayer; and they are embellished with ear spools, scroll-shaped eyes, and rain symbols. One Mayan sculpture called "Stela B" at Copan, Honduras, even features a turbaned rider sitting astride the elephant's head. Similar elephant riders in Southeast Asia are referred to as *mahouts*. Throughout the Yucatan peninsula, facades of Mayan buildings portray the long-nosed rain god, *Tlaloc*, with a nose filled with circular symbols representing rainwater is an artistic representation of Asian elephants who suck water into their noses so they can give themselves a shower.

Mayan sculptures at Copan are particularly striking in their stylistic similarity to Hindu stone carvings. Artists used the same techniques to create fully-rounded sculptures as were practiced in Southeast Asia.





1. to 5. Foreign Ships on Mayan murals & codices



6. Indian Script in Brazil



cave writing, Mexico



7. Hindu Figurine  
7th century Guatemala



8. Hindu Figurine  
7th century Guatemala



9. Copper Medallion  
Guatemala  
found in 1792

10.2

Sculptures were rough cut using iron chisels and then smoothed with abrasives. Chisel marks are sometimes visible on the undersides.

Common Hindu-Buddhist emblems in Mexican art include the Yin-Yang motif, swastikas, conch trumpets, hand-eye motifs, and divine footprints. Although footprints are common artistic symbols throughout the world, the followers of the prophet Guatama Buddha devised a unique version of footprints by inscribing them with swastikas. One of these was found in the ancient ruins of Mayapan, Mexico. Another unique Buddhist motif, the scarf and ring symbol was inscribed into a stone mural at El Tajin, Mexico. Numerous Buddhist sculptures feature hands with sacred eyes in their palms; similar motifs have been reported in Mexico and in the ancient Mississippi valley.

### Artifacts

Traders left tantalizing clues of visits to America. Archeologists found gastropod shells of *Cyprea moneta*, the "money cowrie," in native burial mounds of the Eastern Woodlands Adena culture (500 BC to 200 AD).<sup>5</sup> The gastropod is native to the Maldive Islands in the Indian Ocean and was a common currency among ancient Southeast Asian traders. Hindu artifacts found in Guatemala include two 6th-century bronze statuettes and two copper medallions of a bearded man wearing a turban. The statuettes are of Buddha and the goddess Tara. Both are seated on lotus blossoms as is customary in Hindu religious art.<sup>6</sup> Travelers also left Hindu inscriptions in Mexico and Brazil.



money  
cowrie

### Asian Chickens in America

Trans-Pacific cultural diffusion was not limited to the transmission of Hindu-Buddhist motifs. Texas A & M University geographer George Carter determined that bird bones from Pueblo archeological sites in the Southwestern United States were from Southeast Asian chickens exported to America before 900 AD.<sup>8</sup> Carter identified two pathways of diffusion for the Southeast Asian jungle chicken: one Japanese and the other Hindu. Japanese merchants called the bird *totori*, and their Mexican customers called it by the same name: *totori*, or *totoli*. Hindus called their chickens *karak*; South American natives called their Asian birds *karaka*. Carter argues that the use of Asian names for the bird in America resulted from the simultaneous transfer of the bird and its Asian name. American natives also adopted Asian traditions specifying the use of chickens for sacrificial rites, divination, and cock fighting; they were *not* used for food. In the 17th century, Spaniards introduced European



10.8

Asian Chicken

chickens which were called *pollo*. Natives were shocked when the Spaniards used the chickens for food. However, when it came to the popular sport of cock fighting, it was the Spaniards who were surprised. As was the custom in Asia, Mexican natives attached spurs to the birds' feet, making the game more vicious. Carter believes that Asian birds with Asian names and associated traditions provide evidence of trans-Pacific cultural diffusion.

### Indonesian Blowguns

Geographer Stephen Jett of the University of California makes an equally convincing case for the trans-Pacific diffusion of blowguns to ancient America.<sup>9</sup> The weapon, consisting of a hollow tube used to propel a small dart or pellet, is used primarily for hunting small game in jungle environs where bows or spears are ineffective. Mayan and Peruvian artists portrayed blowguns on ceramics and textiles dating to 500 AD. Use of blowguns in the Americas spread north from Mexico to the Eastern Woodlands.<sup>11</sup> When 17th-century European colonists arrived on the East Coast, they observed Cherokee, Choctaw, Iroquois, and Onandaga warriors using blowguns to hunt small game.

Some isolationists insist that the technology required for making blowguns is so simple that the weapon was invented spontaneously throughout the world. However, Stephen Jett has identified more than 50 specific steps involved in the manufacture and use of blowguns in Asia and America. Jett stresses that ancient American blowguns were "exceedingly sophisticated" tools. He has traced their origins to Borneo (or Indonesia). Because American natives used similar steps in blowgun



# OLD WORLD FACES

IN ANCIENT AMERICA



Tibetan  
monk

NOTE:  
hat with flaps



Micronesian  
after photograph  
by Marston Bates  
*National Geographic*,  
1956

Buddhist Monk  
Tibetan bronze  
1800 AD  
British Museum



Brazilian Native  
after photograph  
by Loren McIntyre  
*National Geographic*,  
1977

NOTE:  
hat with flaps



Mexican Priest  
or Kulkulcan  
relief sculpture  
Ethnographic  
Society, Paris

10.9

manufacture as were used in Southeast Asia, Jett concludes that the weapon's design was imported to ancient America.

Weapons historian Howard Blackmore, author of *Hunting Weapons* (1971), agrees with Jett's assessment of the blowgun's sophistication and diffusion from Indonesia to Central and South America. He notes close similarity between two kinds of Asian blowguns and the blowpipes of Guiana and Peru. The Malayan *zarabatana* like the Peruvian weapon is characterized by a trumpet mouthpiece; the Sumatran *kina* and the Guianan *pucuna* are both characterized by a *composite* of two tubes sandwiched together by a layer of wax.<sup>10</sup> Native manufacture of these



Blowpipe 1060 AD  
Angkor, Cambodia

weapons required a high degree of precision. Although he concedes that blowing an object through a tube is a fairly universal phenomenon, Blackmore is certain that the independent invention of identical, *composite* blowpipes in Asia and America was impossible. At least, the *composite* blowpipe is evidence of ancient cultural diffusion.



Blowpipe  
Mayan 700 AD

### Southeast Asian Physical Types & Pacific Traditions

Large numbers of Southeast Asians crossed the Pacific between the 1st century and the early 16th century. Geographer Stephen Jett noted similar physical characteristics between Southeast Asian inhabitants of Borneo and Arawak natives living in equatorial South America and the Caribbean.<sup>12</sup> He believes that strong physical similarities and cultural similarities are the result of a common ethnic heritage. Natives in both areas utilized slash-and-burn cultivation; they used similar blowguns for hunting small game; they produced bark paper and clothing using grooved stone beaters; and they engaged in head-hunting.

Striking physical similarities reveal a common ethnic heritage for Southeast Asian tribes and some Mayan natives. Similarities include the Asian eyelid or "epicanthic fold" which is a characteristic of Belize natives. Hindu historian Chaman Lal visited Mexico in the 1930's and observed many natives whose physical appearance reminded him of Hindu relatives. Mexican archeologist Rama Mena agreed: in his book, *Mexican Archeology*, he concluded that Mayan physical types are generally "like those of India." Mena also noted that Nahuatl, Zapotecan, and Mayan languages had affinities to "Hindu-European" languages.

Southeast Asian origins for some American tribes are confirmed by native traditions of ancestral homelands across the Pacific. A Guatemalan tribal legend tells of an ancient migration across the Pacific to the city of Tulan.<sup>13</sup> A Peruvian tribe and the Tucano tribe of Columbia also had traditions about their ancestors sailing across the Pacific to South America.<sup>14</sup> Tales of trans-Pacific trade were told to the earliest Spanish explorers in Central America. When the Spaniard Vasco Balboa began his expedition across the Isthmus of Panama in 1513, an Arawak native warned him about foreign merchants sailing along the Pacific coast:

When you pass over these mountains you will come upon another sea. There you will find other voyagers who sail ships as big as yours—using both sails and oars. They are mostly naked as we are.<sup>15</sup>

Italian historian Peter Martyr quoted the Arawak's testimony in his *History of The Indies*. The only Pacific galleys comparable in size to Balboa's galleons sailed from Indonesian ports. However, Balboa didn't see them when he finally reached the West Coast. That was because Portuguese fleets under the command of Alphonso DeAlbuquerque had just captured the Indonesian port of Malacca. The resulting social chaos and destruction of Asia's maritime kingdoms virtually terminated Hindu-Moslem voyages to America. In 1992, California scuba divers retrieved a lingering artifact of Moslem Asia's once-prosperous merchant marine. It was part of a ship's hull inscribed with Burmese letters dating to the 15th or 16th century (as reported in the journal *Mandala* for Fall, 1993).



OLD WORLD

Cultural Diffusion

CENTRAL to AMERICA

ARCHITECTURE



Atlanteans  
Sanchi, India



1. Monster Doorway  
Indonesia, 1300 AD



2. Memorial Stele  
Indonesia,  
900 AD



3. Sun Pillar

"Wheel of Cosmic Law"

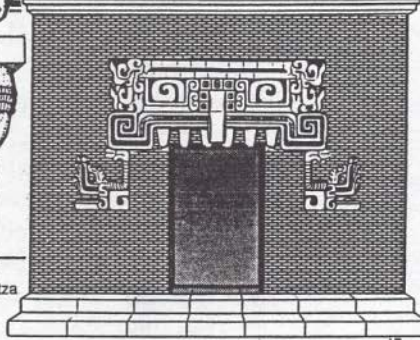


"Wheel of Natural Law"  
or Yin-Yang symbol

3. Sun Pillar  
Teotihuacan, Mx.  
500 AD



Atlantean  
Chichen Itza  
1200 AD



1. Monster Doorway  
Mexico, 1300 AD

note: elephants

2. Memorial Stele  
Honduras, 700 AD



4. Temple of Niches  
Borobudur, Java

10.6

4. Temple of Niches  
El Tajin, Mexico

## Impact on Native American Culture

A veneer of Southeast Asian traditions covered the architecture, rituals, and life-styles of Mayan civilization. Buddhist missionaries left their imprint upon native religion; stone carvers trained by Hindu masters chiseled the statues of Mayan kings; and Hindu clothiers lent their fashions to the Mayan priesthood. Hindu commerce fueled the growth and vitality of the Mayan commercial empire. Hindu merchants brought iron tools and slaves to Central America. Both were essential for Mayan building projects which involved construction of enormous stone pyramids and palaces. Mayans funded their costly imports with exotic feathers, incense, copper, and gold which slave caravans brought to coastal trade centers. Some items were purchased in cash: both Hindus and Mayans used similar axe-shaped currency made from copper.

### Southeast Asian Architecture in Central America

Mayan builders erected thousands of temples, pyramids, and citadels of stone from Honduras to the Yucatan peninsula. Some of the designs emerged from the creative genius of Mayan architects; other inspirations came from abroad. Miguel Covarrubias and Robert Heine-Geldern identified several Hindu contributions to Mayan architecture, including corbeled arches, serpent balustrades, lotus designs in temple facades, and earth-monster doorways. Similar "niche" pyramids were found at Tajin, Mexico, and at Borobudur, Java.

### Iron Tools & Stone Sculpture

Beginning in the 1st century BC, Hindu stone carvers achieved miraculous feats of sculptural and architectural design. The most incredible structures are the rock-hewn temples at Kailasanatha and Ajanta, India, where artisans removed thousands of tons of solid rock to produce temples inside of mountains. These creations were as delicate as they were massive: pillars supporting roofs of solid rock feature detailed carvings of deities and religious symbols. Over a period of several centuries, thousands of temples and tens of thousands of religious sculptures were carved in stone throughout India and Southeast Asia.

Mayan artisans achieved equally marvelous stonework featuring high-relief carvings at Copan, Tikal, and Palenque, as well as many other ancient cities. Mayan stone sculptures, or *stelas*, were embellished with intricate scrolls, serpents, and genies. Iron chisels imported from abroad were used to sculpt these creations. Aztec artisans used iron tools to create a rock-hewn temple in a mountain at Malinalco, Mexico.

Isolationists maintained for decades that Mexico's stone sculptures and buildings were somehow fabricated with *only* stone tools. However, in 1978, archeologist Suzanne Lewenstein demonstrated that it couldn't



## AMERICAN DISCOVERY

be done. Her research assistants failed in an attempt to use hard stone tools to “sculpt” a relatively soft slab of volcanic tuft.<sup>16</sup> Other archeologists found bronze tools at Mayan ruins and noticed examples of metal tools in native picture books.

Archeologist Theodore Willard was one of the first to break away from the academic doctrine that native Americans achieved miraculous stone carvings with Stone Age technology.<sup>17</sup> His book, *Lost Empires of The Itzaes And Mayans* (1933), documented the discovery of bronze tools in Mexican archeological sites: “Analysis of a sample of metal from the Mayan area was found to show gold, tin, and some silicious substance, evidently used to harden it, along with copper which was the basic metal.”<sup>18</sup> In other words, the metal was an alloy of bronze.



Willard (1933)

Willard observed that Mayan *codices*, or picture books, showed artisans using tools “as small as those of a modern engraver.” He examined hardwood carvings and found imprints of blades “as thin as a modern jack-knife.” These were not the crude marks of polished slate or obsidian glass which were the sharpest tools available to Stone Age craftsmen. Willard believed Mayans used metal tools by the beginning of a long cultural florescence which archeologists call

the Classic Period (lasting from 500 to 900 AD). He challenged orthodox colleagues who insisted that 15th-century natives produced bronze “only by accident.” Willard believed there was sufficient evidence that Mexican craftsmen knew precisely what they were doing.<sup>19</sup>

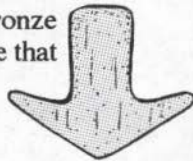
### Metal Alloys: Tumbaga

Hindu merchants brought technology for producing gold-copper alloys to America. The reason for adding copper to molten gold is because the resulting alloy has a lower melting temperature—making it easier for smiths to cast ornaments in molds. Peruvian smiths called the gold-copper alloy *tumbaga*. Both the name and the technology have been traced to Southeast Asia. *Tumbaga* was the name Philippine craftsmen used for gold-copper alloys, and similar words were used for copper alloys in Malaya (*tembaga*), Indonesia (*tambaga*), and India (*tambaga*). The Hindu-Sanskrit origin for the word *tambaga* was *tamra*—a word used in 1st millennium BC India. The alloy was known to Peruvians by 100 AD.

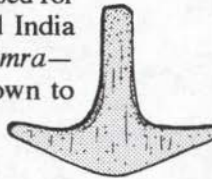
### Time: Calendars, Zero, & the Concept of “Infinity”

Canadian astronomer David Kelley believes the Mayans adopted a

Copper axe money  
India  
after Gordon (1958)



Copper axe money  
Mexico  
in Berlin Museum



modified version of the Hindu calendar. His research has revealed that the lunar periods of both calendars have similar deities.<sup>20</sup> Mayans gave sacrifices in the same seasons as tribes of northern India.<sup>21</sup> Mayan astronomers also identified the same constellation of "scorpion stars" that had appeared on Hindu star charts of the 10th millennium BC.

According to Hindu tradition, the world passed through a series of major phases ending in annihilation of Earth by fire, water, and wind. Mexican natives had a similar world view, believing in regeneration of the Earth through subsequent cataclysms of fire, water, wind, jaguars, and earthquakes. Both Mexicans and Tibetans regard the current world as the 5th creation. In both Hindu and Aztec religions, a person's status in the after-life corresponded to the degree of *transcendence* achieved over the illusions of the physical world. Hindus called the illusion of permanence in the physical world *Maya*.

Among all the world's ancient peoples, only the Mayans, Hindus, and Egyptians conceptualized time as an eternity reaching into the past and future. One Mayan inscription referred to a date 400 million years ago; Hindus thought of time in equally endless cycles. Mayans and Hindus also shared the concept of a numerical place holder (i.e., zero).

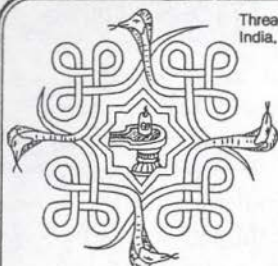
### **Bark Cloth & Paper**

By the 5th century BC, the technology for making bark clothing and bark paper spread from Southeastern China throughout the South Seas to Africa, the Northwest Coast, and Central America. Ancient craftsmen used a serrated stone tool called a "racquet beater" to pound the *bast*, or fibrous root of the fig tree. The Chinese were making paper and paper-cloth by the 3rd millennium BC. Geographer Paul Tolstoy identified similar characteristics of paper-making in both Asia and Central America, including boiling the bast in lime and pounding it with progressively smaller grooved tools.<sup>22</sup> Tolstoy believes similar tools and methods of production resulted from trans-Pacific contacts or migration to America.

### **Games of Chance: Patolli & Parchisi**

American archeologist Edward Taylor noted the close similarity of board games between Southeast Asia and Mexico. Mexican *patolli* and Hindu *parchisi* used cross-shaped playing boards with tokens. Players cast lots to determine moves. Places on the board were marked by cowrie shells in India and black beans in Mexico. Mexicans wagered valuable possessions on the outcome. There was even a separate deity, *Ometochtli*, to answer pleas for supernatural aid. Although isolationists once claimed that the similarity of games resulted from Colonial Spanish contact with the Orient during the 16th century, archeologists found an ancient mural inscribed with a *patolli* game board at Seibal, Mexico.





Thread Eye  
India, folk culture



Swastika Yantra of Naga serpents  
ancient India after Thomas (1960)



Swastika Yantra of serpent-birds  
Sumner Co., Ten. after Willey (1966)



Thread Eye  
Southwest U.S.

10.7



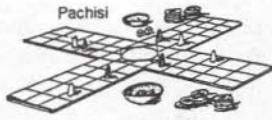
Wheeled Toys



Wheeled Toys  
200 BC to 700 AD  
Mexico



Printing Wheels  
Ban Chiang  
Thailand



Pachisi



Patolli—board game of chance  
Mexican codices 16th century



Printing Wheels  
Guatemala

Printing Wheels  
Ban Chiang  
Thailand



Mixtec wedding with knotted clothes  
Mendoza Codex

Customs

Isolationists enjoy an amusing anecdote about a confused Spaniard who accidentally named Yucatan natives “the Mayas” after a villager said he was from the village of *Mai-am*. Diffusionists suspect the name is a legacy of Hindu religious influence in which Maya represents the mother of Guatama Buddha. Did Hindus name the Mayans?

We may never know. Regardless of what they are called, Mayans and Mexicans have many customs that reflect Hindu traditions. Among the more bizarre Mayan and Toltec customs was blood-letting by piercing the tongue and testicles. Hindu Brahmans had similar rituals including the painful Mayan practice of passing a barbed cord through the tongue. Chaman Lal noted that the Iroquois marriage ritual involved forming a blood-brother bond between the bride and her husband's clan. Hindus had a similar ritual called the *Punlangan*. Another ritual practiced in India and Mexico involved tying together garments of the wedded couple. That ceremony was a proverbial “tying of the knot.”

Old World Diseases: Typhus, Cholera, Yellow Fever, & Hookworm

Columbus was wrongly blamed for another dark episode in America's history: importing the first epidemics from the Old World. Although 16th-century colonists brought smallpox to America, other epidemics

were clearly present *prior* to the Spanish invasion. Several tropical diseases spread from Southeast Asia to Central America in the centuries before Columbus, and it is equally likely that America's indigenous diseases were introduced into Southeast Asia with devastating results. Epidemics of unknown origin repeatedly ravaged the maritime kingdoms of Southeast Asia, primarily as a consequence of Hindu trade networks. Some of these diseases could have originated in America.

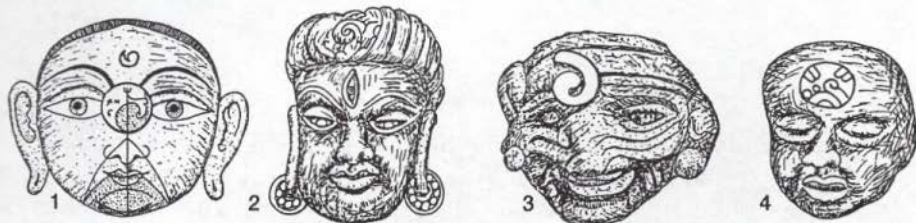
There are *no* historical records regarding the origins of epidemic diseases (with the single exception of HIV—Human Immunodeficiency Virus). Historians have assumed that so-called "Old World diseases" crossed the Atlantic *after* Columbus. However, some of these diseases probably originated in America, or at least they were introduced *prior* to Columbus. Diseases transmitted via ancient trans-Pacific contact include typhus, cholera, yellow fever, and bubonic plague.

Johns Hopkins University epidemiologist Kenneth Maxcy noted: "There is some evidence that typhus was known to the Aztecs and to certain Indian tribes in pre-Columbian days."<sup>26</sup> Although historians regard typhus as an Old World disease, it was not identified in Europe until the 15th century. Typhus, or "spotted fever," is characterized by dark reddish spots, fever, and delirium. The fatality rate can reach 25%. The disease is spread by lice infected with the micro-organism *Rickettsia prowazekii*. Aztec *codices* often portray skulls and bones with red or yellow spots, indicating the most obvious symptom of spotted fever.

Cholera is implicated in the collapse of Peru's Moche civilization circa 800 AD and the collapse of Central America's Mayan civilization a century later. Mayan artists portrayed men with scrolls spewing forth from their mouths while attendants administered enemas. Although scholars claimed that Mayans indulged in one of the earliest health fads featuring "high-colonics," artists actually portrayed the common symptoms of cholera: vomiting and diarrhea. In crowded urban areas with poor sanitation, fatalities from cholera can exceed 80%. Onset of acute symptoms occurs within one-to-five days of infection by the bacillus *Vibrio cholerae*. The disease is spread mainly by drinking contaminated water, eating contaminated raw foods, and contact with infected persons. Immunity lasts no more than two years, allowing epidemics to reoccur often in tropical climates. Cholera epidemics were not differentiated from dysentery until the 15th century. Most epidemiologists believe the disease originated in tropical India where it is most prevalent today and continues to cause annual epidemics.

European trade involving Hindu merchants resulted in several pan-Eurasian epidemics, or "pandemics," during the 19th century. Similar pandemics occurred prior to recorded history wherever Hindus traveled. Hindu voyages invariably transmitted diseases across the Pacific. In the





### Kundalini or Serpent Eye Motif

Hindu yoga practitioners believed a person's body could manifest the spiritual power of kundalini—the cosmic serpent. A third eye or scroll in a person's forehead represented attainment of this power. Examples of serpent eyes are from Tibet, India, Mitla (Mexico) and Teotihuacan. The forehead glyph in 4 represents the "serpent eye."



re glyph  
or serpent eye

9th century, cholera or a similar pandemic devastated Mayan cities throughout Central America causing the collapse of the Mayan Confederacy. At least ten million Mayans perished from this epidemic. An epidemic is implicated in the fall of Mayan civilization because there is no evidence of drought, invasion, or cataclysm that would otherwise explain the sudden abandonment of Mayan ceremonial centers.

In *The Classic Maya Collapse* (1973), author Patrick Culbert noted that another tropical disease, yellow fever, is endemic to Central America. Although isolationists assumed the disease was a post-Columbian import, research in the 1960's revealed that yellow fever is common among native, howler monkeys. This fact led Culbert to propose that the disease was indigenous and that it played a role in the Mayan collapse.

Trans-Pacific routes of infection are also implicated in another disease, the human parasitic hookworm (*Necator americanus*). This ailment, which causes bowel inflammation, stunted growth, and fatigue, has long been considered an "African" disease. It was first described in Egyptian manuscripts dating to the 16th-century BC, and scholars assumed that black slaves carried the disease to America after 16th-century Spaniards began importing African slaves. However, the disease is common throughout the tropics, and Brazilian archeologists found evidence of the disease in human remains dating several centuries before Columbus.<sup>27</sup> Ancient maritime transport of diseased individuals was required for the malady to reach America, because the micro-organism can't survive in nomads trekking through Arctic climates.

Once the ancients began traveling across the oceans, epidemics became a world-wide reality. Epidemiologists can only guess where ancient diseases may have had their roots—because there was so much inter-continental travel before the dawn of recorded history.

### Hindu Religion

Hindu-Buddhist religious influence is evident in the symbolism of Mayan and Mexican societies. Sculptures of Mexican priests show men wearing pointed hats with flaps which was the characteristic head-gear

of Buddhist priests. Mexican sculptures sometimes have a scroll or "serpent eye" attached to the center of a priestly forehead. In India, this symbol represented the "third eye" of kundalini (serpent) power.

Artists in both India and Mexico portrayed priestly figures seated on lion thrones. Although lion thrones are not unusual, Mayans at Palenque also seated their religious leader on a cushion of lotus petals—which in India was the traditional seat for Buddha. The combined lotus cushion and lions yields a distinctive symbol with analogous forms in India.

Mayans didn't converted to Buddhism. Rather, they adopted some Hindu inspirations that suited their desire for a cosmopolitan religion.

### Impact on The Old World

Hindu merchants returned to Asia bearing native American food plants, narcotics, and gold. One of the plants, *maize*, became a staple in the Hindu diet by the 8th century. Gold became so abundant in one of Asia's maritime kingdoms that European adventurers endured incredible adversities while seeking Indonesia's fabled "Golden Isle."

#### American Roots—Asian Blossoms

The list of known imports to ancient India includes grain amaranth, tobacco, pineapples, custard apples, *maize*, and tomatoes.

Sweet potatoes which originated in the American tropics are on the list of "possible imports" to India. Although orthodox historians typically assume they spread to the Old World after Columbus, several early herbalists believed the plant was so endemic in Asia that it must have originated in the Old World. Hindu Botanist S.P. Gosh, author of *Tuber Crops* (1988), has noted that a plant "similar to the sweet potato" is described in the ancient *Vedas* of India.

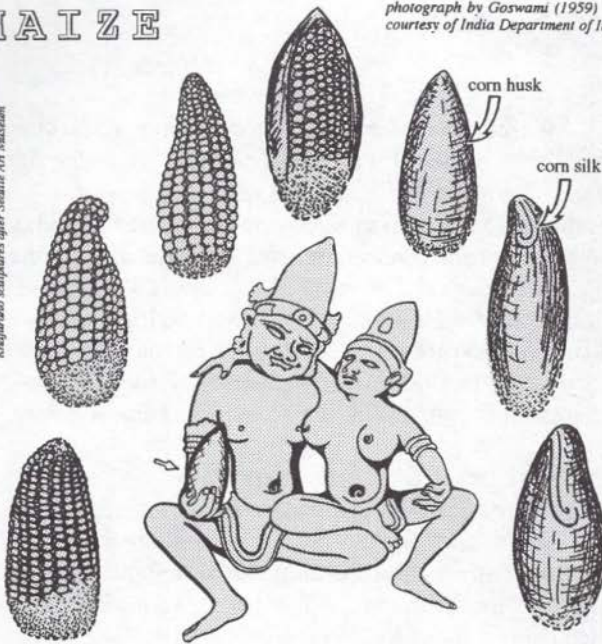
European travelers in the Orient thought another plant, the grain amaranth, was also endemic to Asia. Botanist John Sauer has verified the plant's antiquity in China. He noted that grain amaranth was known by traditional names in India. Hindu names for the plant included *kiery*, *ramdana* (grain of Rama), and *amardana* (immortal grain). Use of traditional Hindu names for grain amaranth implies that the plant was known to the subcontinent of India in ancient times.

The noted plant taxonomist Alphonse DeCandolle acknowledged a Javanese tradition of tobacco being used as a medicinal *prior* to Portuguese contact in 1496. However, he credited the Portuguese with introducing the practice of smoking.<sup>28</sup> His insistence that the Portuguese were responsible for tobacco smoking was in accord with the academic doctrine of "No Tobacco Smoking Before Columbus." However, DeCandolle was unfamiliar with Hindu chronicles which reported tobacco smoking in India by the mid-14th century.<sup>29</sup> Linguistic evidence



# MAIZE

after photographs in Jahnsmann & Parker (1989)  
Khajuraho sculptures after Seattle Art Museum



photograph by Goswami (1959)  
courtesy of India Department of Interior



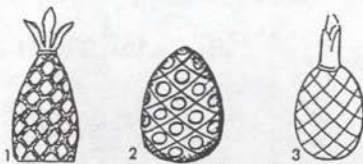
## Hoysala Maize Sculptures 800 to 1300 AD

Hundreds of Hindu sculptures in central India show deities holding maize (corn) ears. Seated deity is from Khajuraho, 1100 AD; goddess (left) is on a temple at Mysore, 1150 AD. Sandstone maize ears show corn in husk with silk strands.

confirms that tobacco was available in India much earlier. A British botanist named Piddington reported that the Sanskrit word *tamrakouta* was the original Hindu name for tobacco, as well as the root word for such Persian derivatives as *tabok*, *tambok*, and *tubbaq*.<sup>30</sup> In 1971, Russian scholars added support to Piddington's theory: they reported Oriental manuscripts documenting tobacco use during the 1st millennium BC.

Another New World import that reached Southeast Asia in ancient times was the pineapple. Botanists believe its original habitat was the Caribbean. By the 15th century, artists at Angkor Wat, Cambodia, carved pineapples in stone; the plant was cast in bronze at Karnataka, India, and sculpted at the 1st-century temple at Sanchi, India. Plant historian Richard Westmacott noted ceramic pineapples in Egyptian tombs along with Hindu exports, leading him to believe that pineapples had existed in India for thousands of years.<sup>31</sup> Theodore DeBry's 16th-century illustration of the plants of India clearly portrays *ananas* or pineapple as an indigenous species.<sup>32</sup> One of the earliest botanists to write on the subject was Rumphius. He regarded the plant's broad distribution throughout tropical India as evidence that it preceded Portuguese colonization. Furthermore, the Portuguese called the plant *ananas*, which was derived from an older Sanskrit term, *anarush*.<sup>33</sup> Use

10.13



### Hindu Pineapples

Ancient Caribbean pineapple plants portrayed in Hindu Southeast Asia include: 1) Angkor, Cambodia--15th century sculpture; 2) 15th-century bronze from Karnataka, India; 3) 1st-century sandstone sculpture at Sanchi, India; and 4) DeBry's 17th-century illustration of "ananas" the indigenous pineapple of India.



of Sanskrit words suggests that the fruit arrived in India by 500 BC.



custard apple

Custard apples (*Annona reticulata*) reached India in deep antiquity. They are known in India as *Sitaphal*, or fruit of Sita. Another name is *sharif* or "Noble Fruit." English archeologist Cunningham identified stone sculptures of the fruit at Bharhut, South India, in 1895. They have also been reported on frescoes at Ajanta.

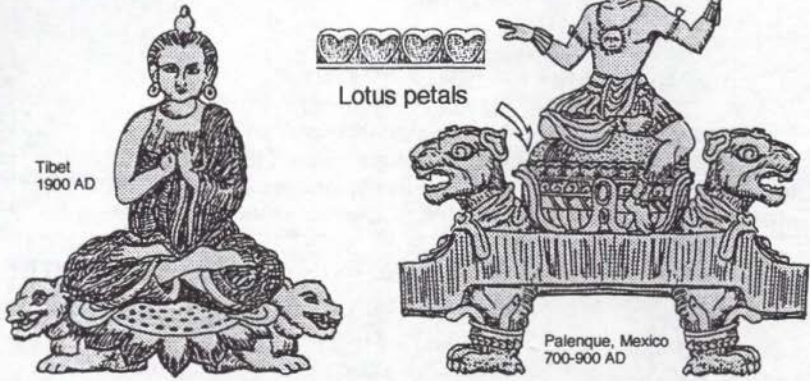
The most important New World import was *maize*. During the 19th century, botanists suspected *maize* was an indigenous plant of Southeast Asia, due to the prevalence of Asian terms for *maize* and the great number of varieties found in the region. In the 1950's, botanists agreed on an American origin, after archeologists found ancient corn-like plants called *teosinte* in Mexico. Because *maize* decays readily in water and requires human assistance in propagation, there has never been serious speculation that *maize* plants might have floated across the ocean. Indeed, isolations have long insisted that *maize* could not possibly have reached the Old World until *after* the Columbus voyage of 1492.

In 1963, American botanist M.D.W. Jeffreys broke away from the doctrine of "No Old World *Maize* Before Columbus" when he announced that the Indonesian name for corn, *Jejung*, was evidence of widespread Asian distribution in ancient times. Geographer Stephen Jett added fuel to the controversy with his 1976 illustration of an ancient Hindu sculpture showing an ear of corn. Isolationists insisted that it was simply a "pomegranate or stack of beads." University of Oregon geographers Carl Johannessen and Anne Parker entered the fray in 1989 with an article on India's *Maize* Sculptures in *Economic Botany*. The maverick scholars described scores of ancient Hindu statues holding *maize* ears, and they provided conclusive photographic evidence of their claims. From this evidence, Johannessen and Parker concluded that *maize* was an important part of ancient Hindu culture.

Indeed, facades of India's Hoysala temples, dating between the 8th and 12th centuries, include scores of *maize* ears chiseled into stone. They are found in the hands of Hindu goddesses engaged in fertility rituals. Hoysala corn cobs have diverse shapes, including short and squat ears, long and thin ears, and bulbous ears. Some of the *maize* ears have an external sheath or "husk," while the cobs have double rows of kernels. A bundle of "silk" strands projects from the end of those ears remaining



## Lotus Lion Throne



A Buddhist religious book shows the Teacher (above left) seated on a lotus cushion above two lions. The lotus cushion is also apparent on a Mayan relief sculpture at Palenque (right).

in the husk, while open ears sometimes have missing kernels, which happens when corn cobs are pecked upon by birds. In other words, Hoysala *maize* sculptures have *all* the characteristics of real *maize*, and they are identical to corncobs found in modern produce markets of India.

Through rigorous scientific research, Johannessen and Parker have thoroughly exposed dogmatic claims that there was *no significant cultural diffusion before Columbus*. The evidence is chiseled in stone.<sup>34</sup> The temples are soundly dated by historical records: some sculptures even bear the date and autograph of the sculptor. The evidence continues to grow: Hindu archeologist Vishnu-Mittre reported pre-Columbian *maize* pollen at a site in the Indian province of Kashmir dating to the 13th century.<sup>35</sup> Several Hindu travelers in Mexico recently noticed the similarity of their traditional corn *chapaties* to the Mexican *tortilla* raising the possibility of transoceanic diffusion of recipes.

Tomatoes were another American plant that was brought across the Pacific in ancient times. Malaysians used the Native American term for tomatoes, *tomatte*, rather than the Spanish-Portuguese *pomo*, indicating that cultivation of the plant preceded European colonization.



### Were American Natives Really “Indians?”

Christopher Columbus was so sure his 1492 voyage took him to the Indian Ocean that he named the native people of the Caribbean Islands *Indios*, or “Indians.” His error has caused historians and students much grief. Even after Spanish geographers determined that Columbus missed India by nearly 10,000 miles, Spanish authorities insisted on calling the land “New India” and the natives “Indians.” The terminology spread throughout Europe leading many colonists to believe they were meeting

“Indians” in the New World. Since that time, students have confused America’s Indians with India’s people, also called “Indians.”

Perhaps Columbus wasn’t so far afield. Georgia anthropologist Joseph Mahan, author of *The Secret* (1983), has identified intriguing similarities between the *Yueh-chih* tribes of India-Pakistan and the *Yuchi* tribe of North America’s Eastern Woodlands.<sup>23</sup> Cultural parallels include similar physical characteristics, similar cultivation of white *maize*, similar rituals associated with *maize* cultivation, use of mulberries to make dried food cakes, cultivation of the white sweet potato, and use of similar turban headdresses.<sup>24</sup> Also, a Yuchi tradition tells of a foreign homeland across the sea—presumably in India.

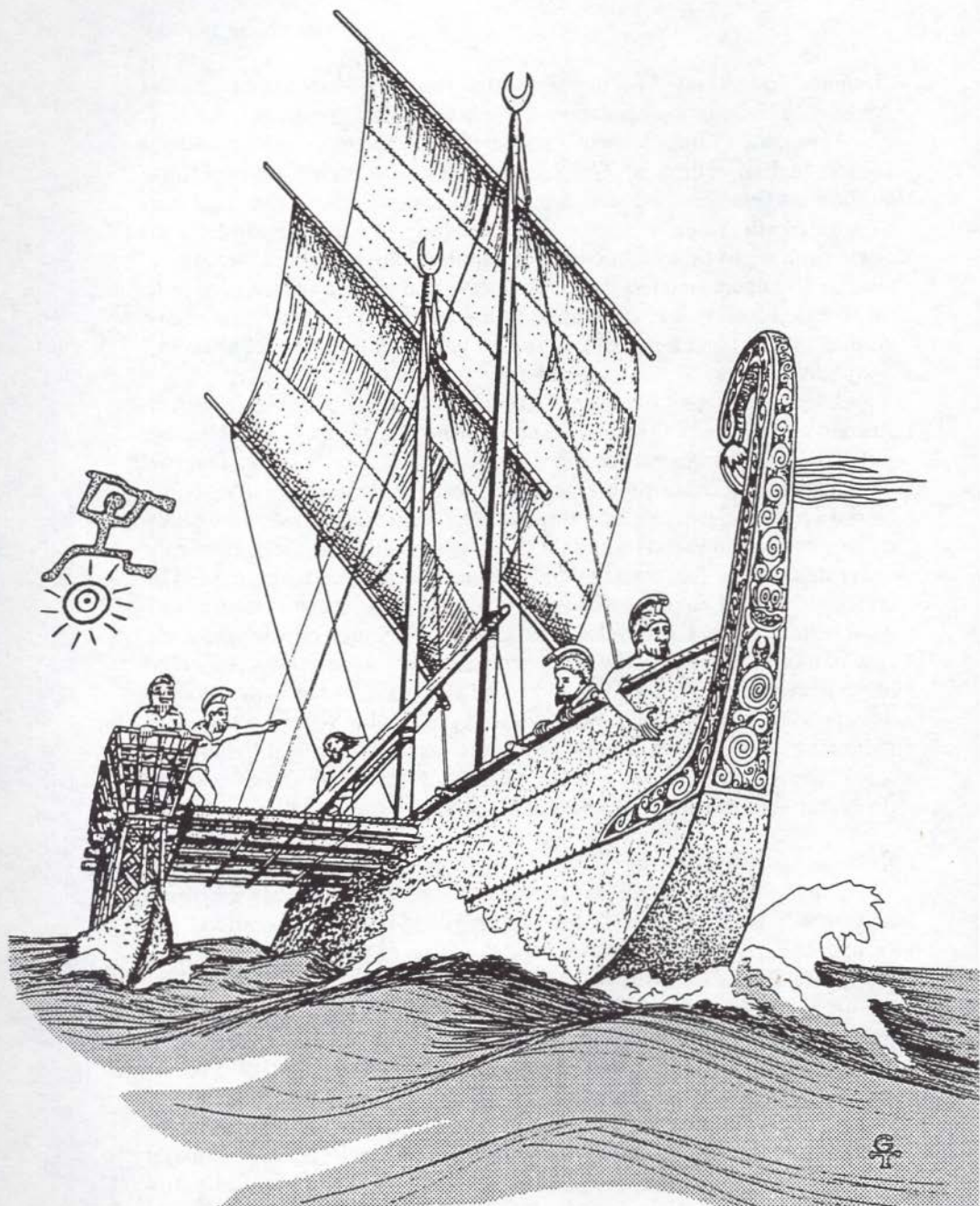
There is a strong likelihood Columbus erred because of reports in Roman chronicles of “Indians” coming from a land across the Atlantic. In 62 BC, the Roman governor of Gaul, Quintus Celer, reported that two “Indians” landed in northern Germany near the Rhine river after being blown across the Atlantic by a storm. They were questioned at length by a German chieftain who passed them on to Roman authorities. Governor Celer determined that the stranded seafarers originated from India. His conclusion is not so preposterous as it might seem: ancient Hindus, like most seafaring peoples, traveled great distances in search of new resources, new markets, and new horizons. Governor Celer’s report was preserved in the manuscripts of Pliny The Elder and Pomponius Mela—two Roman writers whose works Columbus reviewed prior to his voyage west. This incident may well have convinced Columbus that India and Indians lay across the Atlantic. If that was the case, Pliny The Elder deserves credit (or blame) for misnaming America’s native people.<sup>25</sup>

### European Adventurism

During the 13th century, the wealthiest of Indonesia’s maritime kingdoms was located west of Java on the island of *Iocate*—called “The Golden Isle.” *Iocate*’s notoriety and the fame of the nearby *Moluccas*, or “Spice Islands,” attracted European explorers and opportunists. During the 13th-century, Florentine explorer Marco Polo heard about the fabled Golden Isle and praised its riches in a popular travelogue called *Marco Polo’s Travels*. Although Polo never saw the island of gold, he inspired many Europeans to dream of finding wealth in the Orient. Among those so charmed was Christopher Columbus. Finding *Iocate* became his obsession. China wasn’t the objective in 1492; the real target was *Iocate* and the hoard of Indonesian gold. Accordingly, Columbus called his proposal “The Enterprise of the Indies.”







**Bound for Tua-Whenua--America**  
*Hawaiian explorers sail toward the Northwest Coast  
seeking the land of their ancestors, circa 1300 AD.*



## **PACIFIC ISLAND VOYAGERS** (2000 BC—1500 AD)

Nomadic seafarers from sinking lands east of Asia sailed into the Pacific nearly 4,000 years ago. Heading toward the rising sun, they searched the endless seas for unoccupied isles and new homelands. Migrating birds showed them where to find land; sometimes, streams of ash from the Pacific's "fire islands" of Hawaii showed them the way. Wave patterns revealed the course of ocean currents, and cloud formations betrayed "hidden" islets. Over the span of several thousand years, these persistent explorers found all the tiny specs of land in the Pacific Ocean. They also found America.

Island nomads were not alone in the vast ocean. Sailors from Peru and the Northwest Coast of America also sailed far from land in search of adventure and commerce. Even Old World explorers sometimes crossed their paths on tropical isles. These voyages would have been unknown to us had it not been for artifacts, foreign plants, and legends which travelers left behind. Over many centuries, tales of island voyagers and foreign visitors were woven into the fabric of Polynesian folklore. Today, they are a testimony to the cavalcade of discovery.

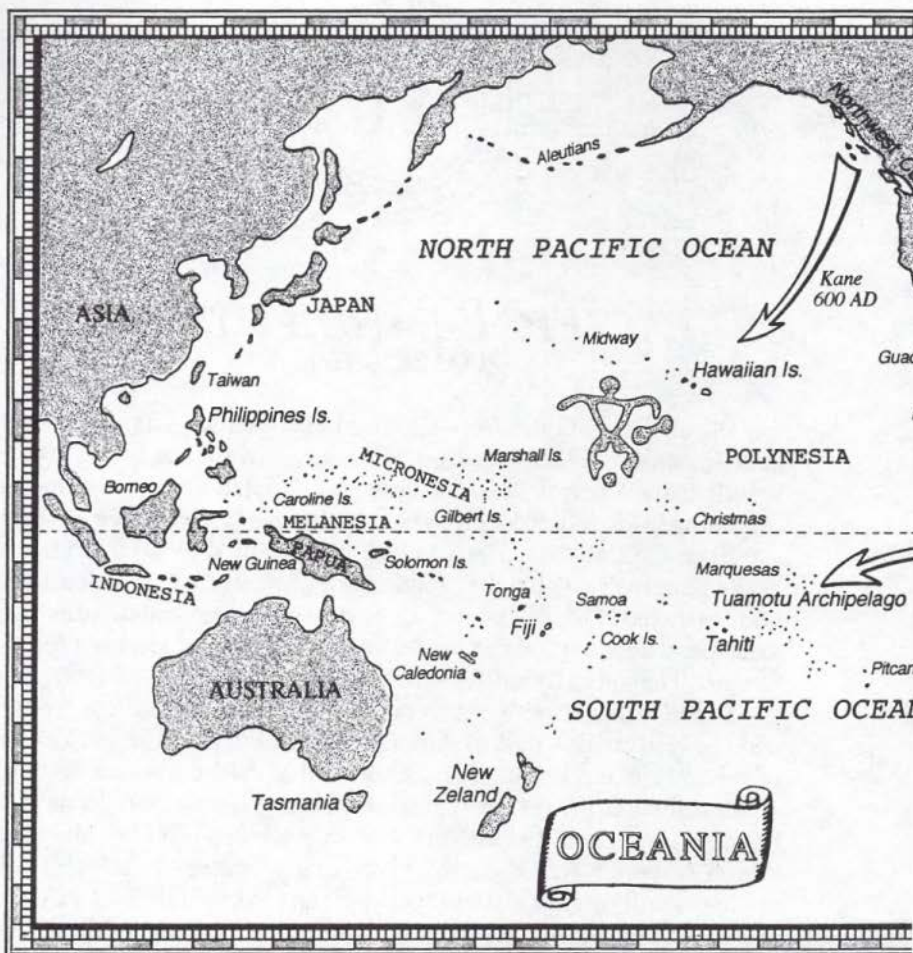
### **Island Civilizations**

Anthropologists divide the western Pacific islands into three broad cultural zones. Inhabitants of the Marianne and Caroline Islands lying east of the Philippines are called *Micronesians*. Another group, the *Melanesians* occupy the islands further east, including the Solomon Islands, Fiji, Samoa, and Tonga. The mid-Pacific islands, including Hawaii, Tahiti, the Marquesas, and New Zealand, are occupied by *Polynesians*. These islands and their aboriginal maritime cultures are collectively referred to as *Oceania*.

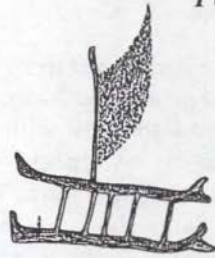
#### **Micronesia**

European historians attribute "discovery" of *Micronesia* to the Spanish navigator Ferdinand Magellan in 1521, although the *real* discovery and settlement of the region commenced at least 7,000 years ago during the inundation of coastal lands along Borneo, the Philippines, and





New Guinea. Refugees from the larger lands found new homes on tiny islands of the western Pacific. The name Micronesia is a scientific term comprised of the Greek words *micros*, meaning "small," and *nesia*, meaning "island." During the 1800's, German missionaries and ethnologists observed a mixture of races in Micronesia, including Malaysians, Negroes, Mongoloids, Melanesians, and Polynesians.<sup>1</sup> Physically, Micronesians have darker skin than Polynesians and are shorter in stature, although both have dark eyes and black hair which are characteristic of Pacific islanders. Malayan cultural influence is evident from the Asian style of ceramic pottery used on the islands. Most of the inhabitants live in villages of reed huts. They cultivate sugarcane, yams, and sweet potatoes. Men fish and harvest fruit trees. Their ancestors were cannibals and head-hunters. Some islands supported more advanced cultures than were present when 19th-century European ethnographers



### MAP OF OCEANIA

Map shows three major cultural and ethnic zones: on the far left is Melanesia north-east of Papua New Guinea. Further east is Micronesia. Polynesia includes the islands east of Fiji from Midway in the North to New Zealand in the South. Ancient voyages of Hotu-Matua from Peru (circa 300 AD) and Kane from the Northwest Coast (circa 600 AD) are shown by arrows. In 1947, Thor Heyerdahl proved the seaworthiness of primitive oceangoing rafts by sailing the *Kon-Tiki* from Peru to the Tuamotu Archipelago. The map shows only the largest of several thousand islands. During glacial periods when the ocean level falls several hundred feet, the size and number of islands increases substantially. As is true for continental areas, the oldest human habitations were in coastal lands now submerged beneath the seas.

11.M1



studied village society. Archeologists found ruins of an ancient city called “Metalanim” on the island of Ponape. Historian William Chamberlain believed Metalanim’s stone walls and canals were the remains of “an amazing oceanic metropolis.”<sup>2</sup> It was the hub of a maritime civilization that vanished long ago.

#### Melanesia

The term *Melanesia* derives from the Greek words *mela*, meaning “black,” and *nesia*, for “island.” Because islanders of this region typically have dark skin, thick lips, and flattened noses, anthropologists often characterize them as a variety of the Negro racial abstraction called “Papuan.” However, Papuan tribes show the same kind of racial variety that resulted throughout the western Pacific from trade and inter-island conquests between various races. The first inhabitants of Melanesia



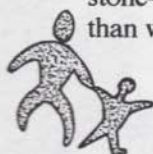


were Negroid pygmies who traveled east from New Guinea. They were followed by another Negroid group, the Australoids who also settled in Australia. Some islands show mixture with Malaysians, Polynesians, Caucasians, and Micronesians. Anthropologists note the use of a Malayan-style loom and Malayan ceramics which spread from Asia during settlement of the islands between 5000 BC and 1000 BC. Archeologists have identified a distinctive ceramic industry called *Lapita* which was present in New Caledonia (western Melanesia) by 2000 BC. *Lapita* ceramics spread northeast to Fiji by 1300 BC, and they reached Samoa by 800 BC. Archeologists uncovered a few Fijian pots that were transported to the Polynesian Marquesas in 300 AD.

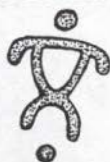
### Polynesia

The scientific designation *Polynesia* derives from the Greek words: *poly*, meaning “many”, and *nesia*, for island. Although anthropologists characterize them as a “Caucasian” people, Polynesians have a mixed racial heritage including Japanese, Cambodian, Mediterranean, Negroid, Melanesian, and Native American ancestry. Polynesians settled on the Marquesas Islands by 100 AD, Hawaii by 300 AD, New Zealand and Easter Island between 400 and 700 AD.<sup>3</sup> Besides fishing, they subsisted on coconuts, breadfruit, pigs, and cultivated plants, including kalo (or taro), yams, sweet potatoes, sugarcane, and gourds. Polynesians were not making ceramics at the time of European contact in the 18th century. Indeed, it seems that most Polynesians never had ceramic industries. The reason for the lack of ceramics was two-fold: many islands lacked adequate clay for ceramics; and foods that required cooking were easily baked in earthen ovens.

Stone ruins found throughout Polynesia attest to larger populations and higher levels of social development than were apparent when European explorers and missionaries visited the islands during the 1800's. Missionaries called the natives “savages,” after hearing stories about cannibalism, head-hunting, inter-island raiding parties, and “wanton” sexual behavior. However, archeologists uncovered evidence of ancient civilizations on many islands. They found an elaborate system of stone drains in New Zealand, and there were masonry pyramids on Samoa, Tahiti and Tonga. Huge stone sanctuaries called *ahus* were located on Hawaii, Rarotonga, the Marquesas, and the Society Islands.<sup>4</sup> Even remote Easter Island in the eastern Pacific had remains of stone fortifications and temples in addition to huge tiki statues that face the ocean. From this evidence, historian Neville Whyment of Hosei University, Tokyo, concluded that ancient Polynesians were familiar with stone-working and had reached a “higher level” of cultural development than was apparent when Europeans began colonizing the Pacific isles.



240





Easter Island Script  
after deHevesy in Bailey (1973)

He called the megalithic monuments on the islands evidence of “vanished empires and civilizations.”<sup>5</sup>

Further evidence of Pacific civilization was inscribed on a wooden oar found on Easter Island. The oar blade had what appeared to be a text of pictographic writing. Skeptical anthropologists assumed the artifact was merely a *mnemonic* device, that is a list of symbols used as an aid in remembering a story. However, historian James Bailey and epigraphic expert Barry Fell compared the writing to an Indus Valley script; they found a perfect match of symbols.<sup>6</sup> Fell subsequently translated the text and found a record of ancient Polynesian legends. At one time, Polynesians had numerous wooden tablets recording the achievements of their civilization, but these were lost over the passing centuries from decay. Aside from the Easter Island text, only oral traditions survived as clues to the ancient Pacific civilization.

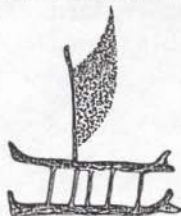
Although Polynesians lacked metal ores and the technology for smelting and fabricating metal, they were familiar with gold, iron, bronze, and copper. Indeed, they had occasional access to these metals during visits from Old World vessels. Anthropologists confirm that natives had ancient knowledge of metals, because Tongans designated *Togi Ocummeu* as the God of Iron.<sup>7</sup> Polynesians went to great extremes to obtain iron from visiting Old World ships. Island women eagerly traded sex to European sailors in exchange for pieces of metal the size of nails. They were so successful in conducting the sex-for-iron trade that English captains were forced to ban intercourse on their vessels, because lusty seamen were prying loose iron nails from the ships’ hulls. What the natives couldn’t get fairly through commerce, they simply took when it wasn’t being guarded. The crew of a Spanish galleon visiting Tahiti learned the hard way: one enterprising *fem fatal* entertained the men on deck while her cohorts absconded with the ship’s anchor.<sup>8</sup>

European sailors complained that “theft” was common in Polynesia, however seamen weren’t particularly conscious of *morality* when entertaining native girls. Island kings believed in the same kind of territorial sovereignty enjoyed by their European counterparts: any ship that ventured near the islands was fair game. Europeans exploited the issue of morality to justify imposition of Western values and religion. However, natives weren’t really immoral—they simply lived by *native* standards which were arguably superior to those of the invaders.

Although many of their cultural achievements were fading by the time of European exploration, island voyagers had already played a major role in ancient cultural diffusion between the Old World and America. This was due largely to the skills of Pacific navigators and the versatility of their ships.



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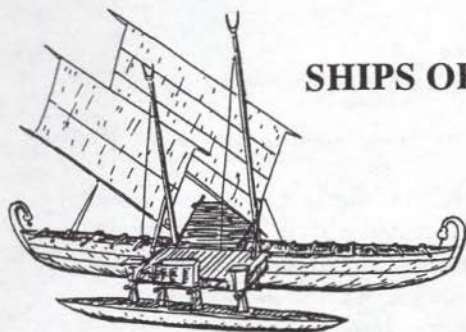


Polynesian  
petroglyphs

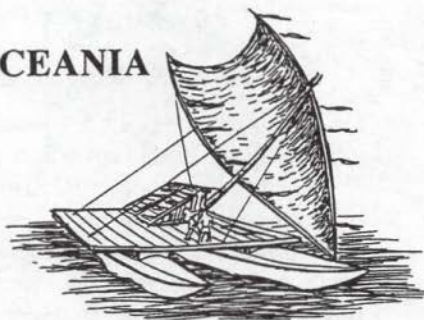




## SHIPS OF OCEANIA



Polynesian Outrigger 1800 A D  
on display in the Berlin Museum



Fijian Dura 1800 A D  
catamaran with deck

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### Island Quest: Voyages by Catamaran, Outrigger, & Raft

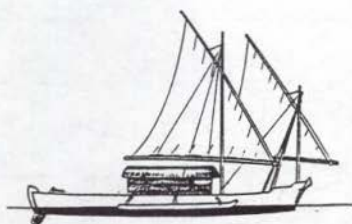
When English Captain James Cook visited Oceania during scientific expeditions in 1768, 1772, and 1776, he praised the seaworthiness of native vessels which easily sailed past his sluggish frigates. Cook met with Polynesian seamen and recorded their tales of oceanic voyaging. He noted that Polynesians were used to sailing hundreds of miles in ships packed with provisions and domesticated plants. Consequently, they were well-prepared in the event that a sudden gale forced them to land on unoccupied islands.

Pacific islanders sailed a variety of light-weight craft, including catamarans and outriggers. Maori-Polynesians as well as Kwakiutl natives of the Northwest Coast lashed together two canoes for increased stability. The vessel was called a *tau-rua*. It was the prototype for *catamarans*, or double-hulled boats. Catamarans were up to 80-foot long and carried triangular sails made of woven fiber. A thatched hut lashed to a platform between the hulls provided shelter for travelers. In 1744, Captain Cook observed a fleet of 160 Polynesian catamarans; the 80-foot long vessels that carried an average of 144 warriors. Fijian catamarans, or *duras*, were huge vessels that had space for 200 passengers.

Outriggers consisted of a single large canoe made from an extended dugout with sewn planks and a pontoon that was attached to the side for stability. Although used mainly for fishing, some vessels reached considerable size. A 19th-century Polynesian outrigger in the Berlin Museum is over 80-foot long and carries two canvass sails. Vessels this large were suitable for long-distance commerce, because they had ample storage capacity for cargo and supplies.

Native Americans used dugout canoes and rafts on Pacific voyages. Norwegian anthropologist Thor Heyerdahl believes Northwest Coast natives used double canoes lashed together on legendary voyages from Vancouver Island to Hawaii. Heyerdahl also believes Peruvians used large balsa rafts to reach the Galapagos Islands west of Peru by the 8th century. Spanish explorers encountered huge balsa rafts with triangular cotton sails cruising along the Ecuadorian coast during the 16th century.

## Pacific Island Voyagers

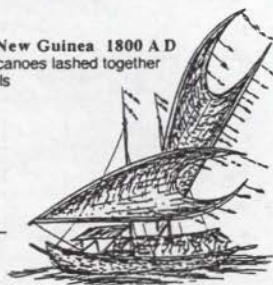


**Philippine Balanghai 1000 A D**  
extended dugout canoe with outrigger  
based on excavation at Butuan City



**Polynesian Catamaran 1700 A D**

**Lakatoi of New Guinea 1800 A D**  
three dugout canoes lashed together  
note: claw sails

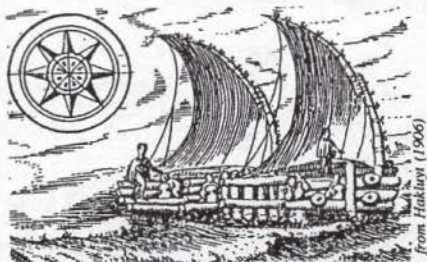


Heyerdahl found remains of Peruvian cotton and pre-Inca ceramic artifacts on the Galapagos Islands, confirming his thesis of ancient travel between the islands and Peru. There were also reports that Peruvians gave the Spanish precise sailing directions to Easter Island and the Galapagos Islands, leading Heyerdahl to conclude that ancient Peruvians had sailed in both directions. Spielbergen's 1607 illustration of a balsa sailing raft was printed in the 1906 edition of *Hakluyt's Travels*.

In order to prove that ancient Peruvians had suitable vessels for reaching Polynesia, Heyerdahl sailed a small balsa raft, the *Kon-Tiki*, from Callao, Peru, to the Tuamotu Archipelago in the mid-Pacific. The 1947 expedition covered a distance of 4,300 nautical miles. In spite of the successful voyage, skeptics insisted Heyerdahl had only proven the obvious: "That balsa can float." However, by 1979, eleven other raft expeditions had sailed along the Humboldt current into Polynesia. There could no longer be any question that long-distance journeys were possible in ancient times using the most primitive of sailing vessels—the balsa raft.

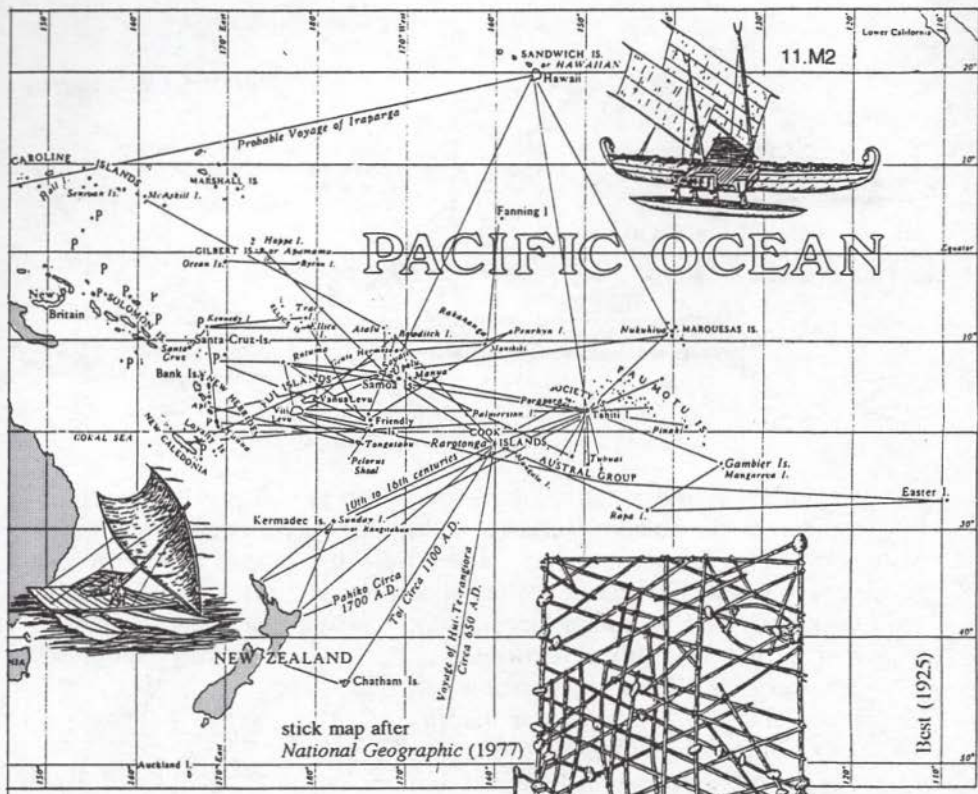
Although historians often characterize the Pacific Ocean as a barrier to inter-continental travel, Pacific nomads traveled the high seas for more than 10,000 years, using the winds and currents as "conveyor belts" between the islands and continents. Daring voyages into the unknown led them to undiscovered islands. They recorded the locations of islands and the patterns of waves on "stick maps" made from bamboo and seashells. These "maps" combined with memory and skill enabled sailors to find their way back and forth between islands. Thus they established new colonies whenever they discovered unoccupied land.

In 1925, Maori scholar Elden Best made a map of Polynesian voyages that were known to the elders. His map demonstrates the role



from Hakluyt (1906)





### Ancient Pacific Voyages

Above map by Maori historian Eldon Best shows routes of recorded Polynesian voyages between the islands. Voyages of several thousand miles were not unusual. Navigators used stick maps (above right) to aid in remembering wave patterns, ocean currents, wind directions, and island locations (small shells).



of Polynesian voyagers as cultural diffusionists between the continents: their voyages span the ocean from Borneo to Easter Island. Incremental voyages took Polynesians to Tonga and Samoa—the eastern outposts of Melanesia. From Tonga and Samoa, Melanesian voyagers sailed west to the islands of Micronesia where they met with nomadic merchants from New Guinea (Papua), Borneo, and Java. And Javanese merchants traveled to the Asian mainland. In this manner, incremental voyagers provided a chain-link of trade and diffusion across the ocean.

In 1976, Hawaiian scholar Mau Pialug demonstrated the art of native navigation by sailing a replica of an ancient outrigger from Hawaii to Tahiti. Using only traditional skills, including observations of the sun, waves, stars, cloud formations, and birds, Pialug and his crew of 15 Hawaiians sailed the 60-foot boat *Hokule'a* across 2,600 miles of ocean in 35 days. Pialug's Polynesian ancestors had taken that same course countless times as they traveled back-and-forth between the islands.

## **Evidence of Transoceanic Contact & Migration**

For several thousand years, Oceania was a transitional zone of cultural diffusion between Asia and America. Along the Pacific Coast, Native Americans launched discovery voyages deep into the ocean, while Pacific islanders traveled to American shores. Evidence of dynamic cultural exchange across the Pacific includes legends of ancient travelers, similar cultural traits in Oceania and America, diverse physical types occupying the same islands, and remains of plants that were passed from island-to-island across the ocean.

### **Legends of Old World Visitors in Oceania**

Polynesian traditions reveal ancient knowledge of Old World civilizations, reflecting contact with ancient voyagers from Asia and the Near East. Asian contact is evident from the names Polynesians gave their gods. The supreme being of Polynesian religion, *Io*, was derived from Asian voyagers who believed in the Taoist supreme force, or *Tao*. Near Eastern contact is similarly reflected in the names of deities. The Polynesian sun god, *Ra*, was adopted from voyagers familiar with the Egyptian or Mesopotamian sun god *Ra*. Direct contact with believers of Near Eastern religions was necessary for name of the sun god to spread to Polynesia. Many tales are told of the Pacific exploits of a demigod-mariner named Maui. Epigraphic scholar Barry Fell has translated inscriptions found in New Guinea and Chile that proclaim Maui as the 3rd-century BC navigator of a large Libyan-Egyptian fleet.<sup>9</sup>

In 1925, British Ethnographer Ettie Rout recorded a bizarre New Zealand Maori tradition that one of the ancient tribes had come from Mesopotamia *via* South America.<sup>10</sup> Most of Rout's associates dismissed her research as a "fantasy," however subsequent identification of an Indus Valley script on Easter Island and Maui's testimonial in Chile add support to Rout's thesis.

### **Native Americans in Oceania: Kane, Hotu-Matua, Inca-Tupac**

According to Polynesian legend, the culture hero Kane led Hawaii's ancestors from a mountainous mainland called *Tua-Whenua*.<sup>11</sup> They headed *west*, following the setting sun, until they came to a big island they named *Hawa-iki*. The location of this mythical island has been the subject of enduring controversy. Some scholars favor Java as the legendary island; others believe Hawaii is the legendary *Hawa-iki*. In his 1952 book *American Indians In The Pacific*, Thor Heyerdahl described ethnographic reports concerning Polynesians on New Zealand, Tahiti, and Rarotonga. In every case, Hawaii was regarded as the ancestral homeland. Heyerdahl also discovered an ancient list of Polynesian kings kept by a New Zealand Maori chief that was identical to a list of Hawaiian





## Great Boats of The Pacific

Archeologists uncovered the chest of a giant stone Tiki on Easter Island exposing the engraving of an ancient sailing vessel. Estimated date of inscription is between 1000 and 1300 AD.

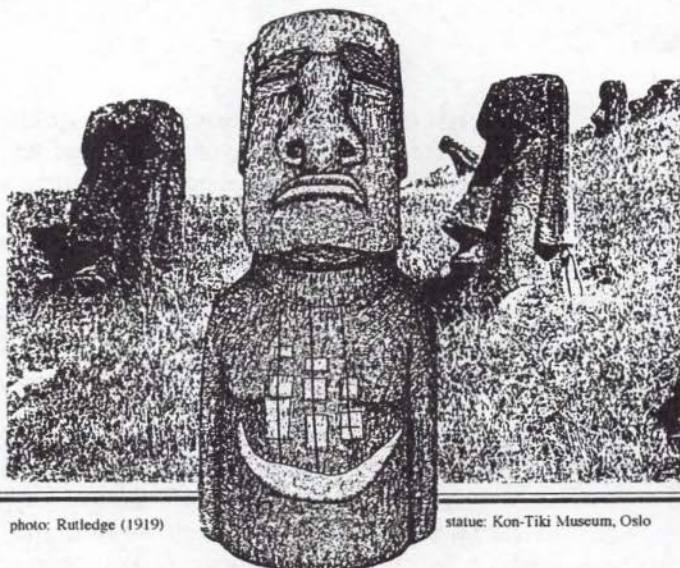


photo: Rutledge (1919)

statue: Kon-Tiki Museum, Oslo

rulers. Because the list of kings was said to be that of the ancestral Polynesian island, Heyerdahl concluded that Hawaii was the legendary *Hawa-iki*. He surmised that the mountainous mainland Kane's followers had departed from was America, because the voyagers had sailed *west* to reach *Hawa-iki*. Indeed, a Northwest Coast tradition praised an ancient voyager named Kane who sailed far out into the Pacific. Heyerdahl concluded that Kane's voyage was an expedition to Hawaii.

Another Polynesian legend tells how the earliest voyagers reached Easter Island. Polynesians called Easter Island *Te-Pito-o-te Henua*, or "The Navel of The World." According to the legend, the founder of the settlement, Hotu-Matua, was driven from his kingdom in the *East* by rebellious subjects. Heyerdahl has identified the "eastern land" as Peru. Hotu-Matua and 300 followers in two giant canoes spent four months at sea before reaching the island. They brought with them Peruvian plants including tobacco, tomatoes, sweet potatoes, bananas, and sugarcane. Archeologists dated Hotu-Matua's arrival on Easter Island to the 3rd century AD, corresponding to the time when remains of baked sugarcane and sweet potatoes were deposited in human habitations. The earliest inhabitants of Easter were skilled stone cutters whose megalithic structures of basalt had the same appearance as stone walls in ancient Peru.

Thor Heyerdahl points out that Hotu-Matua's legend corresponds to a Peruvian tradition about a tribe of bearded white-skinned natives called the *Ringim*, or "Long Ears."<sup>12</sup> Like the followers of Hotu-Matua, the Peruvians made reed boats from Lake Titicaca's *titora* reeds, and they fled into the Pacific after a rebellion. The descendants of Hotu-Matua had beards, red hair, and light-skin—which were also characteristics of the Peruvian Long Ears. Cultivation of Peruvian tobacco, tomatoes, and sweet potatoes, as well as megalithic masonry on Easter Island, support

Heyerdahl's conclusion that the earliest inhabitants came from Peru. Between the 5th and 8th centuries, Western Polynesians arrived from the Marquesas Islands. This invasion of Easter Island led to inter-racial warfare and the near extermination of Peruvian Long Ears.

A Peruvian tradition tells the story of Inca Tupac-Yupanque who sent an expedition of several hundred boats into the Pacific. They found a "fire-island" called *Nina-chumpi* and more distant isles of *Hahua-chumpi*. They returned after a long period of time with black prisoners, a brass throne, and much gold. Tupac's voyage corresponds to traditions on the Island of Mangareva about a fleet of rafts arriving from the East.

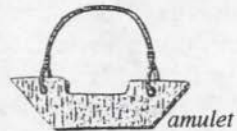
Spanish colonists in Peru sent a fleet in search of Tupac's golden isles. In 1568, Captain Alvaro de Mendana sailed across the Pacific to the islands north of New Guinea. He decided these islands of Peruvian tradition were also the source of King Solomon's legendary mines, so he named them the "Solomon Islands."

### Tales of Polynesian Voyages to America

Polynesian legends of the demigod Maui tell of his voyages on the eastern fringe of the ocean they called *Kiwa*. Rorotongans have a tradition of an ancient expedition to a land of mountains beyond Easter Island. Islanders of Mangareva sing the praises of Chief Anua-Motua's voyage to the lands of *Taikoko* and *Ragiriri* which are identified with South America. Descendants of the chief are also said to have visited the foreign lands. Natives of the Marquesas have an ancient tradition about the voyage of Chief Te-Heiva to the land of *Te-Fiti* that lies beyond the eastern fringe of Polynesia. The chief sailed in a huge catamaran and returned with sweet potatoes.

### The Ethnic Cauldron of Oceania

When Thor Heyerdahl visited Easter Island in the 1970's, he met the sole surviving descendants of Peruvian Long Ears whom islanders called *Ringrim*. Their light skin and facial features made them look more like Mediterranean seafarers than Polynesian voyagers. While on the island, Heyerdahl's archeologists uncovered the chest of a giant stone Tiki bearing an inscription of a three-masted sailing vessel on its chest. In the mid-1800's, islanders wore amulets shaped like ships which they referred to as the *Reimiru*—or "Great Boat." According to the Reimiru Legend, ancestors of the islanders had arrived in two great boats sailing from continental land to the east. It was evident to Heyerdahl that Easter had been the scene of ancient racial mixing due to long-distance migrations. In this regard, Easter was like many of the remote Pacific isles.







### Easter Island Native: or the White Man from Peru

In 1775, artist William Hodges sketched this native descendant of the Peruvian Long Ears who were the first inhabitants of Easter Island. A shipmate of Hodges, Peter Fanin, observed: "The native's features did not seem to differ materially from those of Europeans."

Beginning in the 16th century, European explorers noticed striking juxtapositions of Caucasian, Mongoloid, and Negroid inhabitants on the islands. Particularly noticeable were white-skinned people who looked more European than Polynesian; there were also blacks who looked more like African natives than the local dark-skinned Papuans or Melanesians. In the 17th century, Spanish explorer Gonzales DeLiza reported seeing whites on Peregrina Island whose principle inhabitants were Melanesian. "One native," he said, "was white skinned, beautifully shaped, and had an aquiline face which was rather freckled and rosy."<sup>13</sup> At Taumaco, DeLiza found a man whose color was "so white" and whose hair and beard were "so brown" that the Spanish sailors called him "the Fleming," referring to citizens of Belgium. During the 18th century, the Spanish explorer Mendana saw natives with "white skin and red hair" in the Marquesas Islands. In the Solomon archipelago, his men reported "blacks, mulattos, and whites" living on the same island. In 1773, Captain Cook's English crew encountered white people living among the Maori tribes of New Zealand. Cook's chief artist, William Hodges, observed that the whites "did not differ materially from Europeans." Hodges prepared a portfolio of "non-native" portraits.<sup>14</sup> Thor Heyerdahl also noticed light-skinned natives living with Polynesians on Chatham Island. They had Semitic-Arabic facial features, reddish hair, and light skin.

Even Polynesians were aware that some unusually "white" people resided in the Pacific islands. Polynesians called the white Chatham Islanders *Haoles*, or "whites," confirming that Heyerdahl wasn't the only one who realized they were different from other Polynesians. One legend told of an ancient race of white people called the *Urukehu* who once occupied the Pacific islands before Polynesians arrived. Another legend said a race of white people occupied a "fairy" island called *Moorea*. Polynesians even worshipped a white god with blond hair called *Lono*. Throughout Polynesia, white skin was regarded with admiration, and chiefs sometimes had their favorite concubines or male attendants bleach their bodies to make them "more attractive." The islanders' fascination with white skin was an advantage for Captain

Cook. When he landed in Hawaii, the natives believed he was the incarnation of the white god, *Lono*, and they treated him accordingly with feasting and great honors. However, Cook paid dearly for ignoring native customs. When Hawaiians stole a dinghy from Cook's ship, the English responded by kidnapping a native chief. Islanders were insulted when Cook sought to barter an important chief for a worthless boat. Cook's arrogance led to his death in 1779.

Whites were not the only displaced ethnic group in the Pacific. According to Polynesian legends, Pacific islands were originally settled by a race of black dwarfs which Hawaiians called the *Ka'ava*. They are more popularly known as the *menehune*. Naturalist Martha Zacho attributes the term *Menehune* to missionaries who misused the Hawaiian expression for "small of stature." The *Ka'ava* were characterized as being short, dark people with bushy hair—possibly Melanesians.<sup>15</sup> Many legends refer to these "little folk" as the servants of Polynesian tribes. A sunken temple at Kawaihae Bay, Hawaii, suggests that the *Ka'ava* arrived when the seas were substantially lower—perhaps 3,000 years ago. The "little people" had vanished by the time Europeans began colonizing the islands in the 1800's—leading skeptical historians to assume the *Menehune* were imaginary beings akin to Irish *leprechauns*.

The ethnic identities of numerous Pacific peoples faded into the diverse Polynesian race. One of these groups was the Native Americans. Many scholars, including Thor Heyerdahl, commented about the striking similarity between Hawaiians and Northwest Coast natives. Heyerdahl believes a Kwakiutl tribe populated ancient Hawaii. Besides similar legends regarding the ancestral hero "Kane," Heyerdahl cites similar physical characteristics, including beards, light skin color, and tall stature. Natives of both places also used the same kinds of Neolithic tools, including polished mauls, adzes, and stirrup-handled pestles. They made bark cloth, lived in longhouses made from planks, and carved totem poles. They also raised their dead on platforms exposed to the air.

Comparative studies of Polynesian and Native American blood samples have demonstrated a surprising degree of similarity, adding further support to Heyerdahl's thesis that northeastern Polynesians are related to North American tribes.<sup>16</sup>

Oceania's mixed ethnic heritage is mirrored in a broad variety of artifacts, traditions, and cultural similarities with peoples along the Pacific Rim. Contributions from as far away as the Mediterranean region are evident in the rich matrix of island culture.

## **Old World Artifacts & Traditions in Oceania**

Ancient Old World visitors through Oceania left tantalizing clues of their voyages. Glass beads reached the South Seas during the 1st century



OLD WORLD

Cultural Diffusion

to AMERICA

artifacts after Covarrubias (1954)  
Jett (1978) and Tolstoy (1991)

after American Museum of Natural History

star-shaped mace

polished pestle  
Tahiti



polished pestle



double tiki  
Marquesas

double tiki



double tiki  
Mexico



polished pestle  
Tlingit, Alaska

star-shaped mace  
Peru

pineapple mace



pineapple mace  
Melanesia



fishhook  
Easter Isl.

fishhook

fishhook  
California



pineapple mace  
Peru

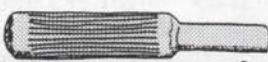


Northwest Coast

bark beaters



Indonesia



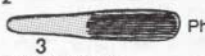
Honduras



Vietnam



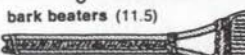
Mexico



Philippines



Guatemala



bark beaters (11.5)

Celebes



Mexico

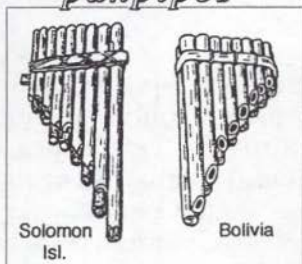
racquet beater

AD. Most beads came from India and Southeast Asia; some came from Rome. Archeologists have reported Roman trade beads in Malaya, New Guinea, and Micronesia. The distribution of glass beads isn't surprising because Roman merchants made frequent voyages to Southeast Asia by the 2nd century AD. Hawaiian islanders adopted the distinctive Stallion's Mane helmets worn by Etruscans, Greeks, and Romans between the 5th century BC and the 5th century AD. Polynesian kings modified the design to suit the island habitat, using bright red and yellow feathers of native birds instead of horses' hair. The island version of the helmet headdress is a prominent feature of Hawaiian statues of King Kamehameha. Ancient Mediterranean seafarers inscribed cup-and-groove markings for recording equinoxes on megaliths in the Marquesas Islands at an unknown date. In 1606, Spanish explorers in the Tuamotu archipelago saw a Polynesian native wearing a gold ring that had been obtained from previous Old World travellers.<sup>17</sup>

### Oceanic Artifacts & Culture in America

In the early 1900's, archeologists with the Museum of the American Indian reported finding ancient adzes and axeheads in California that were remarkably similar to those of Oceanic cultures. Since then, American archeologists have identified grinding stones, star-shaped

panpipes



Pacific Island Voyagers

clubs, fish hooks, and cooking ovens that have surprising parallels with Oceanic cultures. Frances Gibson (*Seafarers*, 1974) reports that stone spearheads from Easter Island have been identified in an ancient Chilean tomb. Panpipes which ethnographers brought back from the Solomon Islands are almost

identical to panpipes found in Bolivia. The pipes have a row of hollow tubes attached to a second row of sticks used to reinforce the device.

Anthropologist Paul Tolstoy has identified bark cloth technology that spread across the Pacific by the 5th century BC. Tolstoy has demonstrated that production of bark cloth (or *tapa*) involved the same materials and sequence of steps from Asia to the Americas. First bark was stripped from a suitable tree; it was soaked in a solution of water and ash; then, it was beaten using wooden and stone implements. The beating caused layers of cellulose to separate yielding a pliable, cloth-like material. Grooved bark-beating tools from Oceania are identical to those used along the Pacific coast of North and South America. Geographical and temporal distribution of these tools implies maritime diffusion across the Pacific.

bark beaters



Indonesia



Honduras

Mexican archeologist Miguel Covarrubias was particularly keen on the idea of cultural diffusion from Polynesia to the Americas. His book, *The Eagle, The Jaguar, and The Serpent* (1974), catalogues numerous similarities in stone mauls, wooden masks, painted bark cloth, wooden pillows, and nose plugs. Covarrubias concluded that: "The great numbers of more-or-less scattered Asiatic and Oceanic traits that have infiltrated various Indian cultures cannot be ignored." He attributed Oceanic traits in the Americas to eastward migrations.

The Pacific Produce Exchange

Island voyagers played an important role in diffusion of plants and animals across the Pacific. Prior to human habitation, the islands of Oceania were resplendent with forests and grasslands. This was a consequence of the opportunistic plants brought in by birds, the wind, and ocean currents. However, the islands contained few edible plants besides the breadfruit tree. Micronesia also had coconuts. Most edible plants, and all domesticated plants, were transported from island-to-island in dugout canoes. Domesticated plants require special cultivation in order to propagate. Consequently, they are generally poor candidates for accidental introduction via natural causes, such as wind and ocean

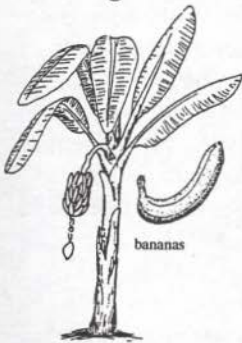
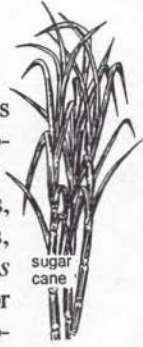


## AMERICAN DISCOVERY

currents. European explorers observed Polynesians transporting plants from island-to-island, confirming the role of sailors in deliberate introduction of domesticated plants to remote Pacific isles—and America.

Asian staples of the Polynesian diet included bananas, coconuts, taro, yams, gourds, mountain apples, milo, breadfruit, sugarcane, dogs, and pigs (*Sus scrofa*). The wild jungle fowl of Southeast Asia (*Gallus gallus*) was prized for cock fights. The Asian *olona* fiber was used for making cord. When Polynesian explorers sought out new island territories, they carried along these plants and animals with the expectation of using them to sustain human habitation. Although coconuts can survive short distances in the ocean and thus float independently to nearby islands and germinate, other plants of the Polynesian diet require direct human transport. Captain Cook observed in the 18th century, that coconuts were transported and planted on distant islands.<sup>18</sup> As a consequence of their agricultural proficiency, Polynesians were able to establish settlements on most of the Pacific islands. Some travelers carried Asian pigs and dogs. Inadvertently, they also transported rats and mice across the Pacific from Melanesia to Hawaii and New Zealand. Rats were agents of inter-island epidemics.

Polynesian voyagers brought several Southeast Asian plants to America. Two Asian plants, sugarcane and bananas, were reported in Hotu-Matua's legend as 3rd-century crops of Easter Island that were brought from a continent to the East—South America.<sup>19</sup>



Geographer Peter Bellwood, author of *Man's Conquest of The Pacific* (1979), identified two species of bananas cultivated in the Pacific islands, and he commented on the role of Pacific voyagers in carrying these bananas to America: "There is some evidence for cultivation of bananas in pre-Columbian South America, and prehistoric transportation from Polynesia is a possibility."<sup>20</sup> During the 16th century, Spanish explorers and missionaries, including Fray Acosta and Fray Montesinos reported that the plant was indigenous in the New World.<sup>21</sup> Historian W.H. Prescott noted that:

"The banana leaf has been frequently found in ancient Peruvian tombs." DeRocheburne reported bananas and banana leaves in an ancient tomb at Ancon, Peru.<sup>22</sup> This Old World plant had spread far-and-wide in Oceania and South America before the arrival of Spanish colonists.<sup>23</sup>

A common item of transport in Polynesian vessels was the coconut (*Cocos nucifera*). Originally indigenous to the South Seas, or Malaya, the coconut palm was present along the southwest coast of Mexico at the time of the Spanish Conquest.<sup>24</sup> Although nuts can float short distances



and still germinate, long-distance diffusion of the plant is unlikely. Thor Heyerdahl found that coconuts immersed in the ocean for 3 months failed to germinate, while specimens carried above water on his *Kon-Tiki* raft were still fertile.<sup>25</sup> Furthermore, Captain Cook and other European explorers observed Polynesian travelers engaged in the transport and propagation of coconuts, just as their ancestors had done for centuries. Although some isolationists assumed Cook was responsible for the spread of coconuts to Polynesian islands, the English explorer's own journal establishes that coconuts were already abundant wherever he traveled.<sup>26</sup> In September of 1773, Cook made the following observation in his journal:



coconut



Coconuts, bananas, and plantains were what we got the most of at all the isles. Pumpkins are now at all the isles. They (*pumpkins*) are the only things which have succeeded of all the seeds that have been brought to these isles by Europeans. At least we have not seen the produce of any other.<sup>27</sup>

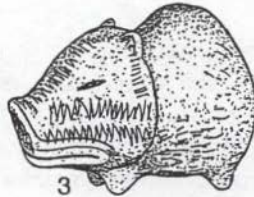
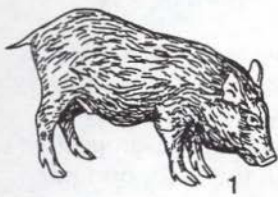
Common assumptions that Cook brought coconuts and pineapples to Polynesian islands are erroneous. The primary agents of banana, sugarcane, and coconut diffusion were ancient Pacific produce vendors—the Polynesians.

### New World Plants in The Pacific Isles

Pacific islanders obtained a cornucopia of useful New World plants, including pineapples, the husk-tomato, papayas, jackbeans, sweet potatoes, tobacco, mahoe, manioc, lab-lab beans, yam beans, lima beans, calabash, hibiscus, chilies, peppers, and arrowroot. Don't assume any of these garden plants floated across the ocean. All of them readily decay in saltwater, and they require special treatment in order to grow. Polynesians used Native American names to identify several plants. Learning a plant's original name required direct contact with farmers or merchants. Ancient Polynesian terms were used for other plants that had been cultivated in the Pacific for centuries *prior* to European exploration. None of these plants were known by European names, leading botanists to conclude that American plants spread to Oceania *prior* to Portuguese and Spanish voyages across the Pacific.<sup>28</sup>

Numerous American plants reached Hawaii in ancient times, resulting in the use of Polynesian names. Ancient Hawaiians obtained Caribbean pineapples and named the fruit *hala-kahiki*. A 19th-century European botanist named Degener reported that natives were *already* cultivating pineapples when English plantations were started in 1813.<sup>29</sup> Polynesian voyagers also carried the plant to the Marquesas and Cook Islands, where it was known as *hala*. Hawaiians called the American





## PIGS IN THE NEW WORLD

Polynesians brought Asian pigs (1) across the Pacific. Whether or not they reached America is a matter of speculation. A diminutive native hog, the peccary (2), inhabited both North and South America. Circa 400 AD, a Mexican artist at Tlatilco sculpted a ceramic pig (3). Mayans painted humping pigs circa 700 AD on a mural (4) at Bonampak.

3. after photo from  
Museum of  
The American Indian  
Hoeye Foundation

after a photo from  
the Museum of  
Anthropology &  
History, Mexico

11.7

husk-tomato *poha*. A 19th-century German botanist named Hildebrand observed that the husk-tomato (*Physalis peruviana*) was “naturalized” in Hawaii. In other words, the tomato had adapted to the island habitat over a considerable period of time.<sup>30</sup> Another tropical American plant, the papaya, was known to Hawaiians as *hei* prior to European contact. It was present also in the aboriginal Marquesas, where it was known as *vi-Oahu*, meaning the “fruit of Oahu.” By so naming the plant after one of the Hawaiian Islands, the Marquesans were expressing their belief that the plant was of Hawaiian origin.<sup>31</sup>

Two American plants, the sweet potato and mahoe, were widely cultivated in Polynesia under their Native American names. A native Colombian name for the sweet potato, *kumara*, is virtually identical to the Polynesian name, *kumar*. Aztecs called it *kamuri*, and it was known as *kamar* in the Peruvian Quechua language.<sup>32</sup> Texas A & M University geographer George Carter is not surprised that the plant and its ancient name diffused simultaneously. Because the plant is difficult to grow and preserve, those responsible for its transport across the seas also had to be familiar with the way it was cultivated. Propagation requires taking cuttings from vines or tubers of the plant. Direct contact with South American farmers resulted in the knowledge of sweet-potato cultivation being passed along with the South American name for the plant.<sup>33</sup> Archeologists found remains of South American sweet potatoes on Easter Island dating to the 3rd century, establishing beyond any doubt that the plant spread to Pacific islands *prior* to European arrival.

Botanist Ruben Villareal, author of *Sweet Potato* (1982), believes historians have been too anxious to attribute sweet potato distribution in the Western Pacific to Spanish colonists. Although historical records confirm that Spaniards initiated sweet potato plantations on the Solomon Islands during the 16th and 17th centuries, ethnological reports now indicate that natives had traditions of a different variety of sweet potato that had been cultivated since ancient times. Villareal believes that



kumar or  
sweet potato



Rubel (1994)

Magellan accurately reported *kamotes* (sweet potatoes) in Guam and the Philippines in 1521—although historians have assumed the plant was “mis-identified.” The botanist notes that another report by the sailor Mendana in 1595 referred to “sweet-tasting roots” in the Eastern Solomon Islands. Archeologist Jack Golson identified sweet potato cultivation patterns in New Guinea that date to 800 AD—confirming ancient sweet potato farming in Southeast Asia.

The mahoe, or *Hibiscus tiliaceus*, was cultivated for its fiber in tropical America and Oceania. Native Americans called the plant *maho*, or *mahagua*, while Polynesians called it *mao*, *mau*, *vau*, or *fau*.<sup>34</sup> Mahoe fibers provided cordage for Polynesian outriggers.

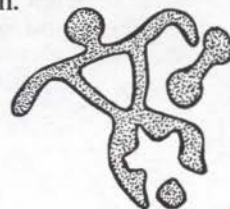
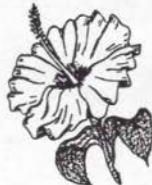
The jackbean (*Canavalia*) was so widely grown in the aboriginal islands that botanists once assumed it was an indigenous species. However, archeologists found jackbean remains at Peruvian sites dating to 2500 BC, leading them to declare a New World source for the garden plant.<sup>35</sup> During the 19th century, explorers found cotton, lab-lab beans, yam beans, chilies, peppers, and papaya plants growing in the islands. They were all called “endemic” species, because they seemed to be of ancient, native origin in the islands. However, modern botanists realized all of these plants originated in America. Botanists once assumed 16th-century Spanish voyagers were responsible for the plants’ dispersal to the islands, because they couldn’t imagine how Polynesian voyagers might have achieved such wide-spread plant distribution.<sup>36</sup>

In spite of such doubts, archeologist Thor Heyerdahl’s excavations on Easter Island confirmed the spread of many plants *prior* to Spanish voyages in the Pacific. Chilies, husk tomatoes, pineapples, manioc, arrowroot, tobacco, and totora reeds were all on Easter Island during the 1st millennium AD.<sup>37</sup>

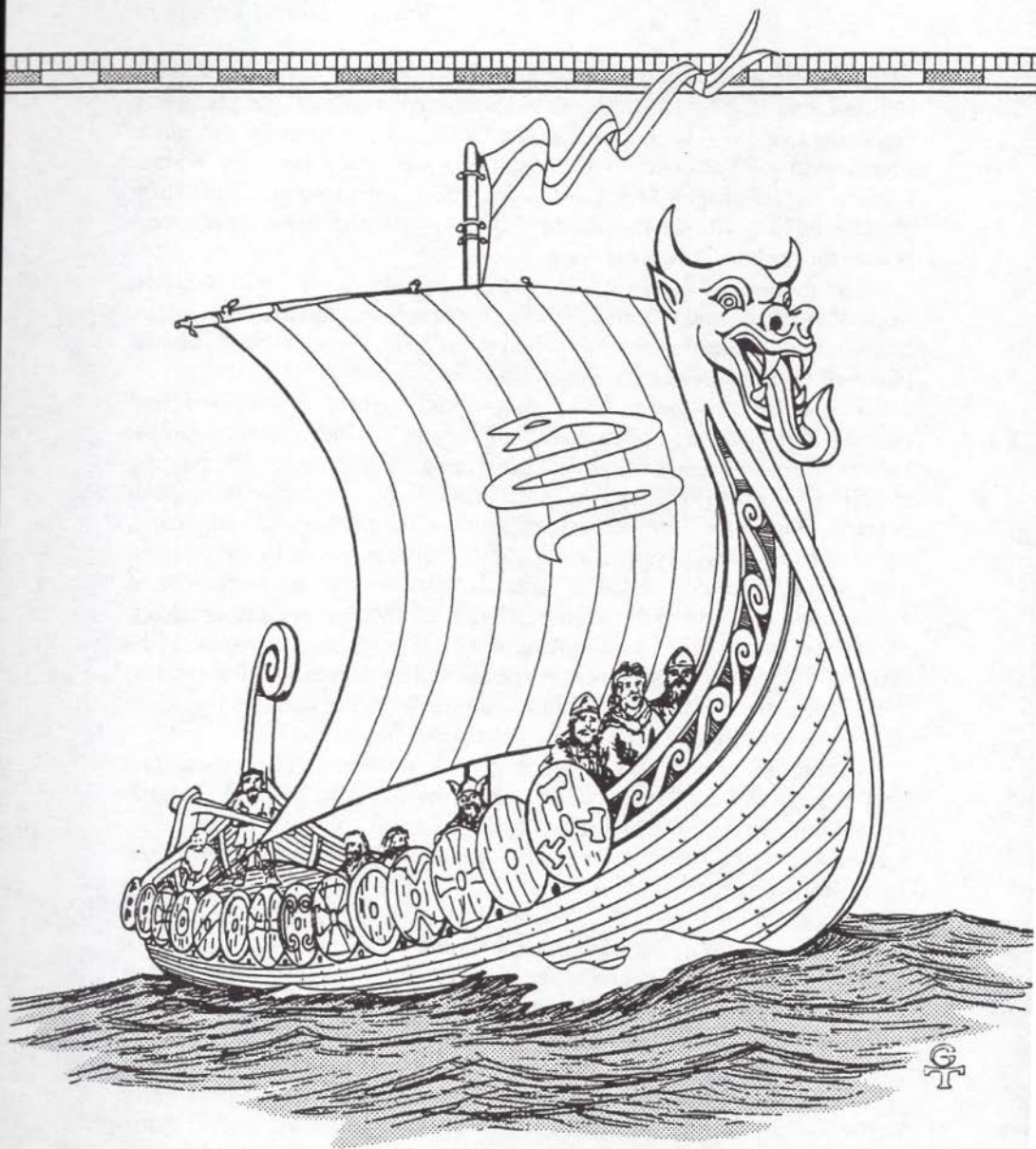
## Island Quest

Polynesians traveled across the seas for many reasons. Some sailed in search of unoccupied islands; some traveled on raiding parties seeking slaves; and others were motivated by commercial profits. Occasionally, island travelers were blown off course and landed at uninhabited atolls. Adventure and discovery were part of their heritage. Geographer Peter Bellwood praised the incredible curiosity of Pacific voyagers: “One simply can not ignore the fact,” he observed, “that the settlers of Oceania had a desire to explore and probe the unknown.”<sup>38</sup>

As they traveled, they carried the cultures of the Old World and the New World across Oceania in both directions. Their traditional sailing routes were the intercontinental highways for cultural diffusion and produce distribution across the Pacific Ocean.







***Bound for Vinland***

*Norsemen sail along the coast of North America seeking new lands and adventures, circa 900 AD.*



## **NORSE SEAFARERS** (2000 BC—1550 AD)



Civilized Europeans cursed the shrieking pirates or Vikings” of the North Sea. From the 8th through the 10th centuries AD, roving Nordic brigands terrorized Catholic parishes in Brittany, England, Ireland, and Spain. Even Paris suffered Viking harassment when dragon ships sailed up the Seine river in 845 AD. Cathedrals were favorite targets—because their icons and crosses were embellished with gold and jewels. It is no wonder terrified Christians recited special prayers in hopes that divine intervention would stop the rampage.

Catholics claim their prayers were answered in 995 AD when Norway’s King Olaf Trygvasson converted to Christianity. The king’s vassals followed in mass baptisms. Old sea-warriors embraced the new church not because of spiritual enlightenment but because of the king’s power of persuasion. Olaf gave his captains a choice between joining him in the cathedral or being baptized with boiling oil. Survivors of that ordeal faced a pit of poisonous vipers. Court historians claim that Olaf’s success as an evangelist was unequalled in Christendom.

Among Olaf’s early “converts” was a strapping youth destined to establish Catholic settlements in America. His name was Leif Ericson. His compatriots called him “Leif the Lucky.”

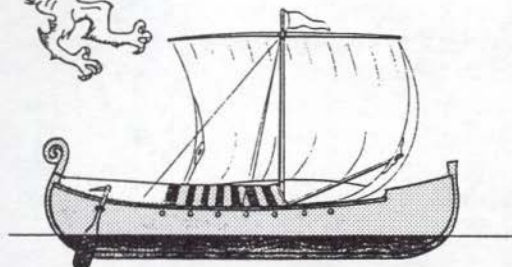
### **Norse Civilization**

Scandinavians were a seafaring people who settled the *fjords* (or mountainous bays) of northern Europe. They moved steadily northward as Ice Age glaciers receded. Nordic nomads traveled in skin boats and dugout canoes nearly 10,000 years ago. Because the seas were much lower than they are today, nomadic hunters followed sea mammals along an archipelago of islands stretching from Norway to Greenland.

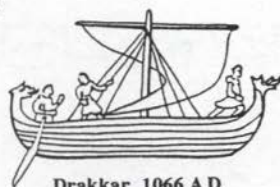
By the 3rd millennium BC, Phoenician commerce across the North Atlantic brought farming and metals to Scandinavian tribes along the Baltic and North Sea. Danes, Norse, Swedes, and Goths, prospered from maritime commerce, farming, and improving technology. Some of the warrior kings sailed along-side Phoenician merchants in the copper trade. In the 5th century, the scales of military power shifted from Rome



## Scandinavian Ships



**Knorr 10th to 14th cent.**  
primary merchant and transport



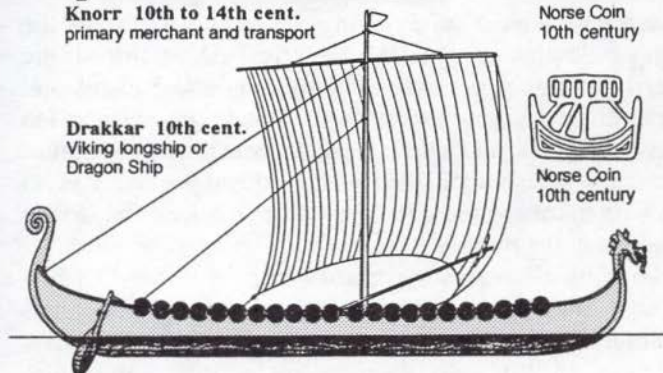
**Drakkar 1066 A D**  
from Bayeaux Tapestry



Norse Coin  
10th century



**Drakkar 10th cent.**  
Viking longship or  
Dragon Ship



Norse Coin  
10th century



Norse Petroglyphs  
Bronze Age  
1000 to 500 BC

12.1

in favor of Germanic tribes called “Vandals.” They ravaged the Roman Empire’s African provinces before sacking the capital. Rome’s naval forces fled—leaving the Atlantic and Mediterranean unprotected. By the 8th century, Germans and Vikings were masters of the seas.

Pagan *Vikings*, or “Sea Warriors,” were the leading edge of an expanding population. Limited space and opportunities in the fjords forced young Scandinavians into lives of marauding and adventure. In 795 AD, Danes invaded Ireland, eventually conquering half the country. In 802 AD, Norse warriors ravaged the Scottish coast. A Danish army invaded England and settled in the province of Northumbria in 865 AD. That same year, Vikings swarmed over Iceland and settled in the lands abandoned by Irish Catholics. During the 9th century, Danish Vikings simultaneously attacked northern France and the German Rhine Valley. The “Normandy” region of France takes its name from Viking conquerors. Norsemen also attacked northern Spain and established a settlement; another band attacked Moslem cities in North Africa, sailed on to Italy, and settled near the city of Luna in the Gulf of Genoa. In the East, Goths traveled up the Dnieper river to the Black Sea, establishing trade with Constantinople. A band of Swedes called the *Varangian Rus* sailed up the Volga river to the Caspian Sea, and on to Baghdad. The territory they settled is known today as *Russia*.

In spite of the reputation of Nordic adventurers, Scandinavian culture was mostly "civilized." Nordic kingdoms achieved a high level of social organization and religion; they created elegant wood carvings, paintings, and jewelry. Following successful invasion of new territories, Viking conquerors established farms, villages, and trade relations with neighbors. Extended families lived in large log buildings, or "longhouses," aligned in streets; villages were surrounded by earthworks and palisades. Danish archeologists excavated several of these fortified villages at Trelleborg, Aggersborg, and Fyrkat. Metal workers made iron tools from bog-peat melted in stone-lined furnaces and finished on the blacksmith's anvil. Farmers raised wheat, barley, and oats, along with cattle, sheep, goats, and horses. The "history" of ancient heroes was preserved through oral traditions, called *sagas*. Memorials to ancient warriors were carved into stone using an old Nordic alphabet called *runes*. A system of laws called *wergild*, or "compensation," preserved social harmony. These laws required clans to compensate relatives of anyone victimized by one of their members—thus the entire clan was responsible for members' behavior. Freemen gathered in an assembly called the *Althing* to decide community issues.

Like most other cultures, Scandinavians had traditions about lands across the ocean on the opposite side of Earth. Slain warriors expected to find immortality in Valhalla—the Warriors' Paradise. Chieftains who died were sent to Valhalla on ships that were cast adrift in the Atlantic. Beneath the Earth was a paradise called the "Other World."

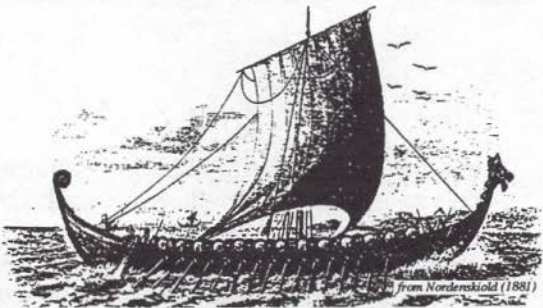
Many of the old Nordic histories in the *sagas* and *runic* books were lost during the Medieval era. As was the case throughout Christendom, monks were the only people trained in writing. Pagan achievements were regarded as "works of the devil" and were of no consequence to the evangelistic mission of the Church. Although the Church's bias resulted in a distorted image of history, it also assured preservation of maps and *sagas* pertaining to Leif Ericson's evangelical mission to America.

### **Norse Ships: Drakkars, Skeids & Knorrs**

Viking raiders sailed streamlined boats modeled after the old Phoenician galleys. Called *skeids*, or "longboats," they were long, squat vessels with pointed ends, shallow keels, and square sails. The single-masted ships were built of oak in the "clinker" tradition, that is, using overlapping planks riveted together or fastened with iron clinch nails. *Skeids* averaged 80-foot long and carried 40 to 60 men. The longest ship reported in the *sagas*, King Canute's battleship, exceeded 260 feet from stem to stern. The crews slept on deck beneath cotton awnings rigged to the masts. Sails were made of wadmal—a coarse woolen cloth strengthened by strips of leather. Warships were embellished with dragon-heads



carved on their prows. These *drakkars*, or “dragon ships,” terrorized Christians living along the North Sea. Viking raiders often traveled in



squadrons called “wolf packs.” Major invasions brought together hundreds of ships from Nordic kingdoms. An assault on the Irish coast in 896 AD consisted of 12,000 warriors in 250 longboats. In 1066, William The Conqueror required several hundred dragon ships to transport his men and horses across the English Channel from Normandy.

When they were not marauding, Nordic sailors preferred traveling in stubby ships with high sides called *knorrs*. These sturdy vessels had high freeboards making it possible to transport large cargoes and farm animals in high seas. Vessels of 50 to 100-feet in length were common. Smaller vessels carried crews of twelve men. The keel projected nearly two-feet below the hull giving the vessel excellent steering from a side-mounted paddle called a *starboard*, or “steer-board.”

Sailors were accustomed to long voyages far from land. *King Olaf's Saga* praised the speed of Captain Toraren Nevjolvsson's four-day voyage from Norway to Iceland. The *skeid* covered a distance of 600 nautical miles at an average speed of 6 knots. A voyage from Greenland to Norway usually took two weeks across open water. In rough seas and unfavorable winds, the voyage could take several months.

Ancient sailors relied on numerous devices and techniques to aid in navigation. Shadows cast by the sun indicated latitude; a polished “sun stone” revealed the sun's location on cloudy days; and ice crystals in the atmosphere reflected the pattern of lands and seas below. Sailors called it the *is-blik*, or “ice-glimpse” effect.<sup>1</sup> Instead of using maps, most sailors relied on memorized directions and landmarks identified by previous seafarers. They used “bearing-dials” to keep on track of their intended course. The rising sun and pole star helped determine their position.

Modern sailors confirm the seaworthiness of *knorrs* and *skeids*. A crew of Norwegians sailed a *skeid* to the 1892 World's Fair in Chicago. The expedition, led by Norse seafarer Magnus Anderson, traveled from Bergen, Norway, to Newport, Rhode Island, in 28 days (an average speed of 5 knots). Under favorable winds, the vessel cruised through the water at 11 knots—a remarkably high speed for a sail-driven boat.<sup>2</sup> In 1986, Ragner Thorseth circumnavigated the Earth sailing a replica of a *knorr*.

### Vinland Sagas & Historical Accounts

North European seafarers often sailed across the Atlantic. The 6th-century historian Jordanes told of frequent voyages to the western isles in his *History of The Goths*: “This same Ocean has in its western region

certain islands known to almost everyone by the reason of the great number of those who journey there and return."<sup>3</sup> Accounts of Norse voyages to ancient America have been found in Danish, German, and Icelandic archives. Historical references to Norse settlements in *Vinland* span the centuries from the earliest settlements through the revival of European exploration in the 16th century. These accounts confirm that sailors and geographers were well-aware of Nordic colonies in America.

The story of Leif Ericson's 10th-century missionary venture to Greenland is presented in two Nordic sagas: the *Greenlander's Saga* written in 1190 and a later version of the same exploits called *Eric The Red's Saga*, or *The Flatey Book*. They chronicle westward expansion, beginning with settlements in Iceland (ca. 865 AD) and Eric The Red's voyage to Greenland in 981 AD.

Eric's followers established a pagan settlement called Herjolfsness in Greenland. Although winters were harsh, reasonably warm summers were suitable for farming. In addition to wheat, farmers raised dairy cattle, horses, goats, and sheep. Marine hunters and fishermen supplemented the Greenlanders' diet with codfish, whale and walrus meat. They also collected walrus ivory and narwhal tusks to trade for European imports. Greenlanders depended on trans-Icelandic trade for luxury goods, such as iron cooking equipment, ceramics, fine textiles, jewelry, spices, and wine. The population grew rapidly, and within a short time, usable farmlands at Herjolfsness were completely occupied. So the next generation sought fertile lands on Greenland's western shore where they established a second colony known as the "Western Settlement."

In 999 AD, Leif Ericson arrived at Herjolfsness with King Olaf's proclamation of Catholicism as the new religion. The king's threat of a trade embargo was sufficient to convert all but a few die-hard pagans. One of those was Leif's father—Eric The Red—who rejected the new faith because it prohibited plural wives. According to the Catholic history, the women all joined up—leaving Eric out in the cold.

After fulfilling his obligation to King Olaf, Leif decided to explore western lands previously sighted by an Icelandic trader, Bjarni Herjolfsson. In 1003 AD, Leif sailed southwest with 35 followers. The first land they sighted was a barren wasteland which they named *Helluland* (or "slab land"). This description suits the desolate landscape of Baffin Island. Next, they came to Labrador—a flat wooded land with sandy beaches. Leif called it *Markland*, meaning "Land of Forest." South of Labrador was an arcadian land of wooded hills and meadows. Greenlanders thought this region around Cape Cod was an Earthly paradise.<sup>4</sup> When the German Tyrkir found wine grapes growing near their camp, Leif was so pleased that he named the region *Vinland*, meaning "Land of Wine Grapes." At that time, Greenland's parishes were desperate for a cheap





### The Grapes of Vinland

Leif Ericson's uncle Tyrkir shows the grapes that gave America its Nordic name of Vinland, or "Land of Grapes."

source of wine. When the Norsemen left the following year for Greenland, they towed a skiff loaded with grapes.

In 1004 AD, Leif's brother Thorvald led the next *official* expedition to Vinland.

He planned to use sod houses constructed by the previous expedition as a base camp while exploring the coast. Explorers sent out to learn about the land reported evidence of Irish habitations, boundary markers, and fields of "self-sown wheat." Toward the end of the second year, they encountered native warriors whom they called *Skraelings*, or "savages." After a brief skirmish in which Thorvald was killed, the remainder of the party returned to Greenland with a cargo of grapes.

In 1010 AD, Icelandic merchant Thorfinn Karlsefni and his wife Gudrun arrived at Leif's old camp accompanied by 160 pioneers and two Scotsmen from King Olaf's guard. Their intention was to establish a permanent settlement, so they brought seven *knorrs* crammed full of trade goods, tools, provisions and "livestock of all kinds." Their fortified compound was located at a place called *Hop*, meaning "small harbor." This was about 100 miles from Leif's abandoned dwellings. Commerce ensued with natives who bartered furs for cows' milk and pieces of red cotton cloth. A skirmish forced the settlers to retreat to Greenland. Two centuries later, monks in Iceland began Norway's Catholic history when they recorded sagas of Leif Ericson's evangelical mission to Vinland.<sup>5</sup>

By the 14th century, the population of Greenland reached an estimated 6,000 people. There were 280 farms, 17 Catholic churches, 2 monasteries, and one cathedral.<sup>6</sup> In spite of previous setbacks, Norse merchants returned to Vinland repeatedly to barter for furs and harvest lumber—primarily as commodities to be shipped East.

European documents confirm that Vinland was a well-known location to Baltic merchants. Historian Adam of Bremen mentioned Vinland in his *Descriptio Insularum Aquilonis* of 1073, saying the colony was noted for its wines.<sup>7</sup> The Danish historian reported that Vinland was settled by Danes and included the first diocese of Bishop Jon of Ireland in 1053. An 11th-century runic inscription at Honen, Norway, told the story of a voyage to the overseas colony.<sup>8</sup> The exploits of another 11th-century voyager, Vidar Viking, were inscribed in runes on a cliff near Helsingland, Sweden. Vidar sailed to the St. Lawrence river and explored the Algonkian trade route to Lake Superior as far as Isle Royale.



Norse wheat

French historian Ordericus Vitalis referred to Vinland in his *Historia Ecclesiastica* of 1120. Icelandic historian Ari Frodi reported Bishop Eric Gnipson's voyage in search of Vinland in *Libellus Islandorum* (The Icelandic Annals) in 1121. Vinland was identified as a Norse colony in three sagas, the 12th-century *Kristni Saga*, the *Eyrbyggja Saga* of 1250 and the *Gretti Saga* of 1290. The Icelandic *Annals* of 1347 recorded the arrival of a ship in Reykjavik harbor on a voyage from Markland (Labrador) loaded with lumber. In the 14th century, an Icelandic choreography of Abbot Thing-eyrar mentioned the Vinland colony.<sup>9</sup>

Norse settlements prospered for three centuries. By the end of the 13th century, however, the climate began to change for the worse. Meteorologists call this climatic shift a "neoboreal," or Little Ice Age. Cooler summers shortened the growing season—forcing Greenland's farmers to reduce their herds. When Bubonic plague spread to Iceland in 1346, and to Norway between 1347 and 1351, Norway and Iceland were devastated, and trans-Atlantic voyages nearly ceased. Nearly two-thirds of Norway's population perished from the disease.

In 1350, Deputy Bishop Ivar Bardarson of Greenland's Eastern Settlement reported that the inhabitants of the Western Settlement had "abandoned" their farms and dwellings. He deduced that the inhabitants had simply moved to a more temperate climate—presumably Vinland. This exodus of Christian subjects and their unknown fate led Scandinavian King Magnus Eiriksson to dispatch a search party in 1355 AD. The king appointed Paul Knutsson to lead the expedition. The outcome is unknown, although a runestone found in Kensington, Minnesota, might be the epitaph of the ill-fated party. During the mid-15th century, Portuguese, Danish, and Norse sailors crossed the ocean seeking news of the "lost" Greenland colonies. A report by Icelandic Bishop Gisle Oddson in 1637 told of their fate: "The inhabitants of 14th-century Greenland voluntarily left the Christian faith and turned to the American people."<sup>10</sup> That is, the "lost" settlement simply moved west.

### Vinland Maps

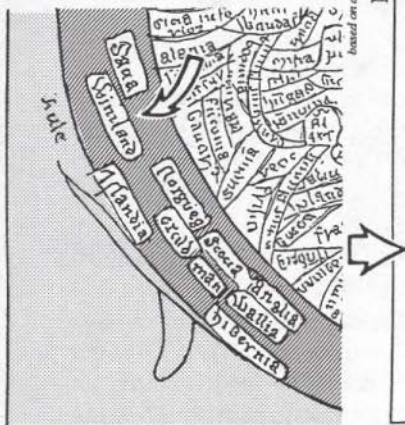
Contrary to popular assumptions of orthodox historians, Norse-American colonies were commonly mentioned on Medieval maps. An important Medieval map by the English monk, Ranulf Higden, is in the map collection of the Huntington Library in San Marino, California. Higden was a 14th-century Benedictine monk in the Monastery of St. Werberg at Chester. His map, completed in about 1350 AD, portrays the "Known World" as an ark-shaped land surrounded by the ocean.

Higden's map shows ten "isles" northwest of Europe including "Winiland" and a vague notation that looks like "Thule" dribbling off the edge of the North Atlantic. Winiland is a clear reference to the Nordic

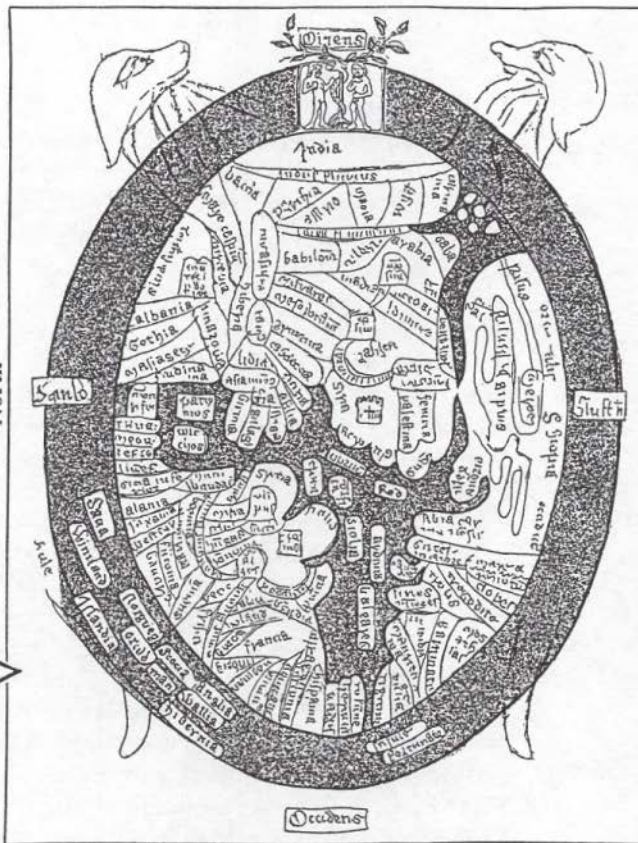




The enlarged section below shows Anglia (England), Wallia (Wales), Hibernia (Ireland), Scotia (Scotland), Man (Isle of Man), Orchard (Orchades or Orkneys), Norgveg (Norway), Islandia (Iceland), Winiland (Vinland), and Saua (Finland).

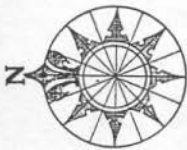


based on a photograph, provided by The Huntington Library, San Marino, California.



### Ranulf Higden's Map from *Polychronicon* 1350 AD

World Map by the English geographer monk shows ten "isles" northwest of Europe (lower left). The second isle on the left is called "Winiland" in reference to a land of grape vines. Albania shown in the northeast quadrant (upper left, east of Gothia) probably represents the North American territory once known as Irland Mikla or Great Ireland. East of India (top of map) is the biblical Garden of Eden — a Paradise on Earth.



Vinland colony. *Win* is the Old English term for wine, and "Vin-land" or "wine-land" was Leif Ericson's designation for the Nordic American colony. Orthodox historians have dismissed Nordic sagas that reported grape vines in North America because the grape vine originated in the Eastern Mediterranean. Historians usually credit 17th-century Europeans with bringing the plant to New England, however French explorers such as Verrazano, Champlain, and Cartier confirmed that abundant grape vines were *already* growing on the East Coast when they explored the St. Lawrence valley prior to the influx of European settlers.

Higden's map is of importance for several reasons. First, it is of *bona fide* pre-Columbian vintage. Secondly, Higden was one of the most prolific authors of his time: the map appeared as a supplement to his book

on geographical history called *Polychronicon*. This popular Medieval reference was duplicated by numerous scribes and translated from Latin into English by 1482. Over 100 manuscript copies are known to exist—attesting to its common availability throughout Europe. The maps use several variations of the name for Vinland, including “Widlad,” “Svinlandia,” and “Winiland.” Columbus was a frequent visitor to monastic libraries, so he was probably familiar with *Polychronicon* and knew about Vinland. A third reason why Higden’s maps are important concerns the unusual spelling of “Win-i-land. It is consistent with “Vin-i-landa” found on a map that Yale University obtained in 1965.

Yale’s Vinland Map is thought to have been produced in about 1440 AD. Although once thought to be a hoax, Yale’s map has been the subject of unprecedented scientific examination including chemical analysis, proton-beam scans, and scholarly studies. Presently, the weight of evidence favors authenticity: researchers at the University of California—Davis found that the map produced a proton reflection pattern that was similar to 15th-century documents like the *Gutenberg Bible*.<sup>14</sup>

The best-known Nordic map is Sigurdur Stefansson’s 1570 copy of ancient sea charts.<sup>12</sup> It shows the approximate sea route between Bergen and *Promontorium Winlandia*—the gateway to Vinland. This map is a composite of more ancient maps compiled using a 15th-century mapping grid. Norse archeologist Helge Ingstad found a similar map in Hungarian archives with a copy date of 1599.<sup>13</sup>

Bishop Hans Resen incorporated numerous ancient charts into a North Atlantic territorial map produced in 1605. Resen’s map includes land areas that are similar to the Stefansson map along with notations showing subsequent French and Portuguese discoveries. A notation on the map informs us that it was based on charts “many centuries old.”<sup>11</sup>

Several other maps of accepted pre-Columbian vintage show archaic forms of Vinland. One of these is the Lubeck Map of 1475 by an anonymous cartographer. This map (also known as the *Rudimentum Novitiorum*) has an island with a castle extending off the northwest edge of the Atlantic. The island is named “Winlad”—which is an abbreviation of Winland. Once more, the mapmaker chose an Old English word for wine grapes (*win*) confirming the map’s portrayal of Nordic Vinland.

Relying on ancient sources, Donus Nickolaus Germanus prepared a map of the North Atlantic in 1466 that showed Vinland as part of a peninsula of land including Norway and Old Greenland. His map uses a Danish version of Vinland—spelled *Venthelant* and pronounced “Vinte-lant.” The association with wine grapes is clear from a North European word with a similar root: *vintner* (wine merchant). By the 15th century, geographers were well aware that Greenland Isle was separated from Norway by a large sea. Consequently, maps by Germanus show a



Winland

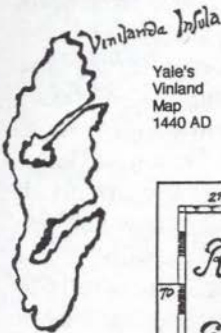
Ranulf Higden, 1350 AD

Svinlandia

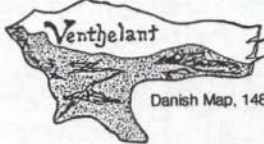
Ranulf Higden, 1350 AD

Widland  
à Lyda

Ranulf Higden  
1350 AD



Yale's  
Vinland  
Map  
1440 AD



Danish Map, 1482



Johan Ruysch  
World Map of 1508

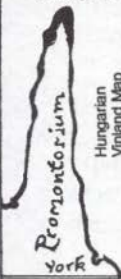


Sigur Stefansson North Atlantic Map 1570 AD



Rudimentum  
Novitiorum  
Lubeck, 1475

Winlandia

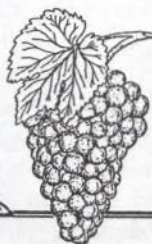


Hungarian  
Vinland Map  
Tynava, 1599



Winlandia

Stefansson Map, 1570



# The Vinland Maps

Promontorium Vinlandie l'ua  
fate Vinlandie pulere & c

(inru stelo) (S maria) (Dru)

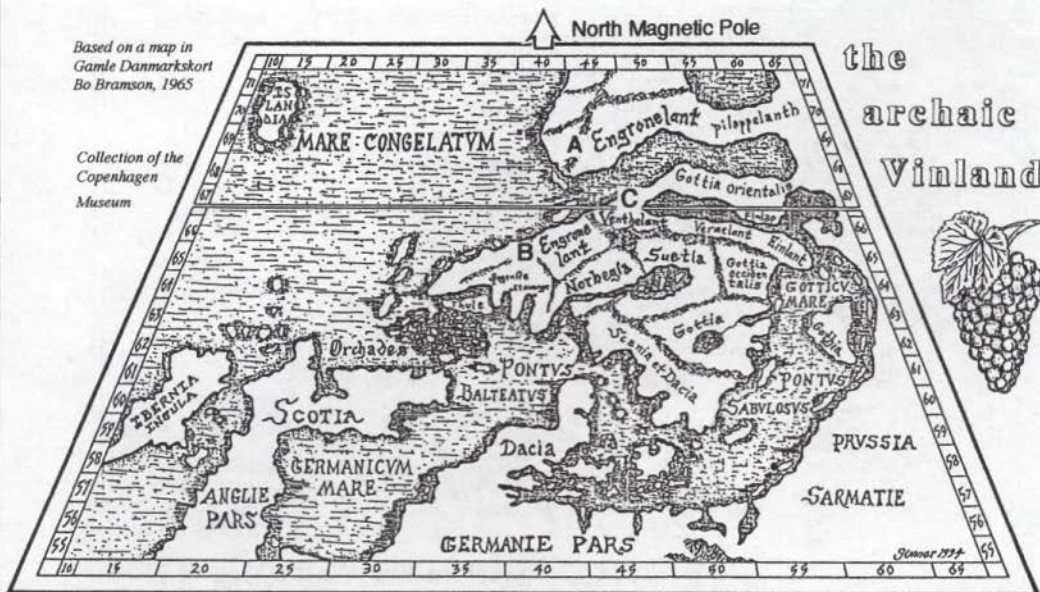
Bishop Resen Map, 1605  
a.k.a. Christian Fresio Map

LEOPOLD  
CORTE  
R. J. L. S.

Hundreds of pre-Columbian maps show the approximate location of the 11th-century Norse Vinland colony in North America. Examples shown above are sections taken from North Atlantic and world maps. At the center is Sigur Stefansson's 1570 copy of ancient sea charts. Pre-Columbian maps of New World territories resulted from the mission of Catholic monks to record the progress of world evangelism. Promontorium Winlandia stood for Newfoundland—the gateway to Vinland det Gode or "Greater Vinland."

Based on a map in  
Gamle Danmarkskort  
Bo Bramson, 1965

Collection of the  
Copenhagen  
Museum



the  
archaic  
Vinland



**key to map**

- A = Upper Greenland
- B = Lower Greenland
- C = Venthelant  
or Vinland

**Donnus Nickolaus Germanus Map of 1482**

This Danish map by Germanus is often called the "Donis Kort." It incorporates two versions of Greenland into one map: the upper Greenland (Engronelant) is from contemporary sea charts; the lower Greenland which is combined with Vinland (Venthelant) and Norway (Norbegia). This is a legacy from centuries-old traditions: ancient geographers assumed that all the lands between Norway and North America were part of a single peninsula.

*second* Greenland, or New Greenland, north of Norway.

Germanus issued Latin editions in 1468, and 1474. It was copied and revised by Danish mapmakers. A 1482 Danish version of the Germanus map is known as the "Donis Kort." Another revised version was published by Henricius Martellus in Florence circa 1480. A Strassburg version followed in 1513; and Martin Waldseemuller issued a copy in 1525. These later maps were printed by the thousands as a result of the new printing presses available in Europe. However, it was not long before cartographers ceased mentioning the ancient Norse colony.

**Magnetic North and The Location of Northern Lands**

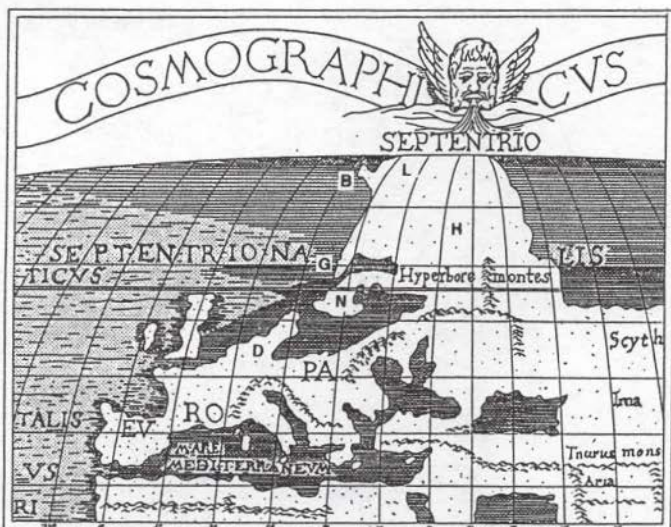
Although 15th-century cartographers often heard about such territories as "Thule," "Hyperborea," "Frisland," "Albania," "Vinland," and "Greenland," they were uncertain of the precise locations. On most maps, Thule is shown southwest of Norway; sometimes it appears north of Norway, north of Russia or even *east* of India. Some maps have both Thule and Iceland; other maps use Thule or "Frisland" as the designation for Iceland. Likewise, Vinland and Greenland are shown in numerous *northern* or *eastern* locations on ancient maps. However, the true geographic locations of Greenland and Vinland were far to the *west* of Europe. This confusion of placement was the consequence of conflicting





key:

- L = Labrador
- B = Baffin Isl.
- H = Hyperborea
- G = Greenland
- N = Norway
- D = Denmark



## HYPERBOREA Joachim Von Watt's Map of 1534

One reason why 15th-century Europeans didn't realize that Columbus simply reached already known lands was that North America was thought to be a huge peninsula North of Norway beyond the Hyperborean mountains. These lands were shown to the north because their location was based on compass bearings which actually pointed toward Hudson's Bay—the location of the North Magnetic Pole. By the early 1600's, geographers realized that Greenland was actually several thousand miles west of its location on this map.

legends and reports by explorers—some of whom relied on celestial navigation, while others used the compass by the 13th century.

Although the compass was a boon to seafarers, it was the nemesis of cartographers. In northern latitudes, the compass is of limited reliability for mapping because of phenomena known as magnetic variation and magnetic deviation (or declination). Above the Equator, compass needles point towards the North Magnetic Pole located near Hudson's Bay. James Ross calculated the 1831 location of the magnetic pole at latitude 70° North; longitude 96° west (or 1,400-miles south of True North). The amount of deviation near Greenland can exceed 50°. Neither sun nor constellations were of much help to confirm direction of travel, because most voyages occurred during Summer months when the sun hovers above the horizon. During this time, the North Star—which was the principle direction-finder for ancient travelers—was concealed by daylight. The result was that sailors using compasses believed they were heading North, when in fact they were voyaging to lands far to the west near the Magnetic North Pole—or Hudson's Bay. Norse seafarers called this bay "Markland's Botnar." Use of compass directions for travel led to the misplacement of *western* territories in erroneous locations *northeast* of Norway on most 13th through 16th-century maps.

Modern historians have ridiculed the ancients for believing in

traditions of temperate climates and seas around the North Pole. These traditions grew in popularity from Roman times to the expansion of the Norse commercial empire. According to the Roman scholar Pliny-The-Elder, people called "Hyperboreans" lived amidst orchards and wheat fields in a temperate climate *beyond* the North Wind (or North Pole). Norse King Haakon knew such a northern land existed because of extensive overseas commerce and travel to Nordic settlements in the far-off lands. In 1261 AD, Haakon declared sovereignty over lands reaching from "Norway to the North Pole." This declaration wasn't based on wishful thinking; it was based on the king's knowledge of his domain. The ancient historian Olaus Magnus of Sweden mentioned that King Haakon sailed to "Greenland and beyond." He was not the first Norse king to undertake such a journey: 11th-century historian Adam of Bremen reported that "Harold, Prince of Nortmanni, explored the breadth of the Northern Ocean to the boundaries of the Earth."

Many 15th and 16th-century maps portrayed northern lands as a huge peninsula above Europe reaching toward the North Pole. It was variously called "Hyperborea" or "Greenland." A classic example is Joachim von Watt's 1534 world map published in Zurich. Watt's map shows a huge land area stretching all the way from the Hyperborean Mountains northeast of Norway to the North Pole.

Since no lands really exist in this location, it is not surprising that many historians regard the northern lands as "a Nordic fantasy inherited from Roman traditions of Hyperborea." However, if we realize that sailors and cartographers were referring to lands situated between Norway and the Magnetic North Pole, it is apparent that the so-called "northern lands" were simply misplaced western territories.

Nordic sagas and historical accounts confirm that this is what happened. In the *King's Mirror* (1250 AD), Archbishop Einar Gunnarson reported that: "Greenland lies on the outermost edge of the Earth *towards the north*;...the land has beautiful sunshine and is said to have a rather pleasant climate." The bishop was surprised by the temperate climate, because most scholars believed northern lands were too frigid for habitation due to climatic zones encircling the Earth. English scholar Roger Bacon shared the bishop's surprise at the temperate climate in the "Polar regions." In his 1275 dissertation *On The Habitation of The Earth*, Bacon reported that:

How far habitation extends north, Pliny shows through actual experience and by various authors. For habitation continues up to that locality where the poles are located; and where the day lasts six months and the night for the same length of time. Martin, moreover, in his description of the world, agrees with this statement; whence they maintain that in those regions dwells a very happy race.





# Greenland Province

Maps by Claudius Clavus in the *Nancy Manuscript* (1424) and by Jacob Ziegler (1532) demonstrate that some geographers realized the connection between Norse territories reaching far down the western Atlantic and lands (Terra Bacallaos) later identified as Newfoundland or Labrador. The Clavus Map (immediate right) was unusual for its time because it showed Norse territories in their true position west of England. Clavus must have had access to celestial coordinates for such an accurate and bold departure from the mapping traditions of his peers. See Nicholas of Lynne, Chapter 14.



## Greenland Province

During the mid-15th century, cartographers produced maps having two "Greenlands" (usually some variation of "Engroenland" or "Grvtlad"). The 1539 pictorial map by Olas Magnus, for example, has two peninsulas of land marked "Grvtladie Pars" across the northern border. The reason for the two Greenlands is that sailors and merchants referred to two different places with the same name: one was an island—the modern "Greenland;" the other was a province extending far into North America.

A map by Claudius Clavus in the *Nancy Manuscript* of 1427 shows the tip of "Gronlandia Provincia" west of Ireland. The bottom tip of the map extends down to the latitude of Labrador and the St. Lawrence river before falling off the edge. How much farther south and west the land extends is left to the imagination of the viewer. The Clavus map is unusual, because most other maps of the 15th century showed that Greenland was situated *northeast* of Norway. Use of the term "Provincia" reveals that Clavus intended to include northern and western territories in addition to the island commonly referred to as "Engroenland." Confirmation of this interpretation is found in a 1532 map by Jacob Ziegler. Northern lands on this map are portrayed in a similar fashion to their appearance on the Clavus Map, however Ziegler's Map clearly shows that "Gronlandia" refers to North American territory: beneath the term "Gronlandia" is a region called "Terra Bacallaos"—the Portuguese term for Newfoundland.



Another map showing the use of "Groenlan" to represent North American territory is Nicola Van Sijpe's 1589 world map. On Sijpe's map, "Groenlan" includes Greenland Island, Canadian provinces, and East Coast territories as far as Chesapeake Bay. Sijpe's "Groenlan" is

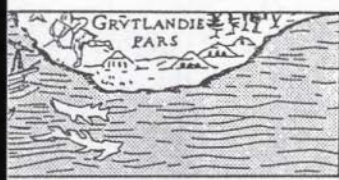


portrayed as a temperate land of abundant trees that is comparable to “Hyperborea” of Roman legend. Pietro Coppo’s 1528 map shows *Isola Verde* (Green Isle) as a huge province beyond Greenland Island. Collectively, these maps by Clavus, Ziegler, Sijpe, and Coppo refute the common assumptions held by historians that “Greenland” referred *only* to island settlements. When we realize that historical references to “Greenland” actually represented the greater Province which included

much of Canada and the East Coast, then many ancient reports that *seemed* impossible begin to make sense. For example, a letter written in 1366 by King Peter of Cyprus concerning his voyage to Norway’s Atlantic territory claimed the province was “so huge” that it required three years for tax collectors to complete their rounds.

According to the king, the northern territory was situated across the ocean beyond *Godeland*—in reference to *Vinland det Gode* (or Great Vinland). Vatican records of beaver pelts, elk skins, sable, ermine, and black bearskins supposedly sent from “Greenland” actually verify ongoing trade with North American colonies, because these fur-bearing mammals were only present on the western mainland. In 1492, Pope Alexander VI appointed the Benedictine monk Mathias as the new Bishop of Greenland Province. His bishopric was not a deserted island: according to a letter written by geographer Martin Behaim in 1493, colonies of Russian Goths were still active in Greenland (Province).

European explorers in the 16th century encountered remnants of former Norse colonies scattered along the East Coast. The most populous and well-organized of these North American settlements was a confederacy of villages called “Norumbega.”





# Nicola Van Sijpe 1589

The northern section from Van Sijpe's world map shows the English concept of "Groenlan." Included are Greenland Island and the northern half of North America. Trees in the northeast above the Arctic Circle relate to accounts of sailors that Northern lands had forests and a temperate climate.



## Norumbega

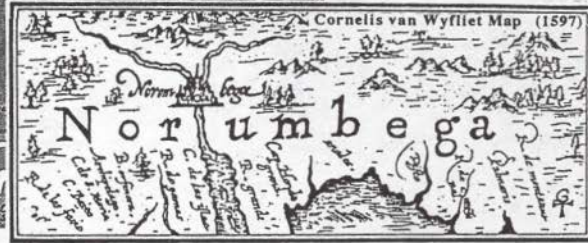
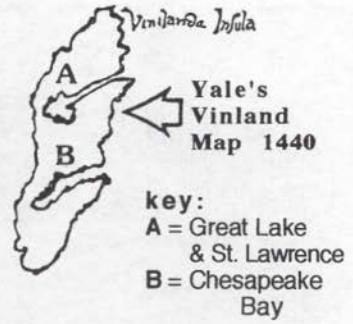
The Florentine navigator Giovanni Verrazano is credited with identifying a settlement called "Norumbega" on the Hudson river. His French-sponsored expedition toured the region in 1524 in an attempt to locate a Northwest passage to China. Two maps were produced from his notes: one by cartographer Vesconte Maggiolo in 1527 and the other by Gerolamo Verrazano (Giovanni's brother) in 1529. Maggiolo's map reports a "Norman Villa" near Chesapeake Bay and a "Vindanus portmorius" near Cape Cod. Gerolamo's map shows *oranbega* in the vicinity of New York. This is the first recorded mention of the Norumbega settlement. In *Raccolto III* of his chronicles (1556), the French historian Ramusio recorded a "Discorso" or letter sent to the king in 1539 by a *gran Capitano*. The letter states that: "The land is called by its people Nurumbega." The Discorso says that the country reaches from Cape Breton to Florida—approximately 1500 miles.

Variations on the spelling of Norumbega appeared on scores of maps published during the 16th century.<sup>15</sup> Icelandic historian Torfaeus assumed the name was derived from the old name for Norway: Norbega. Other possibilities include: the German province of Norimberge; the Norse province Normoria; Nortmannia which is an old name for Greenland; or *Nordhan-bygda*, which is a Norse word meaning "northern settlement." A farcical entry is the story of a Frenchman who was amazed by the towering palisades of the Hudson river and exclaimed: "L'Anormee Berge!" Some writers credit the Abnaki tribe for the word *aranm-begk* (which means "quiet place between rivers").

French navigator Jean Fontaneau (Alfonse) visited a fort Norumbegue in the vicinity of Hudson's river in 1542. He noted that: "There is a fine people at this city and they have furs of many animals." The French



## Vinland



### Norumbega & Vinland det Gode

Most 16th-century maps called the region between Florida and Canada *Norumbega*. This is the same territory thought to have been occupied by Norse settlers in the 14th century and called Vinland det Gode or "Greater Vinland." Correspondence between "Vinilanda Insula" (Vinland) on Yale's Vinland Map and Zaltieri's Norumbega—both with a lake and a bay—confirms European cartographical knowledge of Vinland along the East Coast of North America by the mid-1400's.

geographer Andre Thevet visited Norumbega in 1556 and reported that it was situated on one of the world's most beautiful rivers. English sailor David Ingram trekked through the wilderness from the Mississippi to Norumbega in 1569. He reported farms, fur-trading, and people riding horses. In 1583, a trader named Bellinger reported a city of houses with bark roofs where he witnessed an active market.



Flemish geographer Mercator placed Norumbega on the Rio Grande (or Hudson river) on maps published in 1569 and 1587. Following his lead, Norumbega was commonly used to designate the region until the mid-1600's when "New England" became a popular name.

When Champlain failed to locate the settlement during a cruise along the Penobscott river in 1604, he promptly declared Norumbega a Norse myth. Some writers chastise Champlain for sailing up the wrong river. However, it is possible that the settlement was no longer in its traditional location. The inhabitants might have fled west to escape encroachment by European colonists. A 1589 map by Urbano Monti shows Noremberga situated west of L'Arcadia Province—or near the Great Lakes.

Memories of a "northern" territory lingered among Europeans: John



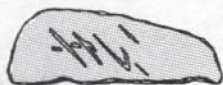
runestones



Baffin Bay Runestone



Medina Runestone  
Tucuman, Argentina



"Bishop's Church," Newport, R.I.



Kensington  
Runestone  
Kensington, Mn.  
1362 AD

Hoenhagen, Greenland  
1200 AD

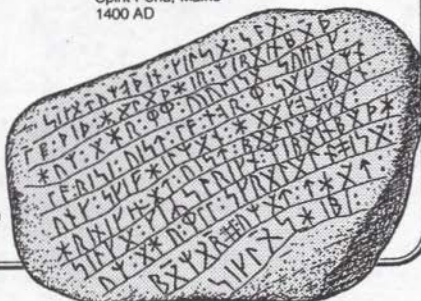


Byfield, MA  
gravestone



Spirit Pond, Maine  
1400 AD

Spirit Pond, Maine  
1401 AD



Milton, a 17th-century English poet, wrote of the stormy gusts of ice and hail that came "from the north of Norumbega." He spoke of a bygone era when Norumbega was among the Norse colonies thought to be situated near the North Pole.



Evidence of Contact

Historian Herbert Taylor believes 3,000 Greenlanders migrated to Vinland before the Little Ice Age prevented escape and before plague had a chance to ravage the settlements.<sup>16</sup> Norse refugees established new homes on the eastern fringe of Irish territory (*Irland Mikla*) and gradually expanded to the west. They called their new homeland *Vinland det Gode*, or "Greater Vinland." They adopted the name *Norumbega* when the Norse-American confederacy grew beyond the borders of Leif's old territory. Judging from the widespread ruins of ancient fortifications, longhouses, iron furnaces, and shipyards found in eastern North America, it appears that Norumbega's settlers prospered for several centuries.

**Artifacts: Ruins, Nails, Axes, Smelters, Chisels, & Inscriptions**

One of the earliest reported relics of Nordic occupation was an ancient tower at Newport, Rhode Island. The eight-sided structure was made of stone masonry in the tradition of North European *lavabos*, or “cleansing rooms.” Such *lavabos* were a common feature of Catholic churches between the 12th and 14th centuries. Swedish architectural historian Oscar Montelius identified the tower as a 12th-century Norse structure.<sup>17</sup> The “rownd stone towre” was reported by an English surveyor in 1632, before it became property of Colonial Governor Benedict Arnold. The tower has been repaired and reconstructed over the centuries. It was partially blown up during the Revolutionary War, and the foundation was excavated by treasure hunters. It is not surprising that archeologists found a Colonial pipe inside the structure’s foundation; radio-carbon dating of tower cement has not resolved the debate over the tower’s age.



During the early 1800’s, American antiquarian Josiah Priest found ruins of ancient fortifications throughout the eastern states. Only Europeans made earthworks, because their construction required metal shovels, and native peoples were unfamiliar with shovels, earthworks, and moats. Priest reported excavations of ancient graves containing European artifacts, such as a 10th-century glass bottle and a steel-edged iron hatchet. The ruins of two ancient forts near Gasconade, Missouri, contained fragments of cast iron.<sup>18</sup> Local tribes claimed the forts belonged to “foreigners who mysteriously vanished.”

In 1880, Boston archeologists Cornelia and Eben Horsford excavated the ancient ruins of Norse houses and wharves at Watertown, Massachusetts. They found an old Norse grinding stone at the site of an abandoned mill, and they found remains of a dam and a canal.<sup>19</sup>

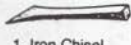
In the late 1800’s, American historians were highly skeptical of Nordic claims that Leif Ericson “discovered” America before Columbus. Consequently, farmer Olaf Ohman’s 1898 unearthing of a Nordic runestone near Kensington, Minnesota, was the subject of much derision and debate. Ohman recognized the inscription chiseled on the face of the 200-pound slab to be Norse runes. Runeologists translated the text as a memorial to a band of Norwegians and Swedes who were attacked by natives. However, historians decided it was a hoax: the runes, they said, were “too recent” for the presumed date of 1150 AD. Later, it was discovered that the carving took place in 1362 AD—two centuries later than originally thought. In 1990, the leading expert on Norse runes in America, Richard Nielsen, verified the text of the Kensington runestone:



1000 BC-1350 AD

12.2

Norse Broadsword



1. Iron Chisel Newfoundland



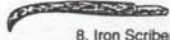
2. to 5. Iron Boat Rivets Va., Penn. & Newfoundland



6. Spear Point from Wis.



7. Iron Handle



8. Iron Scriber



after Vandervloegt (1991)  
Canadian National Park Service



arrows & utensils Middleboro, Ma.



fire-steel Comorant, Mn.



21. Norse Coin Blue Hill Bay, Me. 11th cent.



22. Iron Hook Virginia

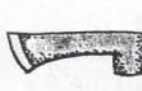
IRON AXES



9. Alexandria, Mn.



10. Milan, Mn.



11. Khokio, Mn.



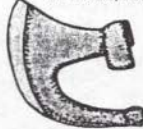
12. Sundburg, Mn.



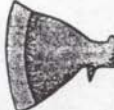
13. Brandon, Mn.



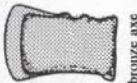
14. Mora, Mn.



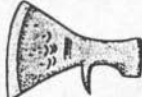
15. Norway Lake



16. Nova Scotia



17. Brantford, Ont. Bronze Age Axe



18. Plymouth, Ma. Tifnag script



19. Caulking Tool Virginia



23. Bronze Cook Pot Hammersham, Ga.



after Holand (1956)

it is an authentic, 14th-century Norse artifact.<sup>20</sup> Nielsen also translated an inscription found at Spirit Pond, Maine. He has dated the artifact to 1401 AD-based on the ancient Norse Easter Table. Nielsen reported his exhaustive analysis in Volume 22 of *ESOP* (1993).

Between 1946 and 1950, civil engineer Arlington Mallery excavated numerous Nordic sites from Virginia to Newfoundland. He found remains of 20 Nordic iron-smelting furnaces along the Ohio Valley, and he located scores of Nordic habitation sites along the St. Lawrence river.<sup>21</sup> He identified 14 Norse sites on Newfoundland and many others along the shores of adjacent Sop's island. Mallery's associate, James Howe, found remains of 16 Norse iron-smelting furnaces in Virginia's Roanoke Valley and collected 400 pounds of iron objects. They found slag from peat-bog iron and pieces of solid iron "blooms" which formed inside the ancient smelters. Mallery noted the variety of artifacts at Nordic sites:

Easily identified among the items were many Viking-type tools: spikes and rivets, scribes for marking wood, caulking tools used in building Viking ships, chisels and axes, boat spikes and boat rivets. The chisels and axes were formed by welding together thin sheets of iron by cladding. The rivets were duplicates of rivets found in a Viking ship, the *Oseberg*, which was discovered in 1903 under a mound on the shores of Oslofjord, Norway.<sup>22</sup>

XI R A M W F 1

Rune Inscription  
Heavener, Oklahoma

after Farley (1994)

On Sculpin Island near Labrador, Mallery found the masonry remains of 12 Norse houses. Nearby, archeologist Junius Bird of the American Museum of Natural History found Norse steatite pots, iron boat spikes, and clinch rivets. On Sop's Island near Newfoundland, Mallery found the remains of Viking longhouses, a Viking iron axe, and a chisel that had been hardened by cladding. Mallery attributed the artifacts to settlements between the 12th and 14th centuries. In order to verify that tools, rivets, and nails were not intrusive remains from 17th-century Europeans, Mallery submitted specimens to Battele Memorial Institute and to the National Bureau of Standards. Metallurgists confirmed that Mallery's specimens were of a more ancient technology than samples obtained from 17th-century Colonial settlements.<sup>23</sup>

Archeologist Frederick Pohl searched the Cape Cod region for evidence of ancient Norse habitations. In 1952, he excavated remains of a longhouse and palisades near Hyannis, Massachusetts. He attributed these remains to Leif Ericson's Vinland.

In 1964, Norwegian archeologists Anne and Helge Ingstad found the ruins of a Norse settlement at L'Anse aux Meadows in northern Newfoundland.<sup>24</sup> During excavation of several longhouses, the Ingstads found pieces of iron and a Nordic spindle whorl. The site corresponds to the location of *Promontorium Winlandia* on ancient maps indicating the gateway to Norse settlements in *Vinland det Gode*.

Gloria Farley, author of *In Plain Sight* (1994), identified an important Norse landmark near Heavener, Oklahoma. A stone wall outside the city that was inscribed with strange letters had been known for decades as "Indian Rock." However, careful examination of the inscription revealed that it was actually written in Norse runes. Farley's efforts led to protection of the site as a state park in 1970. Runeologist Richard Neilsen believes the inscription is a boundary marker left by an old Viking—circa 750 AD. His translation: "this is Glome's Valley."

In 1972, Canadian archeologist Thomas Lee excavated remains of Norse longhouses at Ungava Bay, Labrador. Natives reported legends that the structures were left by "white men." Lee also found Eider Duck shelters that Nordic traders used to harvest duck down for making down comforters and clothing. Inuit natives found a Norse iron axe at the site, and mineralogists at Ottawa's Department of Energy, Mines and Resources determined that it was forged by the Norse cladding process.<sup>25</sup> William Fitzhugh of Canada's National Museum of Natural History identified stone foundations of 26 ancient structures at Nulliak Cove, Labrador. He attributes these to Nordic hunting parties.<sup>26</sup>

Recent discoveries have added to the growing list of Norse artifacts in America. Historian W.R. Anderson has amassed a catalogue of artifacts and inscriptions from across America which have been reported

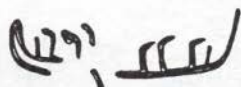


## SHIP PETROGLYPHS

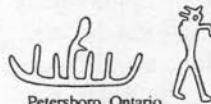
Bohuslan, Sweden



Petersboro, Ontario



Babb's Island, W. Va.



Petersboro, Ontario  
1000 BC



Owens Valley, Ca.

IN ANCIENT AMERICA

in the periodical *Vikingship*. Explorers have reported numerous triangular "mooring holes" along the shores of Hudson Bay. The distinctive holes were used to secure anchor cables from Norse ships to stones on the shore. A Norse penny minted before 1080 AD was found during excavations at the Goddard site near Penobscott Bay, Maine.<sup>27</sup> Runic inscriptions have been identified on Baffin Island, as well as in Minnesota, Oklahoma, Massachusetts, Maine, Oregon, Paraguay, and Argentina.<sup>28</sup> Harvard scholar Barry Fell and Danish historian Jon Galster identified petroglyphs at the Petersborough site in Ontario, Canada, as a memorial of Norse King Woden-lithi's Bronze Age mission to trade for copper circa 1700 BC. The petroglyphs of ships are similar to rock carvings in Sweden and Denmark circa 2000 BC. Fell also reported the nearby discovery of a Scandinavian Bronze Age axe.<sup>29</sup>

### FOREIGN WORDS

32

English	Old Norse	Iroquois
fire	gnista	azista
ice	isa	can-isa
testicle	eista	xista
basin	ker	a-ker-at
direction	at	ati
enter	inni	inni-on
kettle	kanna	kanna-ken
stone	steinn	o-stain-ra
wife	ekk ja	ech-ro
woman	kona	a-kon-kwa
sea god	niord	nioh
devil	loki	loki
cape	kapa	cabata
day	dagr	kiven-dagi
slow	seinn	saien
near	naerm	niyarea

### The Norwegian-Iroquois Language

Frontier testimonials tell of conversations between Norse settlers and natives. In 1626, Norseman Cornelius Sand acted as an interpreter between Mohawks and the Dutch in New York.<sup>30</sup> In 1890, a Chippewa native told Minnesota journalist Johan Banner about ancient visitors who taught the tribe strange words. Banner identified the words as Old Norse. Arlington Mallery examined Iroquois vocabularies recorded by Cartier in 1535; and he identified scores of words that were derived from Old Norse.<sup>31</sup>

### Norse Descendants in Ancient America

European explorers and settlers reported numerous encounters with light-skinned natives. Verrazano's 1524 journal reported tall, "white natives" of the Narangansett Bay tribe of New Jersey.<sup>33</sup> In 1542, French Governor Sieur DeRoberval described the Iroquois as "very white, but they paint themselves for fear of heat and sunburning."<sup>34</sup> In 1604, French explorer Samuel DeChamplain encountered fair-skinned natives living in eastern Canada.<sup>35</sup> Because of their physical features, DeChamplain

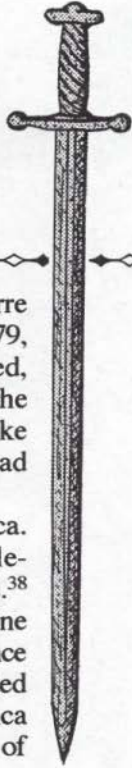


longhouse (reconstruction)  
Ungava Bay & Waterford, Ma.

Fjord Pony  
Statuette  
Greenland  
1300 AD



after Kronau (1892)



believed they were of Nordic heritage. In 1698, French Jesuit Pierre Charlevoix saw bearded, blond-haired natives in Labrador. In 1779, American explorer George Rogers Clark encountered light-skinned, blond-haired, and blue-eyed warriors.<sup>36</sup> Colonists reported that the Lenape-Renawauk (or New Jersey Delaware tribe) were most like Europeans in speech and appearance. Lenapes and Algonkians had traditions that their ancestors came from across the Atlantic.<sup>37</sup>

Nordic seafarers traveled as far as Central and South America. Thirteenth-century murals at Chichen Itza in the Yucatan depict pale-skinned people with blond hair being held captive by Mexican natives.<sup>38</sup> In 1535, Peruvians called the invading Spaniards *Viracochas* (divine whites) because they resembled an ancient race of white people who once lived on Lake Titicaca. Indeed, light-skinned chieftains still dominated the country: Spanish conqueror Francisco Pizarro described the Inca chieftain Atahualpa and his family as being “whiter than the people of Spain.”<sup>39</sup> According to Inca legend, ancient cities in the Andes were built by a race of light-skinned, blue-eyed warriors called the Chacha-poyans.<sup>40</sup> Their descendants are still living in Peru’s jungles.<sup>41</sup>

Twentieth-century ethnographers found “blond” Inuits (Eskimos) living on Newfoundland, Labrador, and Baffin Island. They were descendants of mixed parentage from the days of ancient Norse commerce and migration. Archeologist Thomas Lee found the skeletal remains of mixed European and Inuit stock in northern Labrador.<sup>42</sup> Arlington Mallery reported “full-blooded” Iroquois who had the same appearance as Swedes.<sup>43</sup>

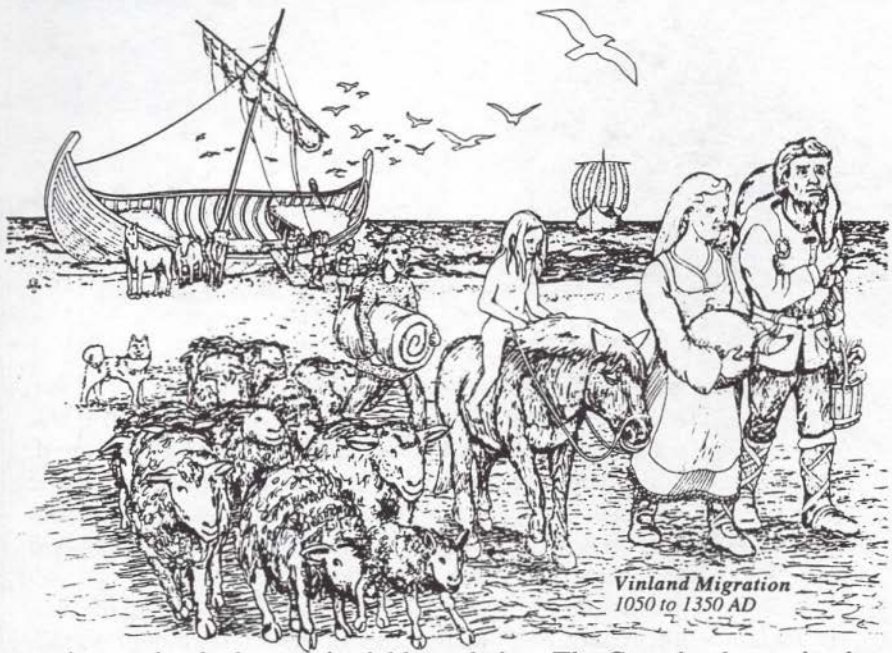


Norse-Inuit native  
Labrador, 1870

## Nordic Impact on Native America

The Nordic exodus from Greenland in the 14th century had profound consequences for Native Americans and Irish settlements in *Irland Mikla*. The fact that natives still called the region of Norse settlement *Norumbega* when Verrazano toured the East Coast reflects the tremendous impact the





Vinland Migration  
1050 to 1350 AD

ancient nation had on territorial boundaries. The Greenlanders arrived fully supplied with livestock and grains. The new immigrants had sufficient numbers and military power to expand the foothold of Vinland into a powerful kingdom rivaling those of Northern Europe. However, most of their achievements were swept away in the 14th century as the World Plague wrapped its cloak of death around North America.

During excavations of ancient Irish and Nordic ruins in North America, Arlington Mallery found sufficient evidence to tie the sudden abandonment of America's ancient European settlements with the Black Death that struck Europe in the 14th century. At one Ohio site, Mallery found heaps of skeletons lacking proper burial; he was struck with the analogy to European cities where people died so fast from bubonic plague that there were not enough survivors to bury the dead. European refugees could have carried the disease to America, or the disease could have spread from South America as a result of commerce.

Plague struck hardest at fortified Nordic communities where people lived in close quarters. Although native villages were not as vulnerable, urban centers were devastated. Survivors fled to the forest, and Norse descendants merged with Iroquois tribes. Some of the Nordic language survived; natives incorporated the Norse *wergild* system of justice and the *athing* system of representation. Lewis Spense, author of *Myths and Legends of The North American Indians* (1914) observed that the Norse legend of the sun god Balder found its way into Algonkian folklore in the guise of Glooskap and Loki. Some tribes built longhouses after the Norse fashion, and they constructed palisades.<sup>44</sup>

### Impact on Europe

Scholars are divided regarding the significance of Vinland's imports

to Europe. North American furs, ivory, and lumber found their way to Baltic ports, and they accounted for a major portion of the Crusaders' Tax levied by the Vatican.<sup>45</sup> Vinland merchants also brought *maize*, falcons,



American Turkey  
Schleswig Cathedral mural  
Germany, 1280 AD

and turkeys to Baltic ports. Botanist John Finan, author of *Maize in The Great Herbals* (1950), implicated Norsemen in the transport of a "Northern Flint" variety of *maize* to Europe.<sup>46</sup> Historian Orville Hope identified the American turkey on a mural in a 13th-century German cathedral. A Greenland source is indicated because of the transoceanic trade network operated by Germany's Hanseatic League.



maize

### The End of Official History

In 1520, Archbishop Erik Valkendorf prepared to sail to Greenland. His goal was to reestablish the bond between the distant parishes of the Western Atlantic and the Mother Church in Rome. However, the mission was aborted when the Protestant reformation swept through Scandinavia. By 1536, the Catholic Church was outlawed in Norse territories, and the role of monks as official recorders of Norse history ceased. It was also the end to any interest the Vatican might have had in Leif Ericson's role as a New World evangelist. For many years, Vatican geographers refused to recognize the fact that Norway's ancient Catholic colony in the "Far-North" was directly linked to the New World "discovered" by Columbus.



Catholic medallion  
Spirit Pond, Maine  
1401 AD

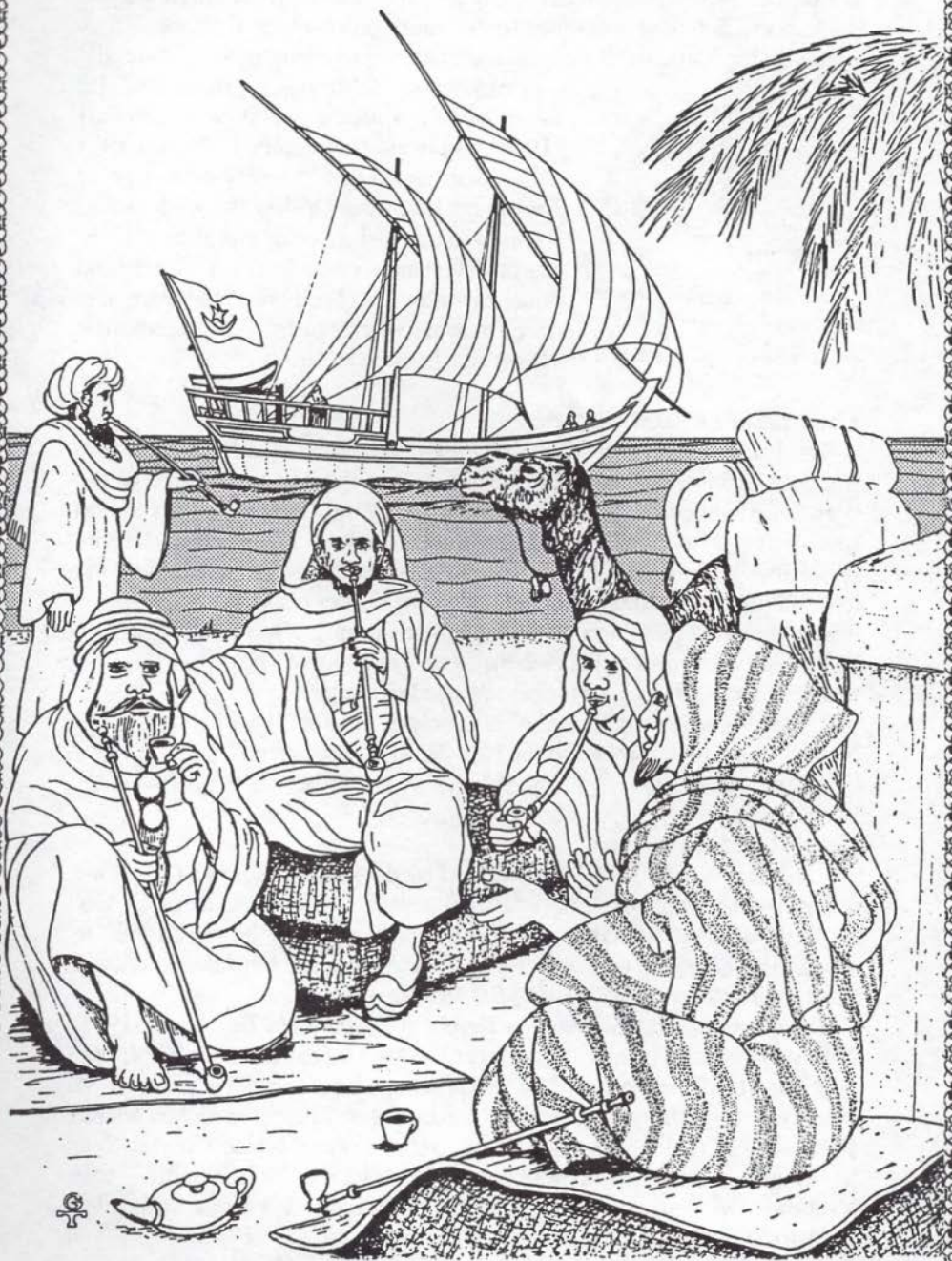
### Columbus Forewarned

Historians have long been puzzled by the peculiar actions of Spain's aspiring discoverer of America, Christopher Columbus. In 1477, Columbus sailed to Iceland, where he heard sagas of Norse travels to Vinland. According to a story Columbus told his son Ferdinand, he even tried the northern route, sailing far west of Iceland.

Several authors, including J. Tornoe (*Columbus In The Arctic*, 1965) believe Columbus sailed past Greenland with the Johannes Skolp expedition. Had the seas been calmer, perhaps he would have pressed on. However, something else deterred the explorer: his real goal was Marco Polo's Isle of Gold in the East Indies. After visiting Iceland, it was clear to Columbus there was no gold across the desolate North Atlantic—only Vinland's wild grapes. So, Columbus huddled in his parka and sailed back to Spain.







**Trans-Atlantic Produce Merchants**  
Arabian traders near Morocco enjoy the latest shipment  
of tobacco from America, circa 1100 AD.



## MERCHANTS OF ARABIA

(630 AD—1492)

Moslem seafarers traveled round the world mapping the continents, establishing colonies, and spreading the Islamic faith. Merchants from Arabia reached America by the 11th century. Between the 7th and 15th centuries, Moslem traders played a major role in building cultural and economic relationships between Asia, the Middle East, and Europe. The resulting commercial network served as a conveyor of plants across the oceans. Moslem sailors brought American plants to markets in Spain, Sicily, Morocco, Egypt, Arabia, Turkey, Persia, India, Indonesia, and China. By the 12th century, merchants in Toledo, Spain, and Palermo, Sicily, sold Native American *maize* and pineapples. In Constantinople (later Istanbul, Turkey), Christian shoppers purchased American tobacco and poultry imported by Moslem seafarers.

At a time when Europeans struggled with an era of archaic religious dogma called "The Dark Ages," Moslems created a new civilization based on scientific principles and exploration. However, religious wars with Europeans severed contact with American outposts. Thus the "Holy Wars" had a profound impact on the course of American exploration and conquest.

### Moslem Civilization

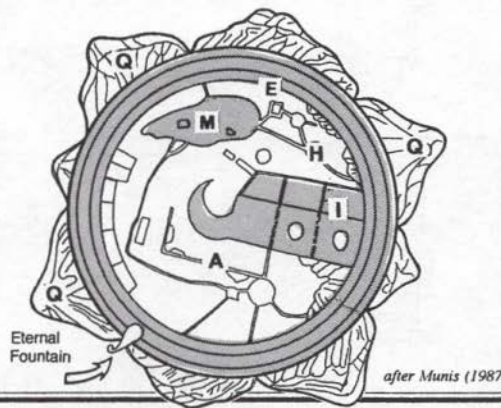
Sixth-century Arabia witnessed the emergence of a spiritual revolution that eventually spread throughout the world. In 622 AD, the Prophet Mohammed eluded assassins in Mecca and escaped into the desert. His flight, known as the *Hegira*, brought him to the city of Medina where he began the task of organizing a coalition of Bedouin tribes. The movement soon took hold in Mecca and other Arabian cities. In 637, Syria surrendered to the Prophet's generals; in 638, the Prophet's successor, Caliph Omar, entered Jerusalem. Egyptian and Arabian Moslems, called Saracens, began the march across North Africa. They captured Morocco in 682 AD. Moslem armies were reinforced by Berber tribes in 711 AD, and they invaded Spain across the Straits of Gibraltar. Saracens and Berbers reached the Pyrenees mountains of southwestern France by 720 AD. Their advance was halted by massive French fortifications. Aside



# The Arab World

## Ibn-Mohamud Al-Qazwini World Map 1250 A D

Persian cartographer's map shows the spherical Earth surrounded by a ring continent. Arabs called the encircling continent the Mountain el-Qaf or Mother of Mountains (Q). Africa (A); Indian Ocean (I); Mediterranean (M); Europe (E); Hind (India-Asia, H).



from Christian garrisons in Aragon and Castile, all of Spain fell to Moslem invaders. In the East, Arab influence spread from Turkey to the Indus valley. Christian Europe was flanked on both sides by Moslem armies. Meanwhile, Saracen pirates raided Christian ports along the Mediterranean.

Moslem sultans often earned the respect of people in conquered territories because of their efforts to build profitable markets and educate commoners. Natives sometimes found their conquerors to be more merciful and productive than previous monarchs. Indeed, Moslems were committed to the Prophet's dream of a Heavenly nation on Earth, and they were dedicated to creating a classless society united in worship of one God—*Allah*.

Caliphs and sultans realized that Arabian traditions were insufficient to unite differing peoples from Spain to India, so they set about creating a new civilization from the roots of Hindu, Assyrian, Persian, Arabian and Greek traditions. Baghdad's Emir Al-Mansur dispatched messengers to Constantinople during the 8th century seeking ancient Greek and Roman manuscripts. Works by Ptolemy, Plato, Euclid, Aristotle, and many others were brought to Baghdad and stored in the *Bayt al-Hikmah*, or "House of Wisdom." A corps of translators made Arabic copies of these masterpieces; they also copied the manuscripts of Hindu and Persian scholars. These efforts proved vital to modern historians, because Moslem libraries preserved the only copies of the Greek Classics. Christian monks had burned the originals because they thought such *pagan* documents were "works of the devil."

Historian Will Durant, author of *The Age of Faith* (1950) observed that Moslems had the world's highest standard of living from 700-1200 AD. In the 11th century, Arabic historian Nasir-i-Khosru described Cairo as "a city of 20,000 shops so filled with gold, jewelry, embroideries, and satins that there was no room to sit down." Cairo's library had 200,000 volumes and the university had 10,000 students. Moslem scholars converted Egyptian alchemy into a science. They perfected Greek mathematics, adding such terms as *algebra*, *zero*, *cipher*, *azimuth*, and *almanac*. In the 9th century, the Arabian Ibn Firnas invented

spectacles; he designed the complex chronometer (a timepiece); and he developed a flying machine or glider.<sup>1</sup> In the 10th century, Arabians perfected the astrolabe which European mariners used for seven centuries to navigate and map the Earth. Arabic became the common language of business, politics, and theology throughout the federation of Moslem states. This widespread conversion to a single language was made possible by free schools whose purpose was to educate the public. Wherever merchants traveled, use of the Arabic trade language, the Arabic calculating system, and a standard rate of exchange greatly facilitated commerce. Even Spain prospered under Moslem rule.

### **The Moors of Spain**

In the 11th century, a Zenga Berber sect of Morocco known as the *Almoravides*, or "frontier warriors of the faith," invaded Spain at the request of Moslem states under attack by Christian armies. Spaniards called the Black African invaders "Moors." Their ranks included merchants, professionals, and scholars. By 1097, Moors gained control of the southern half of Spain and Portugal south of the Tagus river. During the next four centuries, they introduced new crops to the Iberian peninsula, including figs, dates, rice, sugarcane, cotton, and pineapples. They also completed major irrigation projects, introduced arabesque designs in Mosque architecture, and constructed the largest merchant fleet sailing in the Mediterranean.

The Iberian Peninsula became a land of many mosques. There was also a surprising degree of religious tolerance. Christians, Jews, and Moslems worked and studied together in universities at Cordova, Toledo, Seville, and Grenada. Sometimes, they even shared religious facilities. Arts and sciences prospered; education flourished. One caliph assembled a library of over 400,000 volumes. It was one of many achievements in a society that encouraged learning, poetry, and literature. Africans, Egyptians, Persians, Indians, Hebrews, Berbers, and Romans mixed freely in the public markets, and Christians were welcome to worship as long as they paid an extra tax.

Christians were critical of Islam, however there was little doubt of the superior skill of Moslem physicians and scientists. European kings and the wealthy visited Moslem and Jewish physicians in Toledo—a city that served as the principal conduit through which Asian culture flowed into Christian Europe. Visitors in Toledo found shops that were better stocked with pharmaceutical supplies than the apothecaries of France and Germany. Europeans purchased the latest Oriental imports, including gunpowder, cheap paper, and textiles. Asiatic paper was of particular importance because it provided an inexpensive means of communication, historical preservation, mapping, and artistic design.<sup>2</sup> Although



## AMERICAN DISCOVERY

Spanish Moors had much to offer Europeans, both Moslems and Christians clung to the belief that their opponents were "the devil's disciples." The direct consequence of this absurd animosity was *The Crusades*.

### **Holy Wars: Crusades, Jihad, & Reconquesta**

Both Christians and Moslems entertained beliefs that they were "chosen" to establish a Heavenly Kingdom on Earth. Both believed this "Kingdom" was reserved exclusively for the faithful of their own religion. Presumably, either the Caliph of Baghdad or the pope in Rome was destined to become the world's sovereign—acting on behalf of the Almighty. That belief called for world-wide evangelism and *extermination* of non-believers. This was not the first time religions had practiced "ethnic cleansing," but it was the beginning of the abominable practice on a world-wide scale.

Popes traced their vision to Saint Augustine of Hippo whose 5th-century book *The City of God* described the pope as the divine ruler of *all* nations. Caliphs of Baghdad held a similar view because the Prophet Mohammed called upon the rulers of all nations to submit to his authority as the Messenger of Allah, and the caliphs were heirs to that authority.

In 1010 AD, Caliph Hakim sacked the Church of the Sepulcher in Jerusalem. The unwarranted attack was intended to "purify" the city; it resulted in a wave of indignation and propaganda throughout Christian Europe. Kings, barons, knights and priests declared their determination to win back the Holy Lands from the Moslems. The "Holy Wars" played into the hands of zealots on both sides. Christian popes and bishops riled congregations to strike out against "heathen" Moslems; sultans urged war on Christian "infidels." Saracen pirates attacked Italian ports with the Caliph's blessing; Christians attacked Moslems with the papal promise of *peccaminum remissio*—or "salvation" in return for killing the enemies of Christ. In 1060, the pope recruited Normandy's Viking descendants to attack Moslems in Sicily. He offered for their services *novum salutis genus*—literally "a new path to Heaven." After his resurrected Vikings prevailed in Sicily, the pope relished what they might do on the eastern front. They were drafted in due course and sent to lead the First Crusade in 1099. Departing warriors received papal absolution promising eternal life. The extended campaign ended in 1143 with the brutal massacre of Jerusalem's Moslem defenders.

This "victory" was of brief duration. Jerusalem was also a holy place for Moslems—because Mohammed had prayed in the Mosque of Aksa. Accordingly, Caliph Saladin proclaimed a *jihad*, or "Holy War," against Christians occupying the city. Saladin's Counter Crusade of 1187 ousted the Christians. Europeans mounted several more expeditions of glory; the last occurred in 1291. By that time, they realized that the Crusades

were a futile exercise. Repeated failure to sustain Christian garrisons in Jerusalem caused many Europeans to wonder if God was really on their side; Arabs were certain Allah favored their cause. In 1453, the Christian bastion of Constantinople fell to Mohammed II's Turkish army, and the eastern flank of Christendom collapsed. In this desperate hour, there was only one bright star on the Christian horizon: in Spain the combined armies of Castile and Aragon prevailed against the Moors.

In 1035 AD, Christian King Alfonso IV initiated the *Reconquista*. His armies captured Toledo in 1085. They advanced to Cordova in 1236 and Seville in 1248. A ten-year campaign lasting from 1481 to 1492 brought complete victory to Catholic armies under Majesties Ferdinand and Isabel. At the moment of triumph, they declared a "purification" of Spain which mandated expulsion of Moors and Jews. Tens of thousands died in forced marches after being deprived of their possessions. Others "converted" to Christianity but still lived as outcasts. In 1492, Spain entered the arena of world discovery upon the heels of a successful religious crusade. The values and methods of that crusade characterized Spain's approach to native peoples across the Atlantic Ocean.

Meanwhile, Christian Portugal attacked Moslem ports in Africa, Asia, and the Persian Gulf. In 1510, a fleet under Portuguese Admiral Alphonso d'Albuquerque seized the principle Moslem port at Goa, India; in 1512, the fleet took Moslem ports in Indonesia; and in 1515, they captured Ormuz in the Persian Gulf. These victories ended Moslem merchant voyages across the oceans to America. European victories vastly curtailed Moslem commerce, however the legacy of cultural diffusion endured: plants they introduced became important commodities.

### **Arabic Merchant Marine: Dhows, Booms, & Sambooks**

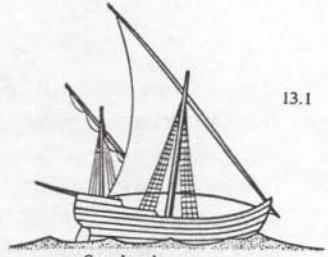
Ancient Arabian geographers reported voyages west to Indonesia and China. In 840 AD, the Arabian merchant Suleiman al-Tajir traveled to China, where Moslem traders were known as the *ta-shi*. A narrative called *Suleiman's Travels* told of the marvels of the Far East. In 850 AD, merchant Ibn Khordadbeh described his journeys to China, Ceylon, Indonesia, and India. During the 10th century, Moslem geographer Muhammad al-Muqaddasi visited all of the Moslem states and wrote of his travels in *Description of the Moslem Empire* (985 AD). Another 10th-century traveler appeared at the court of Afghanistan's Sultan Mahmud. He boasted that he had been to a place where the sun never set. Unfortunately, the sultan regarded the story as a lie and ordered the man beheaded. At the last moment, the sultan's astronomer intervened. He explained that the Earth's spherical shape and revolution about the sun resulted in Arctic regions where the sun didn't set for months. This explanation saved the traveler's life and astonished the sultan's court.





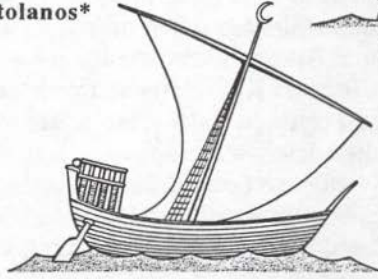
# ARABIAN SHIPS

in the  
portolanos\*

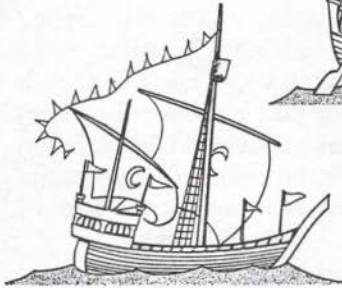


13.1

Sambook  
from Peri Reis Map 1513



Dhow  
Mecia de Viladestes Map 1413



Boom  
from Miller's Atlas 1519



Boom  
Jorge Reinel's Portolano 1518

\*portolano means  
map of ports

At the height of Moslem power in the early 15th century, merchant fleets of several thousand ships sailed the Mediterranean Sea and the Indian Ocean. They transported manufactured goods, grains, and passengers. The most common craft were called *dhow*s, *boom*s, and *sambo*oks. Most of these vessels carried two masts and distinctive triangular-shaped sails called *lateen* sails. *Dhow*s were the principle vessels of the Indian Ocean, the Persian Gulf, and the Red Sea. They were sleek vessels, pointed at both ends, with stern-post rudders, deep drafts, and pronounced keels. Hulls were made from planks stitched together with heavy cord, soaked in oil, and coated with lime to prevent *toredo* (seaworm) infestation. *Dhow*s reached 80-feet in length; larger versions of the same craft were called *boom*s. They were broad vessels designed to transport large cargoes. *Booms* sailed to Canton during the 7th century carrying 200 tons of cargo and several dozen passengers and crew. East African *boom*s reached lengths of 300-feet with room for 400 passengers. *Sambo*oks of the Mediterranean Sea and Persian Gulf had a square stern and deck cabins.

Moslem vessels brought many innovations to the attention of European shipbuilders. Square sterns, deck cabins, multiple masts, stern-post rudders, lateen sails, chronometers, astrolabes, and the mariners' compass are among the many nautical improvements which Europeans

copied from Moslem sources. The Portuguese explorer Prince Henry the Navigator was so impressed with the Moors' fishing boats that he adopted their design for his fleet of expeditionary vessels called *caravels*. Replicas of these versatile craft are still being used in Portuguese waters.

### Tales of American Voyages

Arab geographers reported several legends about Moslem voyages to China, the Arctic Circle, and to unknown lands across the great oceans. Some of these lands have been identified as the Americas.

Al-Masudi's *Historical Annals* of 942 AD tell of a voyage from Cordova, Spain, under the command of Captain Khashkhash. After a long voyage west, the ship returned filled with treasures. Of course, the only land to the west was North America. The 12th-century Arabic geographer Al-Idrisi told of a voyage by the Brothers Al-Mugrurim who sailed from Lisbon into "The Sea of Darkness" seeking islands in the western Atlantic.<sup>3</sup> They sailed for about a month before reaching a land inhabited by Berbers and sheep. It took Columbus about a month to cross the Atlantic—though he didn't find Berbers on the other side.

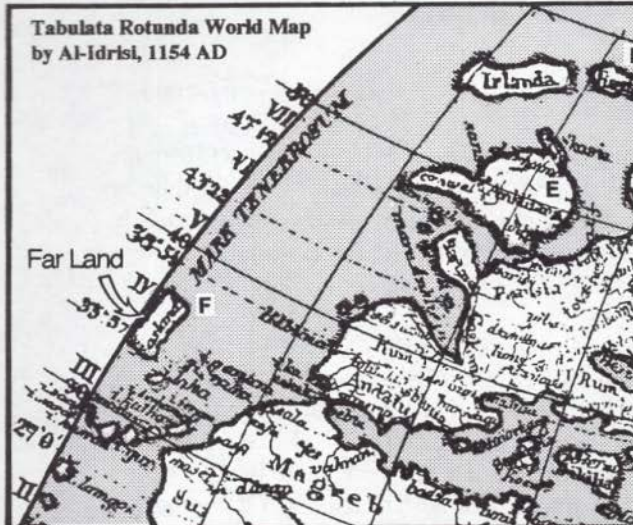
Al-Idrisi's world geography, *Nuzhet al-Mushtaq* (1154) described the rich fishing in the North Atlantic (the famous Grand Banks of Newfoundland) and the whalebone huts of Labrador's Inuit natives.<sup>4</sup> Al-Idrisi also reported mariners' tales of natives living on *Saun*, an island across the western ocean. According to Arabian mariners, the natives of *Saun* were naked except for a covering of leaves. The men were beardless, and they had the breath of "wood smoke." Some scholars believe Al-Idrisi's account is a fantasy; others regard it as evidence of an actual visit to the Americas where natives smoked tobacco. The geographer also mentioned *Albania* or "Great Ireland," which he identified as a territory *beyond* Greenland. Apparently, the Arabs were aware of Celtic-Irish settlements in North America.

Tales of earlier voyagers are found in a collection of Arabian stories known as *The Thousand And One Arabian Nights*. The stories are partly fictional and partly based on tales of Arabian mariners. One of the leading figures in the *Arabian Nights* is Caliph Haroun Al-Raschid, who reigned from 786 to 808 AD. Historians believe the caliph's reign dates most of the events to the 8th century. Originally, the *Arabian Nights* were part of an oral tradition. They were recorded in the 10th century and translated to English during the 1800's. According to the legend, Caliph Al-Raschid was accustomed to sleeping with a new wife each night, and the following day she was executed. Al-Raschid met his match when the storyteller Scheherazade got him hooked on a never-ending story.

Several of Scheherazade's tales were about "Sinbad the Mariner." On his 6th voyage, Sinbad's vessel was swept far out to sea by a storm

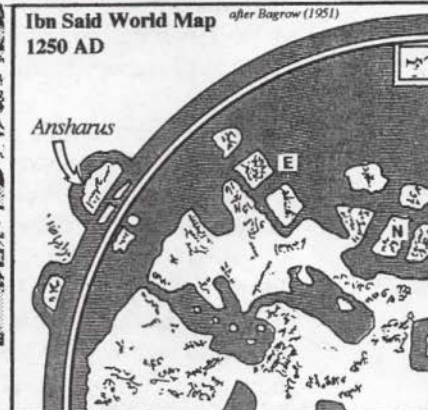


Tabulata Rotunda World Map  
by Al-Idrisi, 1154 AD



from Lelewel's 1857 French rendering

Ibn Said World Map  
1250 AD



after Bagrow (1951)

KEY: Farland (F); England (E); Resland or Iceland (R); Norway (N); Greenland (G).



### Arabic "Far Land" Maps

Northwest section of Al-Idrisi's huge wall map (above) produced for Roger of Sicily in 1154 AD shows "Farland" (F) on the extreme West above the Canary Islands. The northwest quadrant of Ibn Said's 13th-century World Map (right) shows an "island" (Ansharus) west of Spain in the location of Antilia on 15th-century Portuguese maps. These undoubtedly represent North American territory.

and taken to an island from which "no mariner had ever returned."<sup>5</sup> His voyage on the "Last Seas" took several months beyond sight of land. Finally, he reached the Island of Serendib. The 12th-century Arabian geographer Al-Idrisi's world map has a large island called "Serendib" south of Malaya.<sup>6</sup> Western historians generally assume Serendib is an Arabic name for Ceylon—an island near India. However, 15th-century European mapmakers located *Seilan* (Ceylon) southeast of Malaya in Indonesia. Sinbad mentioned the sandalwood trees of Timor and the mares of Borneo—so we know that he sailed in the western Pacific.

Argentine historian Dick Iberra-Grasso believes Sinbad's travels took him far beyond the South Seas of Asia to the Pacific shores of South America. He argues that voyages to Serendib took no more than a few days beyond sight of land, while a voyage of several months beyond land as Sinbad claimed actually corresponds to a voyage across the Pacific. Furthermore, Sinbad reported that he brought back a plant called *maize*. This claim is supported by most linguistic studies and sculptural evidence: *maize* is a Native American plant which Arabian merchants imported extensively in ancient times. Thus, Iberra-Grasso believes Sinbad's tale originated from a Pacific voyage to America.

Chinese annals of the Sung dynasty (1178 and 1225 AD) recorded the Moors' westward travels across the Atlantic. They sailed from *Ta-shish*, or Portugal, to a land across the sea called *Mu-Lan-Pi*. According



## Al Idrisi World Map 1154 AD

This map was inscribed on a silver plate for Roger of Sicily. Like the Roman geographer Ptolemy, Al Idrisi showed Africa reaching far to the west around the bottom of the Indian Ocean (*Bahr al Hindij*). The round shape of the map confirms Arabic knowledge of Earth's spherical shape at a time when most Medieval Europeans believed the Earth to be flat. The ocean is surrounded by *el Qaf*—the great mountain or ring continent. The peninsula north of Europe (**A**) represented lands beyond Greenland. Note *Wak-Wak* (**W**) in South Africa—now thought to represent South America.

13.M1

el Qaf



after Encyclopedia Britannica (1954)

encircling ring of mountains

to the Chinese account, the Moors sailed “due west” for 100 days finding a new country across the sea.<sup>7</sup> Merchants returned from *Mu-Lan-Pi* carrying a variety of unusual plants, such as corncobs “three inches long” and “very large gourds.” Chinese historian Hui-Lin Li believes the Sung annals referred to *maize* and pumpkins imported from America.<sup>8</sup>

### The Arab World

During the 7th century, Arabs viewed the world with the same kind of ethnocentric perspective that characterizes most emerging civilizations. And like cartographers of other countries, Arabs typically placed their own land (Arabia) at the center of the Known World. In accordance with Classical Greek tradition, they portrayed Earth as a sphere (or disk) surrounded by a ring continent beyond the encircling ocean. Arabs called this ring continent *el-Qaf*, meaning “Mother of All Mountains” or the mountain that surrounds Earth. This ring continent is a major feature of most early maps including those by Al-Idrisi in the 12th century and by Al-Qazwini in the 13th century. Like the cosmological maps of Medieval Christians, Arabic maps often have a legendary aura: Al-Qazwini's map has a symbol for the “Eternal Fountain” on the ring continent across the Atlantic from Africa.

Initially, Arabic geographers patterned their maps after the 2nd-century Roman map by Claudius Ptolemy. Arabs called Ptolemy's map *Al Magest*—meaning “The Great Map.” In the 11th century, Arabian astronomer Zarkala calculated the distance between Toledo and Baghdad.



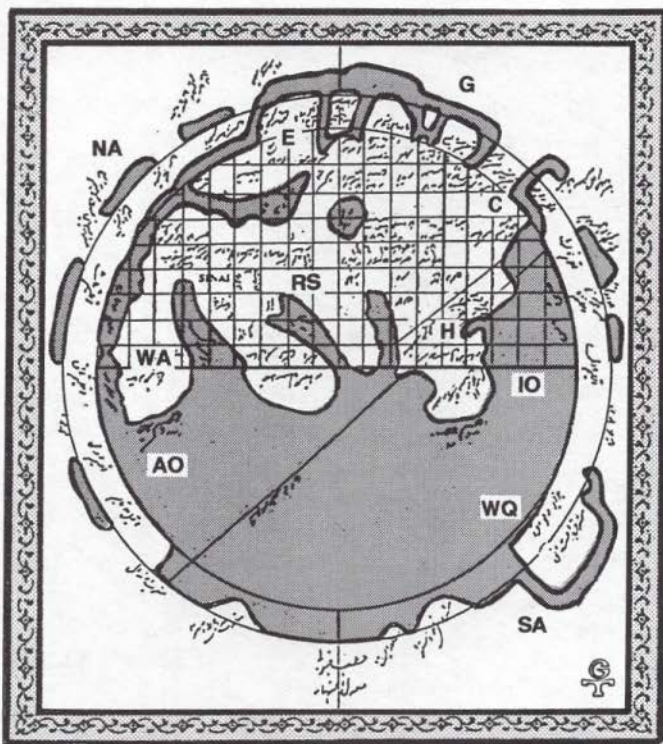
**KEY:**

AO = Atlantic Ocean; C = China or Sin; E = Europe; G = Greenland; H = India or Hind; IO = Indian Ocean; NA = North America; RS = Red Sea; SA = South America; WA = West Africa; WQ = Waq Waq.



### Hamd Allah Mustawfi World Map 1350 AD

American continents are portrayed schematically on this map by Persian cartographer Mustawfi. They are shown as a ring of land surrounding Africa and Eurasia. Waq-Waq (WQ) in the southeast probably represents South America.

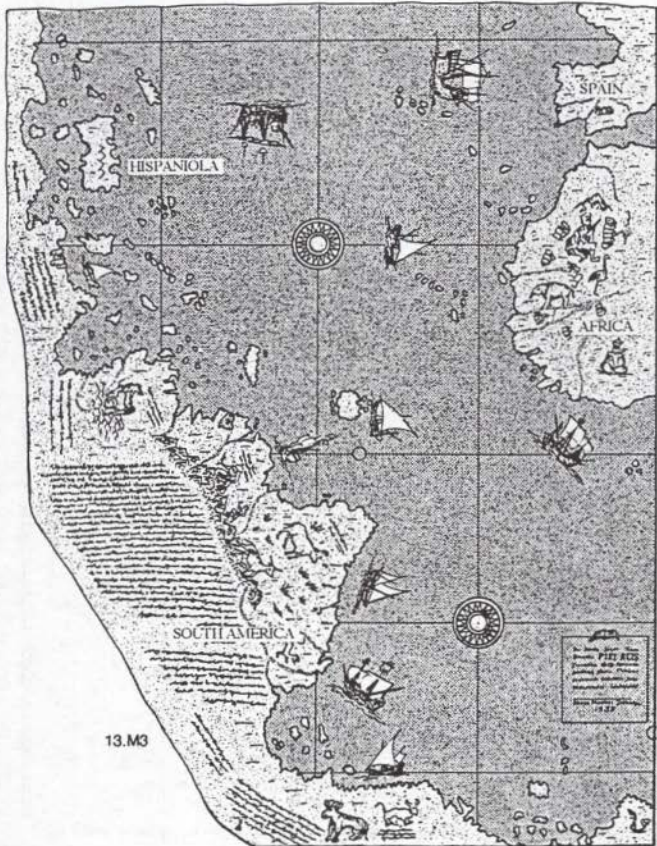


Translation with assistance from Professor Fazi Khoury, Far Eastern Studies, University of Washington, and Afifi Durr, Seattle Arabic Language Service.

His measurement of 51-degrees was only 3-degrees too large whereas Ptolemy had over-estimated the distance by 18-degrees.

Al-Idrisi's *Nuzhet al-Mushtaq*, or *Description of The World*, preserved for posterity Ptolemy's World Map. He adopted Ptolemy's design for a simplified map inscribed on a silver plate for King Roger of Sicily in 1154 AD. Al-Idrisi's world map is noteworthy for its portrayal of a large peninsula of land reaching out from the top of Russia. This peninsula corresponds to the Norse Greenland Province that reached far into North America.

Most cartographers had the misconception that Greenland and other lands *beyond* Norway were an extension of northern Europe. Part of the difficulty in mapping these "northern territories" arose from the fact that land areas on the round Earth don't fit very well on the flat surfaces of maps. Also, magnetic compass readings near the Arctic Circle are notoriously inaccurate because of a phenomenon known as magnetic declination from *true* North. Mapmakers who depended on reports of sailors portrayed *western* lands, such as Greenland and Canada, *north* of Europe when in fact they were actually located thousands of miles *west*. Consequently, Al-Idrisi and subsequent Arabic mapmakers portrayed part of North America on their maps even though they were not aware



Admiral Peri Reis



### Peri Reis Map 1513 AD

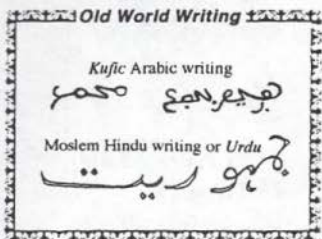
This map is notable because of its accurate portrayal of the relative positions of Africa and Brazil. Arabic text on the map says it was derived from 20 "ancient sea charts" circa 300 BC obtained in olden days from the Alexandrian Library in Egypt. Hispaniola appears to have the traditional shape of Antilia. Reis says it was charted in this manner by Columbus.

that "northern territories" were actually part of a western continent.

A large wall map which Al-Idrisi prepared for Roger of Sicily portrays northern isles such as Albania, Resland (Iceland), and Amazonia northeast of Norway. West of Spain is a huge island—possibly representing the *Antilia* of later Portuguese maps. It lies at the extreme western margin. Al-Idrisi calls this isle: "Farland." Curiously, this is the same name given to a northern island on a map by the 15th-century European cartographer Johan Schritzer. We are left with the impression that mapmakers identified an unknown land that was situated "far across" the ocean—so they called it "Far Land."

A map by the 14th-century Persian cartographer Hamad Allah Mustawfi has been largely ignored by scholars, although it is the earliest Arabic map to clearly show the great extent of New World territories. Mustawfi's map indicates continental land across the Atlantic from Africa and more continental land across the Pacific from China. In the southeast corner of Mustawfi's map is a land called *Waq-Waq*. Earlier Arabic maps located *Waq-waq* in South Africa; later maps had it East of China. Arabic manuscripts typically refer to "Waq-Waq Islands," although the maps show continental land. This land corresponds to the Roman *Cattigara*—which is also the probable location of King Solomon's gold





1. Moslem Trade Money  
Belfast, NY



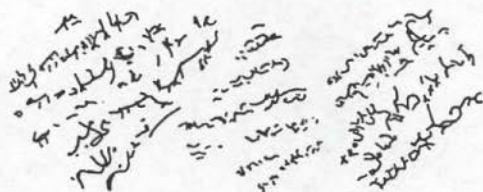
2. & 3. Islamic Coins 11th cent.  
from hoard found at  
Cambridge, Mass. 1787



4. Arabic Trade Token  
Tennessee



5. Arabic Calculus Pebble  
Tippecanoe, Ind.



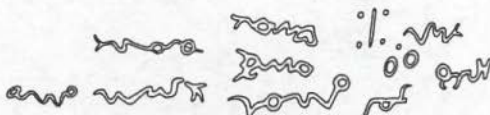
6. Tennessee Petroglyphs



7. California



8. Rhode Island



9. to 16. Ancient Kufic Libyan & Arabic Inscriptions, Nevada

mines. The legendary isle was the target of many European adventurers, and it was eventually identified as South America.

During the 15th-century, Arabian geographer Jezirat al Tennyn identified land in the western Atlantic which he called "the Dragon's Isle."<sup>9</sup> This isle, shown on the Arabic Coimbra Map of 1424 AD, represented North America.<sup>10</sup> Medieval Portuguese maps referred to the same uncharted land as *Antilia*.

Turkey's 16th-century Moslem geographers had maps that were more accurate than those of contemporary Europeans. In 1521, admiral-geographer Peri Reis compiled a book on world navigation, the *Bahriye*, which once included 200 separate charts. Unfortunately, most of the charts were lost in antiquity leading to some doubts about their accuracy and importance. In 1554, Admiral Sidi Ali Ben Hosein compiled the *Mohit*, or *Encyclopedia of The Seas*. Scholars doubted the existence of these maps until the 1929 discovery of the Peri Reis Atlantic map. This chart accurately shows the relative positions of West Africa and South America. Scholars were amazed by a notation on the map's border: according to Peri Reis, the 1513 map was compiled from 20 smaller charts some of which dated to 300 BC.<sup>11</sup>

## Evidence of Contact in America

Moslem trade with America was expanding at the very same time that European navies began attacking Moslem harbors in Portugal, Spain, North Africa, India, and Indonesia. These attacks brought to a sudden halt the expansion of Moslem commerce and culture abroad. Meanwhile, Europe's only "historians" were Catholic monks. Because monks were instructed to record only those events or achievements of importance to *Christian* salvation, they ignored many Moslem innovations. Aside from a few references to "Turkish corn," and "turkeys," Europe's priestly "historians" were mute regarding the contributions of the Moors and Arabs to world exploration. Nevertheless, Arabic coins, loan-words, and imported plants found in America bear witness to trans-Atlantic voyages before Columbus.

### Artifacts of Trade: Coins, Inscriptions, Loan-Words

In 1787, Massachusetts road crews uncovered a hoard of Arabic coins near Cambridge. This discovery was reported in the journal of The American Academy of Arts and Science.<sup>12</sup> Two 8th-century Arabic coins were found along with a hoard of Mediterranean coins near

Venezuela in the 1960's.<sup>13</sup> Carved tokens with Arabic inscriptions have been found in Tennessee, Indiana, and New York. Kufic Moslem inscriptions have been reported in Nevada, California, and Tennessee. The inscriptions and coins are evidence of wide-spread Moslem trade in North America. Harvard scholar Barry Fell believes the traders contributed to a Native American trade language known as the *Mobilian Jargon*. Fell has identified hundreds of Arabic loan words used in Algonkian speech. For example, the word *hasun* means "calculus stone" in both Algonkian and Arabic.<sup>14</sup>

#### FOREIGN WORDS

English	Algonkian	Arabic <sup>28</sup>
shore water	sobag-wa	sobag-wa
rigging	el duk-adwaw	al daq-al
journey afar	ak-sit	aq-sa
wind	a-wan	ah-wa
des	nebi-skat	naba-saq
immediate	nit-ta	ni-taj
at night	ni-boi-wa	na-bi-ha
star	alakws	allaq
tomorrow	sa-ba	sa-bah
king	malki-	malk
master	al-susit	al-usteth
belt	ta-ktek	ti-kak
water	na-ba	na-ba
to thread	na-pa	na-fad
sneeze	nak-whomo	nak-am

### Impact on Native Culture

During the 15th century, New World markets were a marginal component of the Moslem commercial empire. Transoceanic trade probably would have increased substantially had it not been for Portuguese naval victories that drastically curtailed Arabic overseas trade.

Arabs certainly influenced the way Native Americans dressed. Some tribes adopted the Moslem turban headdress: a ceramic jar from





Heck (1857)

## Arab Turbans

Peru makes a perfect portrait of a visiting Arab with Mediterranean features and a turban headdress. North American natives of the Southwest Woodlands also adopted headdresses made from cloth wrapped about the head. Columbus saw women wearing *yash-maks*, or Moslem-like veils covering the lower parts of their faces. Wearing the *yash-mak* is a Moslem custom.<sup>27</sup> Women also used scarves which Columbus noted were similar to *almayzars* that Moors imported from West Africa.



Lady with Veil  
Quito, Ecuador  
Wymer (1892)

### The Arabian Produce Trade Going West

Moslem merchants played a pivotal role in the ancient diffusion of plants between Europe, Asia, and America. They brought African bananas, or *plantains*, oranges, and almonds, to the Caribbean.

Although popular myths praise Columbus for bringing the *first* bananas from the Caribbean to Spain in 1493, these so-called "New World" plants actually originated in the Old World. Indeed, Columbus could have picked up the same kind of bananas at Moslem markets in North Africa. A century earlier, he could have purchased bananas from Moors at the local fruit stand. Historian Will Durant noted that Moors brought the *first* bananas and other produce to Spain:

Moslem Spain brought from Asia, and taught Christian Europe, the culture of rice, buckwheat, sugarcane, pomegranates, cotton, spinach, asparagus, silk, bananas, cherries, oranges, lemons, quinces, grapefruit, peaches, dates, figs, strawberries, ginger, and myrrh.<sup>15</sup>

During the 10th century, Arabs brought Southeast Asian bananas to Africa where they were known as *poro-bana*, meaning Arabian banana. Moors carried the Southeast Asian banana and its African cousin, the *plantain*, to the Caribbean. Historians and botanists agree that bananas were common in tropical America by the mid-15th century. Mexicans regarded the banana as a "native" fruit, and the earliest Spanish explorers



## Native American Turbans



Sauk-Fox Chief  
Wisconsin  
19th century illust.



Peruvian Prince  
Moche culture 500 AD  
from a ceramic jar

Choctaw Native  
Mississippi  
19th century drawing

Mayan Chief  
stone carving  
Palenque, Mx.  
700 AD



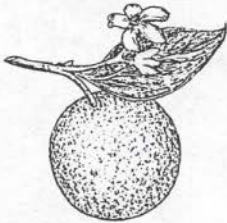
Donmeller (1882)

reported bananas already growing in Central and South America.

Botanist Alphonse DeCandolle has clearly established the Old World origins of the plant. It was well-known to Greeks, Romans, and Arabs.<sup>16</sup>

Arabic scholar Paul Lunde (*Aramco World*, June 1992) reports that a plant "very like sugarcane" (an Old World plant) was found growing along the coast of Brazil when the Portuguese arrived. Botanist Walton

Sinclair, author of *The Orange* (1961), cited a 1579 Spanish report of oranges in St. Augustine, Florida, to justify his belief that Spaniards brought "the first" oranges when they founded the colony in 1565. However, a French sea captain who had explored the East Coast during the early 1500's reported that orchards



were already present in the Carolinas *before* the Spanish sailed for St. Augustine: "The country abounds with all kinds of fruit. Oranges and almonds grow in wild forests." His statement was part of a letter to the king of France published in Ramusio's *Discurso* in 1539.

### Impact of Arabian Trade on Europe

From the 10th through 14th centuries, Moslem merchants were the world's leading traders. They traveled from America to North Africa and from Syria to Indonesia. Moslem sailors visited all the world's major ports—except those of Christian Europe where religious animosity prevented free trade. Asian products flowed into Europe via Moslem trade centers at Toledo, Palermo, and Constantinople.

### The Arabian Produce Trade Going East

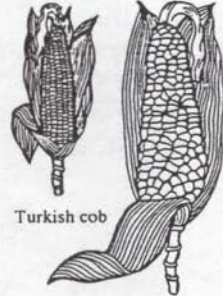
An Arabian scholar of the 12th century, Ibn al'Awwam, described 17 varieties of beans in Andalusia (Spain). Arabist Paul Lunde suspects one of these was the New World *haricot* bean. The botanist Leonhart



Fuch's Herbal, 1542



Turkish Corn



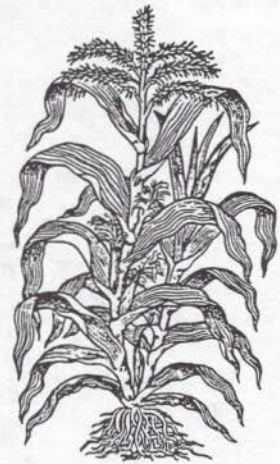
Turkish cob

Indian cob

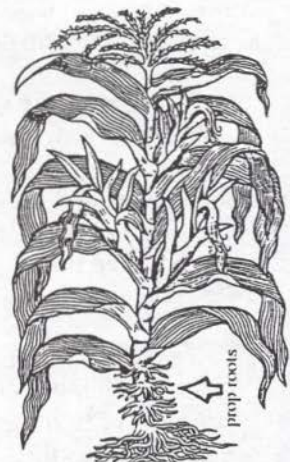
drawings after Tabernaemontanus (1588)

## INDIAN MAIZE & Turkish Corn

Europeans first knew *maize* by way of Arabian merchants during the 11th century. Hindu, European, and African terms for *maize* all derive from Arabic words. The first European illustration of the plant is in Leonhart Fuch's herbal, *De historia stirpium commentari* (comments on plant life) published in 1542 (above left). Fuch called the plant Turkish Frumentum or Turkish corn. In 1588, the European taxonomist Tabernaemontanus mentioned two kinds of corn in Europe—one brought by the Moslem Turks called "Turkish Corn," the other brought after 1492 from America called "Indian Corn." According to Tabernaemontanus, Turkish Corn was distinguished by small leaves and cobs with uniform kernels; Indian Corn had a second set of roots high up the stem called "prop roots." 13.4



Turkish Corn



Indian Corn

drawings after Tabernaemontanus (1588)

Fuchs, writing in the 16th century, identified an Arabic source for the pumpkin—which was actually a native American plant. Fuchs called the plant *Cucumis Turicus* or “Turkish pumpkin.” Artists carved stylized American pineapples into archways at the sultan’s Alhambra Palace during the mid-14th century.

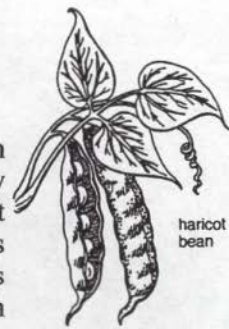
The role of Moslem merchants in bringing Native American *maize* to the Old World is evident from Arabic and Turkish names for the plant. Hindus called the American plant *makhai*, *Mecca cholam*, *Mekka sorghum*, *Mekka jola*, and *Mekka jonna*. Because all these terms refer to Mecca, the Moslem Holy City, botanists believe Moslem merchants were responsible for distributing the plant in India during the period of Moslem world-wide commerce.

Historian Santa Rosa DaViterbo claimed the Arabs introduced *maize* into Spain during the 13th century.<sup>18</sup> It was called *trigo de Turquia*—that is, grain of the Turks. Early names for the grain in Europe indicate Turkish, or Arabian, origins: in Italy, it was known as *Grano Turco*; Germans called it *Turkische Korn*; and Englishmen called it “Turkie Cornes.”<sup>19</sup>

The Italian historian Peter Martyr wrote a letter in 1494 in which he compares the corn which Columbus brought back to Spain with “a certain flowery grain” already growing around Granada.

Europe’s 16th-century botanists distinguished two varieties of corn: “Turkish corn,” and “Indian corn.” The German botanist Johann Tabernaemontanus noted that Turkish corn had smaller ears; Indian corn produced large ears and had a row of “prop roots” around the base. Indian corn came from Spanish colonies; Turkish corn came *via* the Orient. The German herbalist Leonhart Fuchs published an illustration of *maize* in his *De Historia Stirpium*. He called it *Fruentum Turicum*, or “Turkish corn,” and said that it originated in Asia and Greece.

In 1509, Portuguese explorers reported that *maize* was already farmed near Cape Verde, and Sierra Leone, Africa.<sup>20</sup> Botanist M.D.W. Jeffreys believes Moslem traders introduced *maize* into West Africa as early as the 11th century. *Maize* was also cultivated in China before the 15th century. Portuguese explorer, Valentin Fernandez, reported that Guineans were harvesting *milho zaburro*, or Arab corn, in sufficient quantities to allow export by 1506.<sup>17</sup> The ancient Chinese book of plants, *Ke Chih King-yuan*, attributed the origins of “Imperial wheat” (that is, *maize*) to a province frequented by Moslem traders.<sup>21</sup> Clearly, *maize* was plentiful



haricot  
bean



Turkish Pumpkin  
in Fuch's Herbal  
1542 AD





## TOBACCO

Arabic traders imported North American tobacco by the 11th century to North Africa, India, Spain, and Southeast Asia. It was at first regarded as a medicinal, until Moslem leaders discovered it was a potent narcotic. This led to a ban in Moslem territories. Shown here are the tobacco plant and a smoker with a hookah or "water pipe."

in the Old World prior to the Columbus voyages, and it was commonly regarded as a Turkish-Arabian import.

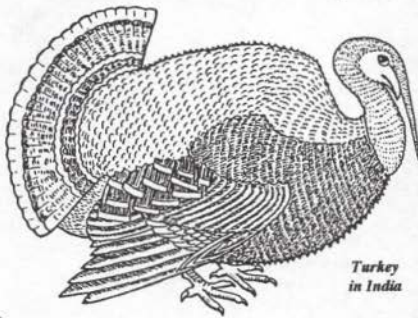
Moslem merchants imported American tobacco to India by the 14th century. In 1329, *tanbaku* (tobacco) was used as a medicinal in the Delhi Sultanate.<sup>22</sup> A 14th-century Persian manuscript reported that *hookahs*, or Arabian water-pipes, were used for *tobacco* smoking.<sup>23</sup> Tunisian historian Muhammad al-Tunsi visited the Sudan in 1803 and recorded a poem about *tabgha* (tobacco) which was dated to the mid-15th century.

Persian terms for tobacco *tambak*, *tavak*, and *tubbaq*, were derived from the ancient Sanskrit word *tamrakouta*, leading some botanists to conclude that tobacco first came to India more than a thousand years ago. Some American tribes called tobacco *to-bak* prior to European contact. Because *to-bak* is a Persian term, some linguists believe Native Americans had contact with Moslem traders from whom they derived the name of the American plant. Tobacco was also used in ancient Portugal, where it was known as *tambaku*.

Historians once believed that ancient Arabs didn't have tobacco, because 15th-century travelers in Istanbul (Constantinople) didn't notice anyone smoking. That was due to a recent anti-smoking campaign. In 1450, Sultan Amurat declared smoking a *capital* offense, and he toured the city enforcing his own edict. Amurat was one of the first police decoys: he disguised himself as a tobacco addict and solicited from unwary shopkeepers. Anyone caught with the illicit substance was immediately beheaded. Thus, smokers were hard to find when Europeans came traipsing through Istanbul a few years later.

Moors brought American cotton plants to Africa and probably Spain

by the mid-15th century. Botanists have determined that “Guinea cotton,” grown in West Africa prior to 1466 was derived from an American hybrid.<sup>24</sup> Moors also brought the American prickly pear to Spain by the 15th century. It was known by the native American term, *tuna*, until after the Spanish conquest of *Las Indias* (America). Then,



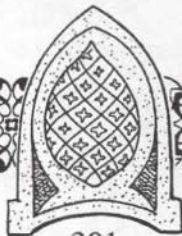
Turkey  
in India

Spaniards re-named the plant *higo de Las Indias*, or “Indian fig”, because figs were then imported from the New World—or *India Superior*.<sup>25</sup> Arab traders brought Mexican apples (or “custard apples”) to Asia prior to the 15th century. Mexicans called their apples *ate*; the term was derived from the Asiatic *atis*, meaning apple.<sup>26</sup> The Mexicans used the Asiatic term because of contacts with Moslems from Southeast Asia.

During the 16th century, Europeans had two names for America’s most popular game bird, the turkey gobbler. Birds brought in by Moslem traders, or Turks, before the 15th century were called “turkeys;” those brought after the Spanish conquest were called *dindons*, or “Indian birds,” because they came from the Spanish *Indies*. A 16th-century French naturalist, Belon, called turkeys an Old World animal in his *Historie Naturelle*. The bird was portrayed in a decorative mural in Germany’s Schleswig Cathedral circa 1280 AD. Hanseatic ships or Arabs could have imported the American bird by the 13th century.

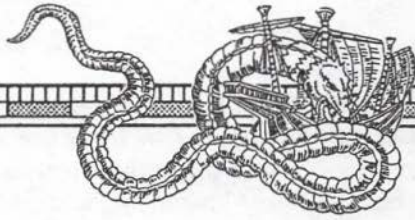
### The Incalculable Price of Spice

In 1453, Moslem Turks captured Constantinople (Istanbul)—the capital of the Christian Byzantine Empire. This was the principal avenue for silk and spice to reach the Mediterranean from the Far East. English historian H.G. Wells believes the fall of Constantinople forced the Spanish and Portuguese to build strong navies and armies in an effort to restore trade with the East. Catholic kings soon dispatched explorers across the oceans in search of new routes to the Orient. It is H.G. Wells’ belief that Spanish “discovery” of America resulted from Europe’s quest for an alternate route to Oriental markets. The proposal of Columbus to “sail west to the Orient” was part of this multi-national effort.

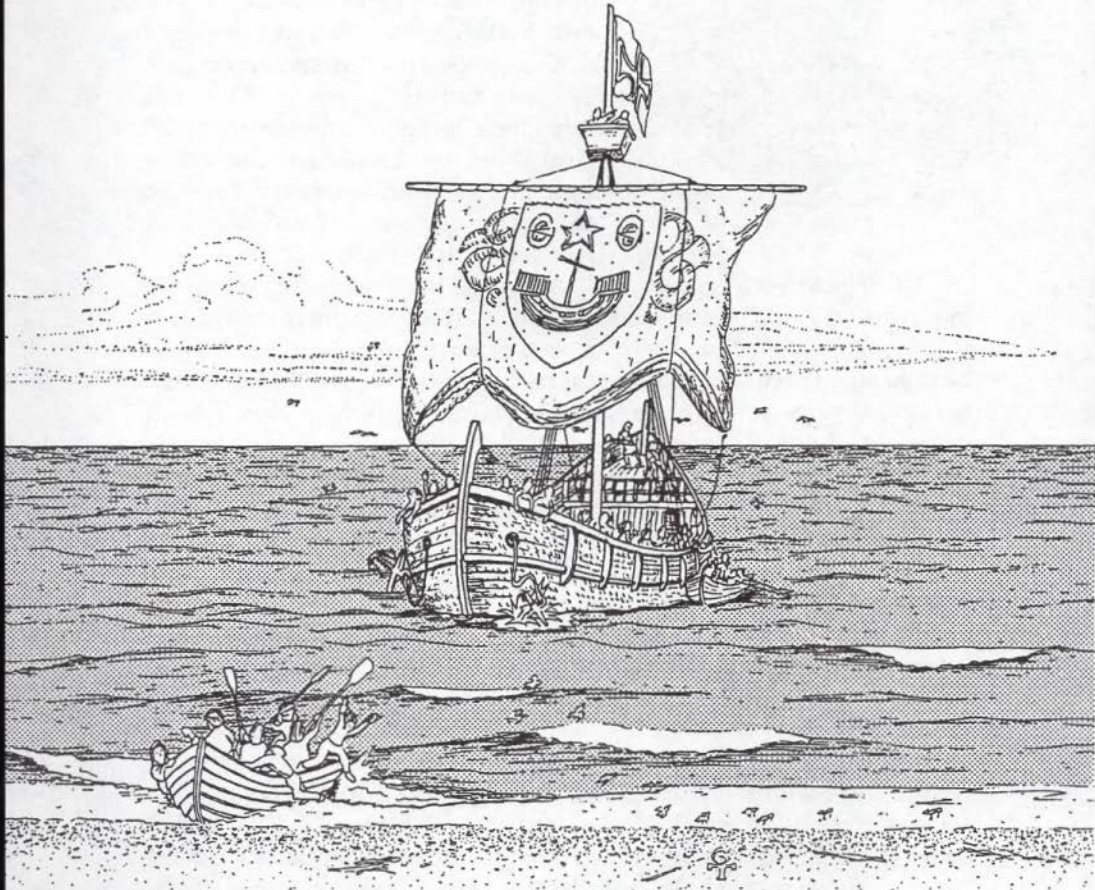


Pineapple Motif  
Grand Archway, Alhambra, Spain  
14th century





Sea Monster  
after Olaf Magnus, 1555



**Scottish Earl in America**  
*Henry Sinclair's expedition arrives off the coast of Nova Scotia,  
after a voyage across The Sea of Darkness, 1395 AD.*





## VANGUARD OF CONQUEST

(Late Medieval Europe 1200—1480 AD)



West from the Pillars of Hercules lies a boundless ocean. Himilco relates that no one dares sail across due to insufficient wind, perpetual darkness, and a dense fog which conceals the waters.

*Ora Maritima—4th century*

Beneath the fog lurked hazards of Nightmarish fantasy: demons, sea serpents, and the edge of the world. During the Dark Ages, Christian priests warned parishioners about evils lurking beyond the safe harbors of orthodox religion. In a world of superstition, terror was an effective weapon of mind control. Heavenly rewards awaited the obedient; curiosity was forbidden.

In spite of Medieval phantoms, a few independent souls ventured beyond the sanctified harbors of Christian Europe. Wayward seafarers reported arcadian lands across the Atlantic inhabited by civilized people—and many Christians. These *unofficial* voyagers raised havoc with Medieval theologians who believed science and discovery were intolerable. From the monks' lofty perspective, the only meaningful endeavor was the pursuit of salvation; the only territory worthy of exploration was the *Bible*; and everything men really needed to know could be found in a monastery.

### The Paradox of European Civilization

The Holy Roman Church was the very heart of European civilization. In the decades following the 5th-century collapse of the Roman Empire, the Church provided the leadership and inspiration needed to survive barbarian invasions, famine, and plagues. Christian leaders managed the affairs of the Church through a representative body of cardinals and a regional administration of bishops. This centralized institution wove a network of power throughout Europe. Missionaries converted all the barbarian kings and united the people under a single mantle of religious doctrine. Western civilization evolved in Europe under the aegis of Roman Catholicism.



## AMERICAN DISCOVERY

During the Dark Ages, from the 10th through the 14th centuries, the Church was preoccupied with royal intrigue, blocking Moslem assaults, enlisting Crusaders, and promoting the cause of world evangelism. The foundation of European unity rested on the Church as a divinely sanctioned institution. In accordance with doctrines stemming from the manuscripts of a 5th-century bishop, Saint Augustine of Hippo, theologians believed the Church's role was to establish a divine government over all the world's nations. Hippo's treatise, *Civitas Dei* or *The Divine City* (430 AD), established the Church as the administrative and moral authority of a divine world empire. Popes demanded the obedience of kings, thereby assuring a measure of stability among nations that were traditional enemies.



from Heck (1857)

Church doctrine was entrusted to a corps of dedicated servants called "monks." They lived in monasteries far-removed from the affairs of common people; they contemplated the spiritual world; and they continuously copied aging manuscripts in an effort to maintain scriptures and the literary history of the Church. This arrangement was a mixed blessing: although monastic life protected monks from the plagues and torments of Medieval times, the isolation led to a superficial view of the world. Ancient Church doctrines and the scriptural interpretations of senior monks were regarded as the final authorities on both spiritual and worldly existence. In fact, theologians saw little distinction. In their eyes, the world was a testing ground for souls; disease and human misery were an integral part of the continuing struggle for salvation.

Clerics insisted that faith and exorcism were the only valid ways to treat physical illness, because they assumed that illness was caused by spiritual inadequacy. Theologians were generally suspicious of medical practitioners, because it was believed that attempts to alleviate suffering thwarted God's desire to test the faith of those who were ill. Physicians were suspected of being in league with the devil—particularly if their treatments were successful.

Tribunals called "inquisitions" served the purpose of assuring conformity within the ranks of the organization. As early as the 4th century, Church leaders used the inquisition as a method of imposing authority over public officials and confiscating property. By the 9th century, torture and execution of those accused of "spiritual deviancy" had become commonplace. Philosophers, physicians, alchemists, and the mentally ill were common targets. During the 13th century, under the authority of Pope Innocent III, public burnings of accused heretics were so frequent that the Inquisition was regarded as an established institution.

## INQUISITION



### *Vanguard of Conquest*

The professed rationale behind the Inquisition's reign of terror was "to purify the Divine City." Paradoxically, the result was the opposite: those authorized to conduct tribunals and punish the accused were often the worst specimens of the human species. Church officials extended the inquisitors' jurisdiction to matters beyond the spiritual realm, including philosophy, astronomy, medicine, art, alchemy, and geography. Virtually every-

one was vulnerable to the whims of demonic inquisitors.

In 1544, the Flemish geographer Gerhard Kremer (a.k.a. Mercator) was accused of heresy during a purge of Flemish scholars. Five of those arrested with Mercator were executed; one was beheaded; two were burned at the stake; and two were buried alive. Mercator recanted his heresies, then he fled to a German sanctuary where he became a leading figure in *scientific* geography. He was fortunate to escape; thousands—if not millions—died under horrible circumstances at the hands of ruthless champions of dogma.

### **Biblical Geography**

One of the great paradoxes of European civilization is that the Holy Roman Church was both the custodian of learning and the promoter of ignorance. That dualism is evident in the struggles of geographer-monks who attempted to reconcile Biblical notions concerning the shape of the Earth with reports from overseas travelers. Christian maps and travelogs of the Middle Ages constitute the literature of "Biblical Geography."

During the early years of the Church, monks abandoned the Classical Greco-Roman concepts of a spherical Earth that revolved about the sun. Geographer Ernest Ravenstein commented that: "The Church fathers did not encourage scientific pursuits. The doctrine of the sphericity of the Earth was held by the more learned, but the heads of the Church held it to be unscriptural."<sup>2</sup> Indeed, the *Bible* was regarded as the final authority on matters of astronomy, geography, medicine, and morals.

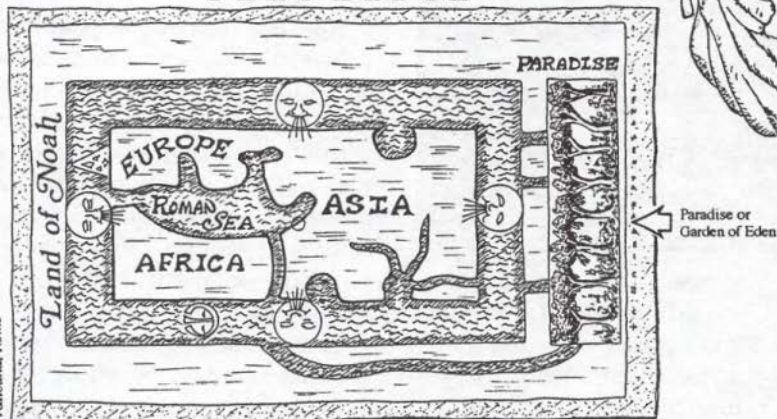
Christian travelers usually interpreted what they saw in accordance with Church doctrine and ignored anything that didn't easily fit with preconceived ideas. During the 6th century, the monk Cosmas of Alexandria traveled from Egypt to Ceylon. In 540 AD, he published a Christian geography called *Typographia Christiana* that denounced as false and heathen the concept of a spherical Earth. Because Cosmas was well-educated and well-traveled, his interpretations were highly valued by his peers. Less-experienced monks assumed his pronouncements



# Biblical Geography

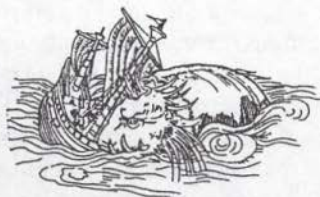
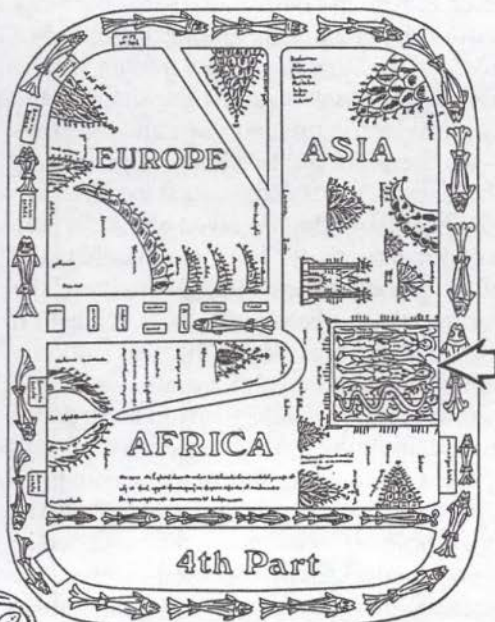
Flat Earth

after a map in the Biblioteca Apostolica Vaticana, Rome



## Cosmas of Alexandria World Map (540 AD)

Biblical geography took a great leap into fantasy with the musings of a Medieval cleric, Cosmas of Alexandria, also called *Indicopleustes*. Cosmas sought to bolster a scriptural interpretation of the Earth as a flat rectangle at the center of the universe. The ring continent is presented as uninhabited or "forbidden" lands. East of Asia is Paradise or the Garden of Eden. 14.M1



after Olaf Magnus, 1535

## Beatus World Map 786 AD

Copy of the Benedictine's 8th-century map in the Silos Apocalypse of 1109 AD. Contrary to most of his associates, Beatus suggested the southern continent or "4th Part of Earth" was inhabited. Adam & Eve with the serpent designate Paradise someplace in the Indian Ocean. In accordance with biblical teachings, his Earth was flat and located at the center of the universe. The ring continent of Classical geography is missing from this cosmological map.

after a map in the British Museum Library London

regarding the shape of the Earth were confirmed by actual experience. However, Cosmas derived his interpretations not from what he saw but from what he *believed*.

In accordance with scripture, Cosmas visualized Earth as a flat, rectangular surface at the center of the universe, and he began a reactionary trend in biblical geography characterized by flat-earth maps. Cosmas acknowledged the existence of lands across the ocean from the Known World, however he insisted overseas territories were uninhabitable. It was his belief that the "Western Continent" of Greco-Roman mythology was the biblical land where Noah's family dwelled before the Deluge. This region was presumably uninhabitable because of the God-ordained flood that exterminated all but Noah's family. Cosmas believed an earthly paradise—The Garden of Eden—was located in the Far East. According to Cosmas, mortals were forbidden from going to this land because of sins committed by Adam and Eve—i.e., sampling the forbidden fruit of the Tree of Knowledge. Medieval maps often showed the Garden on an island surrounded by a fortress to keep out accidental visitors. Pictures of Adam and Eve are also shown on these maps to remind mortals of the consequences of disobedience.

Religious dogma concerning the Garden of Eden and the uninhabited lands of Noah survived through the 15th century. One reason Spanish clerics cited for rejecting the Columbus proposal of sailing west into the "Sea of Darkness" was fear that he might blunder into "forbidden territory." No God-fearing clergyman wanted that on his conscience.

In the 7th century, monastic geographers often wrote of uninhabited lands or *terra inhabitabilis* across the Atlantic.<sup>3</sup> Monks regarded these lands as the *forbidden* territories described in the *Christian Geography* by Cosmas. The Spanish monk Isidore of Seville mentioned *terra inhabitabilis* in his book *Origines* (636 AD). The 8th-century Austrian monk Beatus mentioned *terra inhabitabilis* in *Commentaries on The Apocalypse* (776 AD). During the 11th-century, monks at Saint Sever Abbey drew a world map to illustrate the uninhabited land of Beatus' *Commentaries*. In accordance with the cosmology of Cosmas, Earth was portrayed as a flat rectangle.<sup>4</sup>

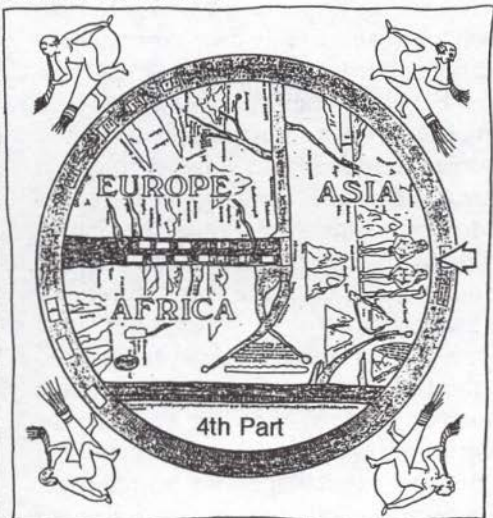
Flat Earth maps included four land areas: Asia, Africa, Europe, and a southern continent sometimes called "Antichones" or simply the "4th Part." The inhabited continents were the lands presumably settled by Noah's three sons (Shem, Ham, and Japheth). Since there were only three sons, biblical geographers naturally assumed there was no one available to inhabit the southern continent.

By the 9th century, contact with Arabic scholars convinced Europe's leading clerics that Earth was round. Accordingly, they adopted a stylized cosmological "map" in the shape of a circle around a *tau* cross.





Santarem ca. 900 A D



14.M2

after Bagrow (1951)

A disk shape is used for this representation of a spherical Earth in Santarem's Mappa Mundi (left) circa 900 AD. In accordance with biblical doctrine, land area takes up 3-4ths of the surface area. Missing is the ring continent of Classical geography. The 4th Part was held to be uninhabitable due to inhospitable climate. Angels with wind bags explain the phenomena of winds. At the center is Jerusalem, and in the far East—Paradise represented by Adam & Eve. Pomponius Melae's Mappa Mundi (lower left) from 1417 AD lacks a 4th Part which by this time was in disfavor but not entirely ruled out. The Earthly Paradise, as portrayed by Hans Rust (below) in 1475, was conceived of as a walled island surrounding the famous Apple Tree. Wherever it was, mortals were not allowed to go there.

Pomponius Melae 1417 A D

after Letewel (1857)



1475 AD



Paradise on the Hans Rust Map

The “T-O” map was a simplistic, yet theologically elegant way to show Earth's three continents as a Christian symbol.

Monk-geographers achieved a major breakthrough in 1085 when Christian armies captured Toledo from the Moors.<sup>5</sup> Among the treasures in the Islamic library were circular world maps showing the Earth's roundness in sufficient detail to disprove archaic doctrines.



Circular world maps were called *mappae mundi*. Monks centered their world on Jerusalem—the focal point of Christian theology. They embellished the countryside with biblical anecdotes to reinforce beliefs that Earth existed primarily as a stage for the drama of salvation. Scenes showing Adam and Eve in the far east reflected current dogma that an Earthly Paradise was situated near China. The monk Santarem expressed this cosmology in a map produced circa 900 AD. He believed the southern continent—*Partes Orbis Quatra*—was uninhabitable due to extreme cold.

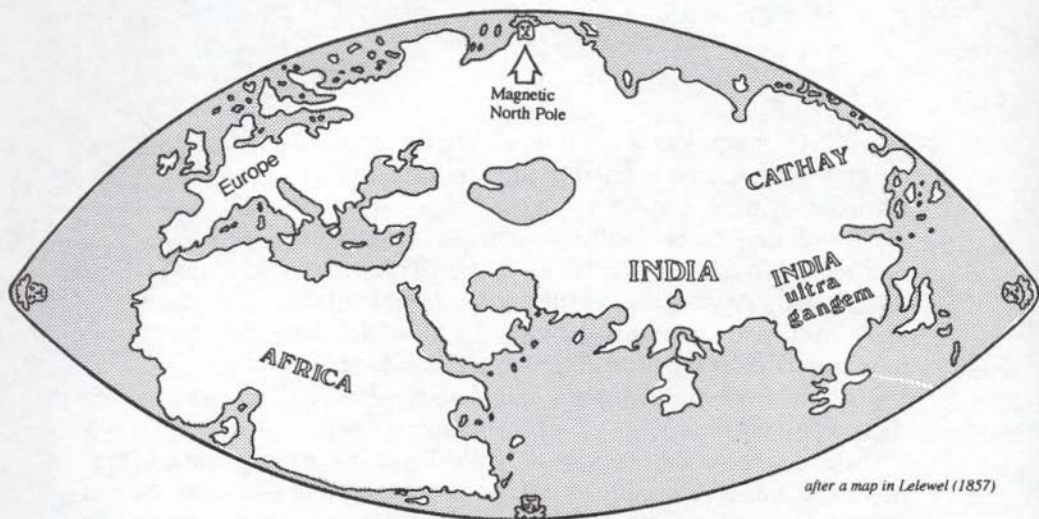
Inquisitive monks who examined Arabic manuscripts became aware of lands across the ocean. A few daring clerics skirted heresy by citing the opinions of Classical writers. In 1120 AD, the monk Lambert of Saint Omer stated in his *Liber Floridus* that there was a southern land which “ancient philosophers” thought was inhabited by the *Antipodes*. By quoting ancient philosophers, Lambert avoided the censure from superiors and the wrath of Inquisitors for suggesting that a land not named in the *Bible* might be inhabited.

*Mappae mundi* by Pomponius Malae circa 1417 reflect the controversies that preoccupied biblical geographers. One of his maps shows the 4th Part of Earth as a southern continent called “Antichones” in accordance with Greco-Roman tradition. A second map lacks the southern continent. Some monks argued that a 4th continent was impossible; others held that the “Other World” of the ancients existed—although biblical doctrine made clear it was uninhabited. The Garden of Eden, once thought to be situated in Asia, was now presumed to lie on an island somewhere *east* of Asia. Circular maps were usually surrounded by angels who served the purpose of explaining the winds and the miracle of Earth “floating” in the ether of space. This myopic world view influenced political and economic policy for the next century; it was a major factor in the “Age of Exploration;” and it contributed to the rivalry between scientists and clergy that culminated in the Reformation.

### Scientific Cartography

Beginning in the late 13th century, mapmakers in Pisa, Genoa, and Venice developed scientific methods for making maps. Their *portolanos*,





after a map in Lelewel (1857)

### Marino Accordata Planisphere 1447: Tabulata Genuensis

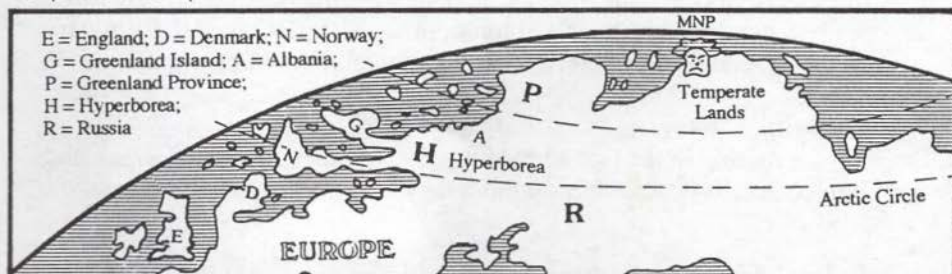
This map is a copy of an earlier planisphere in Florence, Italy, dated 1431. It is an adaptation of Ptolemy's 2nd-century map. The primary differences are addition of "temperate lands" above the Arctic circle (enlarged below) and islands east of India ultra Gangem or India Superior. Marco Polo identified these islands as Java and locathe—the Isle of Gold.

or "port guides," were the earliest European charts of sufficient accuracy for use in navigation. They are distinguished by overlapping compass lines. Because they were made to serve a purely utilitarian function—earthly navigation—they lacked the Biblical annotations which characterized *mappae mundi*.

In 1409, the Florentine Jacopo Angiolo translated Arabic copies of Ptolemy's Roman geography. Europe's scientific mapmakers promptly adopted Ptolemy's elongated version of the Known World because it was the most accurate map available. As a consequence of this re-discovery of ancient pagan maps, European geographers emerged from the Dark Ages in 1450 to a level of knowledge equivalent to the 2nd century AD.

Angiolo's translation served as the basis for a Florentine *planisphere* in 1431. Marino Accordata made an updated copy in 1447. The purpose of a planisphere was to show the entire surface of the globe as an oblong projection. Accordata's map, The Tabula Genensis, portrays only three continents—because the current doctrine held that the "4th Part" or

Temperate lands represent North American territories



southern continent of Greco-Roman legend was only a fable. North of Europe, he indicated several large, temperate lands reaching above the arctic circle. These lands included the Norse Greenland Province, *Unsi-albi* (Albania), Hyperborea, and a land of Griffons. They all appear as northern appendages of Europe, but they actually represented North American territories in the vicinity of the North Magnetic Pole. Accordata's map shows Java in the Indies Islands—where Marco Polo spoke of an isle of gold. This map and its golden isle played a prominent role in the Columbus proposal—"The Enterprise of The Indies."

A copy of Accordata's planisphere made in 1457 was known for a long time as "The Genoese Map." Now, scholars believe the map was produced by the Florentine geographer Paolo Toscanelli. Like his predecessors, Toscanelli produced a map that follows Ptolemaic designs with one major exception: in accordance with current Church doctrine, only three continents are shown. Ptolemy's map had indicated a huge, continental land area east of Asia across an ocean he called the "Sinus Magnus." Ptolemy believed there was continental land between the Indian Ocean and the Atlantic Ocean—which happens to be true. However, Toscanelli's map indicates there is no significant land barrier between Asia and Europe—just a wide-open sea. Another mistake that Toscanelli made was that he assumed Ptolemy had accurately determined the size of the Known World. In fact, Ptolemy's Eurasia was substantially exaggerated. This exaggeration led Toscanelli to believe that the distance separating the East Coast of China from the West Coast of Europe was substantially smaller than is actually the case—about 3,000 miles versus the actual 13,000. In 1474, Toscanelli sent copies of his map to Columbus and the king of Portugal. He suggested the unthinkable: that a voyage was feasible across the Atlantic to the riches of the Orient.

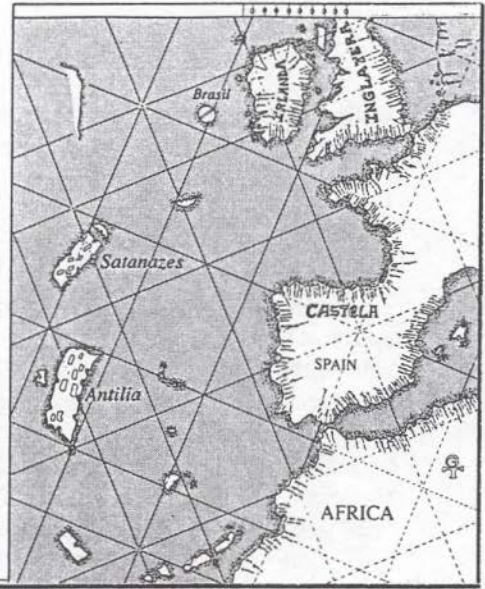
Portuguese cartographers knew Toscanelli had crossed over the edge of sanity. They had entertained similar ideas since the mid-1400's. Numerous captains had sailed across the seas under orders from Prince Henry The Navigator. They even found land west of Europe—although cartographers showed these as mere islands on the *portolanos*.

The earliest Portuguese map to show significant lands in the Atlantic directly across from Europe is an anonymous *portolano* that surfaced in Lisbon, Portugal, in 1424. Known as Pope Urban's Map (a.k.a. the "Pizzigano Portolan"), it shows two large islands directly west of Portugal—*Antilia* and *Satanazes*. Several scholars believe these lands represent North America. An Arabic map by Ibn Said in the 13th century shows large islands in the same area. Portuguese cartographer Andrea Bianco made a map in 1436 that was very similar to Pope Urban's Map. Bianco called *Antilia* and *Satanazes*—*insulae de novo repertae*, or



### Pope Urban's Map 1424

This map, also called the "Pizzigano Portolan," is by an anonymous Portuguese cartographer. It shows two large land areas in the mid-Atlantic, *Satanazes* and *Antilia*. Placement of these isles is the same as western isles on a 13th-century Arabic map by Ibn Said (now in the Oxford Bodleian Library). Most subsequent 15th-century maps show these two "islands." The Portuguese name *Antilia* means "land across from" Europe. *Satanazes* is thought to represent a French word for "forests" and might correspond to the Norse territory of Markland (forest land) or Greenland Province. This Portolan and subsequent maps showing *Antilia* support the Portuguese claim of ancient voyages to America. The placement of these isles suggests they were located using celestial coordinates. 14.M3



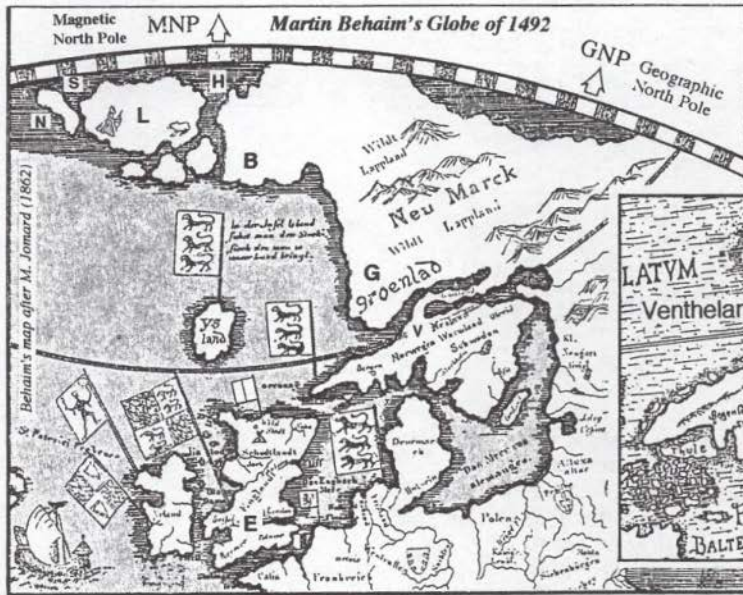
"newly discovered islands." In 1448, he wrote on another map: "Island authenticated to the west 1500 miles."<sup>6</sup>

These statements confirm Bianco's assessment that *Antilia* and *Satanazes* were significant land areas that had been confirmed by more than one witness. Multiple confirmation is one of the methods used by scientific cartographers to distinguish *real* lands from "imaginary isles" that were sometimes spawned by the imaginations of Medieval sailors. Modern historians often fail to credit Renaissance scholars with practicing the scientific method. Mariners often underestimated sailing distances because they lacked adequate instruments for calculating *longitude*, however, they were usually accurate regarding *latitude* because all that was necessary was to observe the direction of the rising sun on the horizon. Although isolationists have dismissed *Antilia* and *Satanazes* (or *Salvaga*) as mere "fantasy islands," most 15th-century cartographers included them on charts of the North Atlantic.

### Northern Territories

By the mid-15th century, European mapmakers added a new peninsula of land above Norway called *Groenland*, or Greenland. An example of many such maps is the 1489 chart by German cartographer Henricus Martellus. He portrayed Greenland as a long, finger-like peninsula reaching far west from the top of Norway.

In 1491, German cartographer Martin Behaim completed work on a world globe. It is a valuable record of European knowledge about western lands *prior* to the Columbus voyage in 1492. Notations written on the globe identify several land areas in North America. Behaim believed that *Antilia* was a large land midway between Europe and Asia:



KEY: B = Baffin Island; E = England; G = Greenland; H = Hudson's Bay; L = Labrador; N = Newfoundland; S = St. Lawrence estuary; V = archaic Vinland or Venthelant.



Nicholas Germanus Map of 1470

### Magnetic North and Northern Territories 1492 AD

This section from Martin Behaim's globe of 1492 shows European beliefs regarding the location of Norwegian territories at the time of Columbus. The location of Greenland Island north of Norway is essentially the same as Nicholas Germanus had on his map of 1470 (right section). Behaim shows lands beyond Norway reaching to the Magnetic North Pole; such lands, due to compass declination and deviation from True North, were actually located thousands of miles west of their location on this map, and they represent Norwegian territories reaching far into North America. Behaim's map has eliminated the archaic "Venthelant" of Germanus.



In the year 734, when the whole of Hispania had been taken by the Infidels from Africa, the above-shown island of Antilia, called the Seven Cities, was colonized by an archbishop from Oporto in Portugal. Together with six bishops and other Christians, men and women, they fled there from Hispania by ship with cattle, goods and belongings. In 1414 a ship from Hispania sailed close to it.<sup>7</sup>

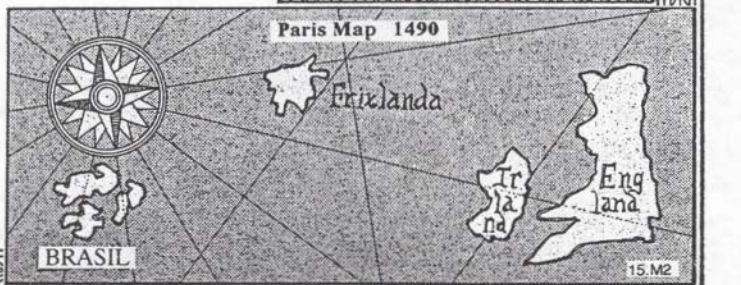
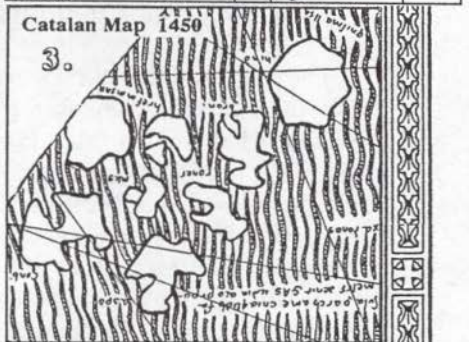
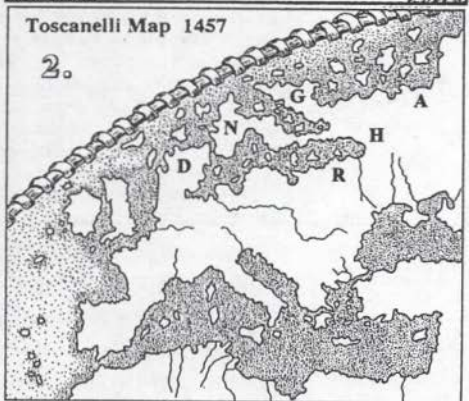
The only land that comes even close in size and location to Antilia is North America. Behaim's globe includes the notation that it was produced following the latest Portuguese expeditions between 1431 and 1486. The northern section contains several North American islands, including Greenland, Baffin Island, and Newfoundland, and huge "islands" representing continental land from Labrador to the Gulf of St. Lawrence. The land areas are portrayed as an archipelago bending around the Arctic Circle. Behaim made the mistake of assuming Greenland was part of a peninsula of land reaching northwest from the top of Europe. However, both Greenland and the islands he portrayed northwest of Greenland were actually situated thousands of miles toward the west and southwest. The error was caused due to reliance on mariners' compass bearings. Thus, lands shown around the North Pole actually correspond to lands around Hudson's Bay—which was the





# Misty Isles

European maps of the 15th century show many islands north of Europe. Most of these represented lands which merchants and fishermen saw or landed upon across the seas. Most sailors used compasses which are notoriously inaccurate in the northwest Atlantic. A map by Henricus Germanus in 1489 (1) shows Greenland as a long peninsula reaching out from above Russia. Paolo Toscanelli's map of 1457 (2) shows islands and temperate lands (Hyperborea) beyond the Arctic circle between Greenland and the North Pole. On charts made with compass coordinates, this area corresponds to Labrador and Hudson's Bay. A group of islands drawn on the Catalan Map of 1450 (3) are thought to represent islands and continental shores between Davis Strait and the Gulf of St. Lawrence. Lands southwest of Frixlanda (Iceland) on the Paris Map of 1490 (4) probably represent Newfoundland. English seamen referred to this area as Brasil—meaning "Blessed Land." It was the location of cod fisheries frequented by Bristol seamen in the 1480's or earlier. Johan Cabot planned to stop at these isles on his way to China in 1494. Irish and Portuguese voyagers carried the name "Brasil" to South America where they found a valuable red tree they named Brazilwood.



- KEY:**  
 G = Greenland  
 N = Norway  
 H = Hyperborea  
 D = Denmark  
 R = Russia  
 A = Albania



location of the North Magnetic Pole.

Behaim identified two lands north of Europe with names that have historical references: "Neu Mark" and "Falcones." Nu Mark represents the Norse territory located beyond Greenland Island that was the source of lumber shipped to Iceland. This is documented by Icelandic historical records. "Falcones" refers to the source of falcons which Greenland traders provided to European royalty—also a matter of historical record.

References to northern lands on European maps increased with the passing years as voyages across the North Atlantic became more frequent. The Catalan Map of 1450 shows a group of islands in the vicinity of the St. Lawrence Gulf; another 1450 Catalan Map in the Biblioteca Ambrosiana identifies *Illa Verde* (Green Isle) west of Ireland; the Genoese Map of 1457 indicates temperate lands north of the Arctic Circle; Johan Schritzer's Map of 1482 shows an island called "Farland" north of Ireland in the Glacial Sea; and the Paris Map of 1490 shows a land called "Brasil" southwest of Frixlandia (i.e., Iceland). This places Brasil in the vicinity of Labrador. In 1528, cartographer Pietro Coppo identified *Isola Verde* (the Green Isle) as a continent—North America.

### North European Ships & Maritime Commerce

Although European shipbuilders faced hard times at the beginning of the Dark Ages, the spiritual revival initiated by the Crusades infused shipyards with the vitality demanded of nations at war. The fact that armies had to be transported across the Mediterranean to the Holy Lands and supplied by ships placed a staggering demand upon naval yards. New innovations in ship designs came about as a consequence of contact with Moslem navies and Arabian merchant ships. By the mid-15th century, European builders perfected the world's mightiest fighting ships and constructed the most powerful fleets.

North European builders incorporated the Oriental sternpost rudder on vessels called *cogs*. The 12th-century craft were bulky, single-masted ships with a deep keel and rounded bottom to provide maximum speed and maneuverability. Cogs were up to 100-feet in length; larger vessels were called *hulks*. When cogs were ordered for combat, builders added "castles" above the stern and bow. These elevated fighting platforms had protected positions for archers and catapults.

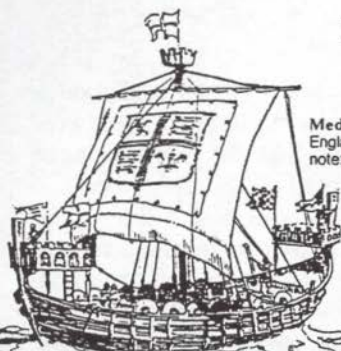
Merchants organized for safety and for economic advantage. Major ports between London and Novgorod, Russia, joined a trading coalition known as the Hanseatic League. Hanseatic cogs traveled as far as Greenland, until the Little Ice Age prevented North Atlantic voyages.

In the 14th century, shipbuilders of southern Europe designed huge ships with square-shaped sterns. These *carracks* were the primary fighting ships of Christian fleets. They carried multiple masts, including



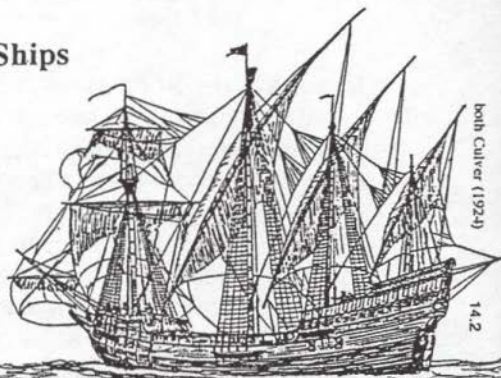


## European Ships



Medieval Warship  
England 11th to 14th cent.  
note: castles at both ends

Caravel



both Culver (1924)

14.2

both square and lateen sails; they had portholes for cannons. The largest vessels, called *great carracks*, displaced more than a thousand tons.

Portugal's Prince Henry The Navigator designed a special expeditionary vessel during the early 1400's that was based on traditional Moorish fishing boats called *caravels*. Henry's design was a medium-sized ship with fore and aft castles, high bulwarks, square stern, bowsprit, and three or four masts. *Caravels* were usually equipped with square and lateen sails—making them versatile craft in Atlantic coastal waters. They were used in Prince Henry's expeditions along the African coast as well as voyages to northwest territories—that is, America. Columbus used two *caravels*—*Nina* and *Pinta*—on his voyage of 1492.

## Unofficial Voyages

Europeans had two histories: the "official version" and an informal assortment of tax records, private letters, mariner's charts, and oral traditions. Monks were responsible for keeping the sanitized version of history that documented progress of Church authorities in building the "Divine City" on Earth. For a long time, the Church held a monopoly on history, because libraries were housed in cathedrals or monasteries, and monks were the only people trained to write. The "history" they recorded was the official version which documented miraculous events and the annexation of formerly heathen lands by conquests. Church authorities euphemistically referred to these conquests as "discoveries."

However, the story that monks recorded was not the only story being lived. By the 12th century, Europe's monarchs had grown jealous of the pope's power over temporal affairs—and his monopoly on history. Some kings found literate friars who were willing to write chronicles dealing with affairs of state. Documents they produced reveal a hidden dimension of discovery that was beyond the realm of world evangelism.

Monarchs who were skeptical of maps produced by biblical geographers arranged secret expeditions across the Atlantic. They followed in the wakes of numerous "unofficial" voyages including pirates,



fishermen, curious mariners, and devout captains who were inadvertently swept off course by storms.

### English Seamen, Fishermen, Traders & Pirates

Besides ancient voyages reported in earlier chapters, English seamen engaged in fishing, trading, and piracy in the North Atlantic during the century preceding the so-called "Age of Discovery." In 1360 AD, King Edward III ordered the Oxford monk, Nicholas of Lynne, to make an inventory of western isles. Lynne's manuscript was called the *Inventio Fortunatae*—literally the inventory of the "fortunate" isles. King Edward regarded it as an accurate accounting of the numerous territories sighted by English voyagers. Although the *Inventio* has been lost, it is known that John Day promised to send a copy to Columbus. The document was mentioned by Fernando Colon (the mariner's son) as well as Bartholomew Las Casas—the chief biographer of Columbus. Martin Behaim referred to the voyage of an anonymous English Franciscan (probably Lynne) in 1360. And cartographer Johan Ruysch cited the *Inventio* as a source for his Arctic map of 1507.

Norse records indicate that Lynne accompanied an astronomer whose duty it was to make celestial observations in order to determine accurate geographical coordinates. It is for this reason that several scholars believe that early maps showing the correct latitude for New World territories, such as Pope Urban's Portolano of 1424, were based on celestial observations in the 14th century.

British merchants visited western territories in the north Atlantic during the early 14th century. Bristol traders brought fancy European garments which archeologists found in Norse burial grounds near ruins of the Greenland settlements. On the return voyage to England, they carried American tobacco. The characters of an English pipe smoker and his outraged spouse adorned an ancient building in Stratford-on-Avon.



after Donnelly (1976)

By the early 15th century, Nordic colonies on Greenland had become prosperous enough to attract British pirates. An attack on Greenland's western Catholic settlement in 1418 AD was severe enough to warrant mention in the chronicles of Pope Nicholas V. According to the report, the pirates attacked from bases *farther west*, such as Baffin Island or Labrador. In other words, the pirates had established their base somewhere in North America. By 1432 AD, the attacks had become so severe that the Norse king sought English help to suppress them.

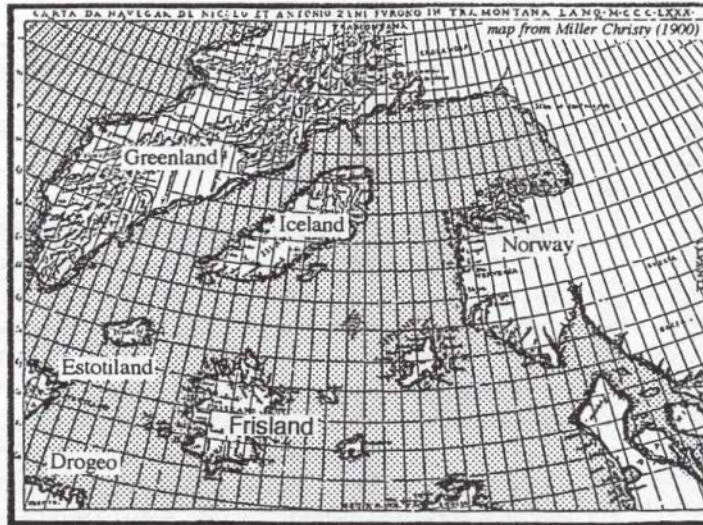
In 1480, John Day dispatched Thomas Lloyd to seek a northern route across the Atlantic to find "Brasil." The fact that a *northern* route was





## Zeno Map

This 1558 copy of a map by the Zeno brothers Nicolo and Antonio in 1395 was discredited in the 16th century because the coordinates were shown to be in error. Modern scholars have complained that the map includes non-existent islands such as "Frisland." However, Miller Christy (1900) and William Hobbs (in *Imago Mundi*, 1946) have established that the map is an excellent magnetic rendering—confirming that it was made in ancient times. Drogeo in the lower SW corner is thought to represent Labrador.

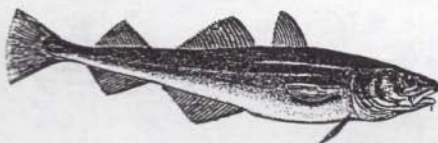


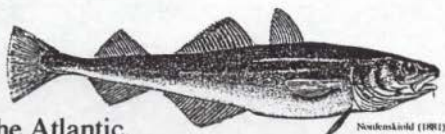
chosen reveals a 15th-century British belief that Brasil was in the western Atlantic. The account of Lloyd's voyage tells of storms battling his vessels for nine weeks before he was driven back to England.<sup>8</sup> Although historians cite this as an indication of failure to succeed in early western explorations, a letter written by John Day in 1497 clearly states that Bristol fishermen succeeded in reaching Brasil prior to John Cabot's first voyage in 1494. In the letter, Day says that Brasil (Labrador) was the location of cod fisheries frequented by ships from Bristol and Iceland. Another letter by John Day indicated Cabot's prior knowledge of mainland in the North Atlantic based on conversations with Bristol fishermen. A letter which Pedro Ayala sent in 1498 to the Catholic Sovereigns of Spain reported that several expeditions had set out each year from Bristol heading west since 1491. Their objective was Antilia—The Isle of Seven Cities.

Bristol harbor masters reported Atlantic trawlers hauling cargoes of Newfoundland cod to seafood markets in the early 1480's.<sup>9</sup> The annual fishing expeditions, which probably took place long before 1480, were of vital importance to the British economy—as they were to many other North European nations. Occasionally, fishermen sighted lands to the west; others were driven ashore by storms. Those who returned with tales of western lands contributed to the folklore. Monks didn't record such incidents because *unofficial* sightings were deemed unimportant to the evangelical history of the "Divine City of God."

## The Scots, Sinclair & Nicolo Zeno

The first Scotsmen of historical record in America were two rangers who accompanied Thorfinn Karlsefni to Vinland in 1010 A.D. Their role in the two-year Norse trading expedition was reported in the *Greenlander's Saga*. They made the trip at the request of the Norse king who was





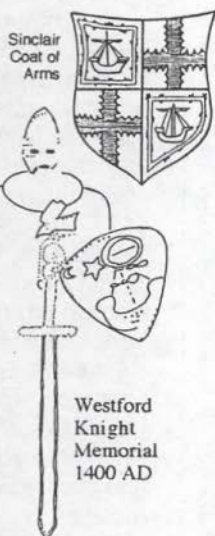
intrigued by reports of lands across the Atlantic.

Historian Arlington Mallery believes an expedition of Scots established a colony west of Vinland during the 11th century. His evidence consists of a Norse saga and a 16th-century chart called the "Thorsen Map." The *Greenlander's Saga* told of Norse explorers finding a grain shed in Celtic *Vitramannaland*—the territory west of Vinland in North America. According to Icelandic historian Bjorn Jonsson, "Vitramannaland," or "Albania," were names used for a Celtic colony in North America. In 1568, a priest named Erlend Thorsen left a copy of an ancient map in the parish archives of Staden, Iceland. The map shows a New World colony called "Albania" in the vicinity of the St. Lawrence river.<sup>10</sup> Arlington Mallery believes that "Albania" was a colony of Scotsmen because *Alban* was the ancient name for Scotland.

In 1558, a Venetian produced a map and travelog which he said were obtained from two 14th-century explorers Antonio and Nicolo Zeno. The travelog was written from the perspective of the Zeno brothers who reported visiting "northern territories" including a place called *Drogeo*—probably Labrador. Scholars now believe that the brothers joined a Scottish expedition to the New World in 1398. The leader was a prominent historical figure, Prince Henry Sinclair, Earl of Orkney. Sinclair organized the expedition to satisfy his curiosity about rumors of inhabited lands west of the Atlantic. Zeno and Sinclair traveled together for 9 years before returning to Europe.

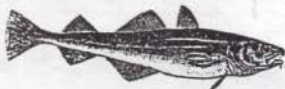
Although Zeno's account was popular during the 1500's, historians later decided that the map was a fraud because it included a nonexistent island, *Frisland*. However, the same island was included on most ancient Nordic maps before Iceland was accurately charted; and it is common on Arabic charts of the 15th century. Even Columbus told of his voyage to "Frisland" in an Arctic voyage of 1477. Instead of "proving" the Zeno map a hoax, inclusion of *Frisland* is evidence of authenticity.

Frederick Pohl found another relic of Sinclair's voyage to America: an ancient petroglyph (rock carving) near Westford, Massachusetts bears the knight-and-shield insignia of the Sinclair clan. Although isolationists assumed the monument was a fraud, Thomas Lethbridge, curator of archeology at Cambridge University, England, identified the shield as a 14th-century emblem of a Scottish knight.<sup>11</sup>

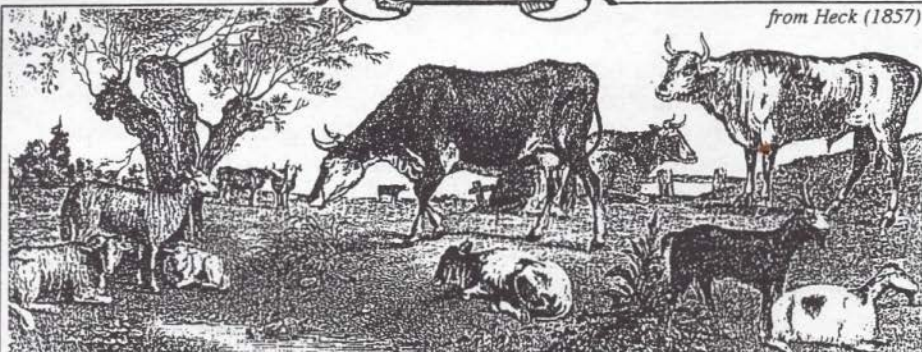


### Basques in America

Basque fishermen of northeastern Spain were among North European seafarers who followed migrating herring into the North Atlantic







## Old World Farm Animals in Ancient America



Europeans introduced numerous farm animals to the New World between the 8th and 15th centuries. The earliest historical reference to European animals is found on Martin Behaim's annotated world globe of 1492. According to Behaim, Portuguese Christians brought cattle and other animals to the western Atlantic refuge of Antilia (North America) in 734 AD. During the 14th-century exodus from Greenland, Norse farmers brought fjord ponies, cattle, sheep, goats, cats, and dogs to Vinland det Gode (New England).<sup>25</sup> The sagas reported that Norse settlers brought "livestock of all kinds" to Vinland; priests who toured abandoned villages in Greenland reported that few animals had been left behind. Norse livestock joined animals belonging to Celtic farmers in Great Ireland.

The animals and farms were still around when European explorers and colonists descended upon North America. Even on the marginal island of Hispaniola, Columbus reported that natives had hogs, goats, and chickens. The Florentine explorer Amerigo Vespucci reported hogs and goats in villages along the Gulf of Venezuela during his voyage in 1497. He called them similar to hogs and goats of Europe. Survivors of the Spanish DeSoto expedition which crossed from Florida to Louisiana in 1542 reported seeing *vaches* or cattle in native villages. When the English seaman David Ingram trekked through the wilderness in 1569 from Louisiana to Canada, he reported farms with "cattell," horses, and chickens along the route. Indeed, most frontiersmen observed farms scattered across the wilderness. In 1687, the New England militia under Baron DeLahontan devastated Seneca villages of western New York. His men were surprised to find that the Seneca were excellent farmers, and they raised many European animals: "In all these villages," the Baron recalled, "we found plenty of horses, black cattle, fowl, and hogs."<sup>26</sup> In 1765, frontiersman William Rogers visited "white Indians" who lived in towns and raised cows as well as grain. These Indians, like the Seneca Tribe, lived far beyond Colonial settlements. Consequently, the grains, animals, and fruit trees they raised did not seem like recent adoptions from European culture; they were part of the ancient, native heritage.



and beyond. They also fished for cod along Newfoundland's Grand Banks. Fishermen called the abundant cod *baccalos*—a name that was also used by the natives of Newfoundland. During the early 16th century, the region from the Gaspé Peninsula to Maine was known as *Terra de Baccalos*—literally “Land of Cod.” It was the site of Basque fishing villages. Basque traders also obtained beaver pelts from the natives. According to Bristol harbor records, Basque merchants imported beaver pelts to England by the late 14th century.

Cartographers identified the Basque region of northeastern North America as early as the 12th century. Al-Idrisi's 1154 map shows the region of *Bakargar* north of China. It was similarly placed on a map by the Florentine Francesco Rosselli in 1492 (called *Balor Regio*) and on a map by the German cartographer Martin Waldseemüller in 1522.

Anthropologist James Guthrie believes a Basque colony was established in Virginia and North Carolina.<sup>12</sup> Early explorers including the Florentine Giovanni Verrazano and the Colonial scout Daniel Boone reported “white tribes” in this region. Guthrie believes that a group of people called “Melungeons” and members of the Lumbee Tribe living in Virginia and the Carolinas are descendants of Basque settlers. His theory is supported by blood samples which show strong similarities between the Melungeons and Basques.

Harvard scholar Barry Fell has identified similarities between the Basque writing system of the Middle Ages and writing used by Cree and Ojibway tribes of North America.<sup>13</sup> The Ojibway also have a legend that their ancestors came across the ocean from a distant land.

### Portuguese Explorers and Brazil

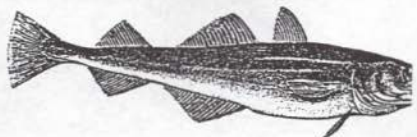
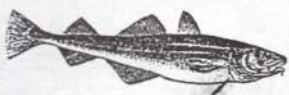
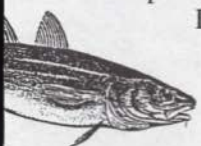
The Portuguese were among the first Europeans to venture across the Atlantic. The earliest documented voyage occurred in 734 AD, when the archbishop from Oporto sailed with six bishops and hundreds of followers to *Antilia* (America). They also brought along farm animals (see “Focus”). German geographer Martin Behaim recorded their flight to escape the invading Saracens on his 1492 globe.

During the 15th century, Portuguese sailors under Prince Henry the Navigator were active in the North Atlantic as well as along the coast of Africa. In 1427, he dispatched the pilot-navigator Diogo de Sevil to scout the Azores. Henry sent another pilot, Goncalo Cabral, to the Azores in 1431. The pilot Joao Fernandes sailed numerous times into the Atlantic between 1431 and 1486.<sup>14</sup> Portuguese historians believe these pilots sailed as far as the eastern tip of South America.<sup>15</sup>

In 1445, Vicent Dias sailed from Guinea to the Azores. His ship was

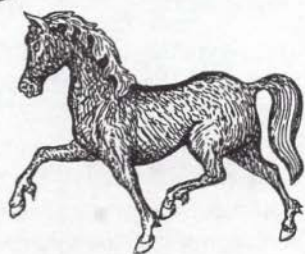


J. Russell, Montreal, 1879





## Old World Horses in Ancient America



Popular isolationist myths attribute the first North American horses to *strays* from the 1521 Juan Ponce DeLeon expedition and the 1539 Fernando DeSoto expedition. However, Spanish survivors reported that the expeditions used only stallions; breed mares were left behind in Cuba.

Some North American horses came from Spanish ranches in Mexico during the late 1500's; many came from stock imported from Europe during the early 1600's; and some came from the descendants of ancient Celtic stock already in America. Historian Alfred Crosby, author of *The Columbian Exchange* (1991) acknowledged that: "A lot of them (native tribes) have claimed that horses have been here forever and ever."

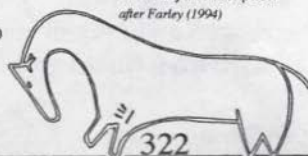
Henrietta Mertz (*Pale Ink*, 1972) reported that archeologists excavating a native mound in Wisconsin in 1956 found a horse's skull along with ancient artifacts. Materials from the mound produced radio-carbon dates from 490 to 1100 AD. Georgia residents have found horse statuettes with ancient remains; they are similar to Norse statuettes found on Greenland. A copper pin found with Inca remains in Peru was mistakenly identified as a "llama," but the profile is clearly that of a horse.

The survival of ancient Celtic and Nordic horses in the eastern Woodlands explains why explorers and missionaries sometimes found tribes riding horses long before they had significant contact with European horse traders. Baron DeLahontan's militia found horses in New York's Seneca villages in 1687.<sup>26</sup> Sailor David Ingram reported tribes with horses between the Mississippi and the St. Lawrence rivers in 1569. French explorer LePage duPratz reported in 1719 that he saw natives riding many horses that were "different from the European horse." In 1725, Colonial trader James Adair found that Chickasaw, Choctaw, and Cherokee tribes from Tennessee to Mississippi were *already* skilled riders, and they had independently developed a distinct breed of horse called the "Chickasaw." Botanist William Bartram saw Seminole and Chactaw natives riding horses on his trek through Georgia and Florida in 1773. In the 1850's, Apache Chief Esconolea told frontiersman James Tevis of a tradition that an army on horseback had come to New Mexico before the arrival of the Spanish.<sup>32</sup>

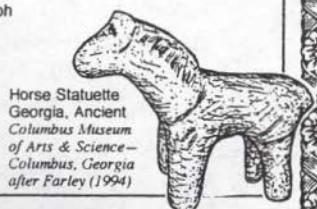
Historian Robert Howard determined there was no clear historical connection between Chickasaw horses and 16th-century European imports: "The Chickasaw horse emerges as the first domestic breed evolved in America; its origins may never be determined."<sup>27</sup>



Engraved Tablet  
Horse with Mane  
Utz-Oneola Site  
Missouri, 1300 AD  
after Bray (1963)

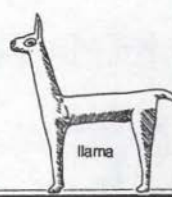


Ancient Colorado Horse Petroglyph  
with Libyan inscription  
after Farley (1994)



Horse Statuette  
Georgia, Ancient  
Columbus Museum  
of Arts & Science—  
Columbus, Georgia  
after Farley (1994)

# Inca Horse



Inca horse  
copper pin  
Peru, 1450

blown off course, and the crew sighted land to the west. Another ship, blown off course in 1453, reached the western land and found both gold and Christians. Diego de Teive was sent in search of the western land of gold; his ship was blown off course and wound up in Ireland. In 1471, Portuguese navigator Joao Vaz Corte Real sailed with a joint Norse-Danish expedition under the command of Didrik Pining and Johannes Pothorst. According to a letter written in 1551, the expedition charted continental land across the North Atlantic.<sup>16</sup> Corte Real sailed again from the Azores to Nova Scotia in 1473; his voyage to Newfoundland in 1485 ended in disaster.

American Museum of Natural History  
Bennett & Bird (1960; f33)

A Danish-Portuguese expedition in 1476 was under the command of Johannes Skolp (Scolvus). They sailed between Greenland and Baffin Island in search of a route to the Orient via a northwest passage. Anthropologist J.R. Tronoe believes Columbus accompanied this voyage. Joao Coelho sailed to the Caribbean Antilles in 1487; his pre-Columbian voyages were revealed at a court hearing in 1514 when Spanish authorities accused his associate, Estevao Frois, of trespassing on Spanish territory in the Caribbean.

Some 15th-century Portuguese maps showed a mid-Atlantic island called *Isla Verde* —“the green island.” By the 16th century, *Isla Verde* was identified as the Northeast coast of North America. Secret Portuguese expeditions into the Atlantic came to light following the Columbus voyage of 1492. When the Spanish pope awarded Spain *exclusive* right to colonize the “Indies Islands,” King John of Portugal threatened war with Spain. John’s emissaries protested that Portuguese navigators made *prior* discoveries but kept them secret to avoid competition with other Christian nations. In the Treaty of Torsedillas, the pope recognized Portugal’s claim by granting Portuguese sovereignty over territories up to 370 leagues west of the Cape Verde Islands. This zone includes the eastern territory of South America—Brazil.

Suspicious of King John’s prior knowledge of Brazil were confirmed by a letter that English merchant-spy Robert Thorne sent to King Henry VIII in 1527.<sup>17</sup> Thorne stated that the Portuguese had already identified the South American province of Brazil long before 1492.

## Evidence of Contact

Artifacts, Old World wheels, natives with European physical traits, European farm animals, legends of foreign visitors, and tales of white prophets all bear testimony to the profound cultural and social impact of

Horse Amulet  
ancient Pueblo artifact  
after Farley (1994)

323





## Ancient American Epidemics Tuberculosis, Syphilis, Small pox, Measles, & Typhus

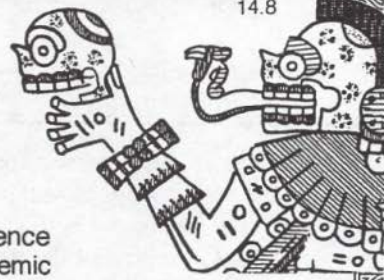
During the 11th century, an unknown pestilence decimated the Toltecs of Mexico.<sup>28</sup> Another epidemic swept the Yucatan Peninsula in 1480.<sup>29</sup> Scarring on ancient skeletons reveals that some natives suffered from tuberculosis and syphilis.<sup>30</sup> Some had polio. All of these were present in the Old World *prior* to 1492.

Tuberculosis was once the leading cause of death in America, and epidemics decimated native populations. Lakota natives called tuberculosis the "coughing sickness." According to the National Academy of Sciences (March, 1994), tuberculosis has been identified in a Peruvian skeleton dating to 1000 AD.

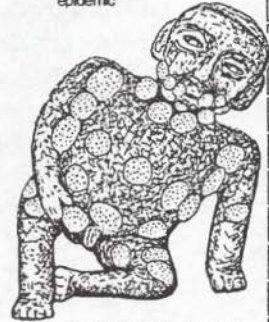
Reports of syphilis epidemics in Spain, France, and Italy following the return of Columbus in 1493 led isolationist scholars to assume the disease originated in America. However, Reay Tannahill, author of *Sex in History* (1980) notes that syphilis was already present in Europe under the name "lepra." The French called it "the Neapolitan Malady," Germans called it "Spanish Scabies," and Spaniards called it "the French disease." Classical archeologist Joseph Carter of the University of Texas-Austin reported evidence of treponematosi (syphilis or yaws) infection on bones recovered from a 5th century BC site in Italy. A Smithsonian archeologist, Donald Ortner found similar evidence in early 15th-century England.<sup>31</sup> Chinese historians claim Emperor Huang-Ti described syphilis in 2637 BC.

Ancient Mexican sculptures reveal that natives were hit by measles epidemics *prior* to the 15th century. Frances Gibson (1974, 258) noted that Mochica pottery from Peru shows natives scarred with "pockmarks and eruptive disease." Portrayals of the death goddess in the *codices* (1, 3 & 4) show patches of red dots suggestive of smallpox. Paul Marcoy (1875, 179) attributed a Toltec migration in 1051 to a smallpox epidemic that swept through the Yucatan peninsula.

Johns Hopkins University professor of epidemiology Kenneth Fuller Maxcy, M.D., reported that the Aztecs suffered typhus (spotted fever) epidemics in ancient times, although isolationists have claimed the first epidemic started with Cortes in 1519.<sup>32</sup>





1. Lord of Death  
red rash on skulls and bones  
15th century  
epidemic



2. Mexican with Measles  
14th century ceramic



3. Smallpox  
Mexican Deity  
Nuttall codex

note:    
red rash



4. Lord of Death  
Mexican codex  
15th cent.

Old World voyagers during the 15th century Vanguard of Conquest.

The earliest Europeans to reach North America reported Caucasians living among the natives. Columbus mentioned seeing white natives in Hispaniola, including women wearing their hair in the manner of Castilian ladies. He encountered a boat paddled by blond-haired men who eluded his carrack near Venezuela. When Pedro Pizarro invaded Peru, he noted the European appearance of some natives: "The ruling class in the kingdom of Peru was fair-skinned with fair hair about the color of ripe wheat. Most of the great lords and ladies look white like Spaniards." In 1524, Giovanni Verrazano reported people of "fair white" skin (*piu bianchi*) living in Rhode Island. Frontier scout Major William Rogers, author of *The Concise Account of North America* (1765), reported visiting "white Indians" who dwelled in houses organized into towns. They farmed grain and raised cows. Henry Schoolcraft (*Indian Tribes of North America*, 1851) wrote that an Algonkian Tribe had a tradition that their ancestors had come from across the Atlantic. A legend recounted by Chief Blackhoof told of white settlers who came to Florida in ancient times. Explorer Jacques Cartier and Canadian Governor DeRoverbal heard stories of white natives who dwelled in a western nation of Saguenay. Attempts to locate them proved unsuccessful.

With the passage of time, distinctly European features blended with the native racial stock. In some cases, the evidence of racial mixture was lost through genocide. A tribe of pale-skinned natives once inhabited Newfoundland at the time of early European colonization. Known as the Beothuks, they were generally regarded as a peaceful people. However, Iroquois and Micmac warriors exterminated the entire population after French authorities offered a bounty for Beothuk scalps.

French and English explorers remarked that some tribes could pass for Europeans if given appropriate clothing. Indeed, John Cabot brought three natives from Newfoundland to England and dressed them as Europeans. English historian Hakluyt said they were indistinguishable from his countrymen.

### Artifacts

Columbus acknowledged numerous artifacts of prior European voyagers to the Caribbean. On the first expedition in 1492, sailors informed Columbus that a native was seen wearing a coin pendant embossed with writing. This was a clear indication of prior visitors, due to the fact that natives didn't make coins. That didn't bother Columbus since he was expecting to meet many Old World princes, voyagers, and merchants in the Indies. On his second trip in 1493, Columbus came upon the wreckage of a European ship on the Island of Guadeloupe. Church historian Bartholomew Las Casas acknowledged the evidence of



## AMERICAN DISCOVERY

glass beads from Tatham mound  
Withlacoochee, Fla., 14th-16th century



prior voyagers, but he regarded such voyages as unimportant because they were not part of the *official* mission of world evangelism.

Several artifacts attest to transoceanic contacts in the years immediately preceding the Columbus voyage. Medieval swords were found in a pyramid at Palenque and at ruins near Madison, Wisconsin.<sup>18</sup> In 1501, the Venetian explorer Pietro Pasqualigo found a Venetian sword in Newfoundland. Some scholars believe it is a relic of the Nicolo Zeno and Sinclair expedition of 1395. At Tatham mound in western Florida, archeologists found glass and silver beads dating to the 14th or 15th century. Archeologists also found a gold coin in Santo Domingo inscribed with the date of 1482—just ten years before Columbus.

### American Wheels

Isolationists have argued that the *presumed* absence of wheels in America is evidence that Old World voyagers failed to have “significant impact” on New World cultures. Wheels have been found at archeological sites and commonly dismissed as “post-Columbian” phenomena. There is one glaring exception: Hayatt Verrill, author of *Old Civilizations of the New World* (1938), excavated four stone wheels at sites in Peru and Panama. Verrill noted that: “The most puzzling objects among these ruins are two stone disks of wheels which I discovered on my last visit to Tiahuanaco. One of these is completely buried under the fallen masses of stone.” He concluded that the wheels were of pre-Columbian origin. They are also a common feature of Mexican ceramic toys circa 500 AD.



Mexican wheeled toys  
2nd to 5th century AD

### Legacy of The Vanguard: White Prophets

Natives from New England to Peru cordially received 16th-century Europeans. In some instances, foreigners were treated as long-lost brothers or returning gods.<sup>19</sup> Usually, white explorers didn’t have to battle their way onto the shores: instead, they were welcomed with presents. Could it be that earlier visitors from abroad had established a reputation for fairness and generosity?

The Micmac of Nova Scotia had a legend of a culture hero who came from across the Eastern Sea. They called him “Glooscap.” Many of his adventures involved a trickster-demon named Loki that suggests a Scandinavian heritage for the Micmac hero. According to Native historian Dhyani Ywahoo, Southeastern tribes (the Tsalagi, Creek, Choctaw, and Yuichi) had a tradition of a Pale One who came to the Great Smoky Mountains bearing spiritual gifts.

When Hernan Cortes reached Mexico in 1517, the natives greeted him as a “returning savior.” Indeed, the Mexicans told him that he was expected. According to historian Hugh Thomas, author of *Conquest*



Toltec Portrait of Kukulcan (a.k.a. Quetzalcoatl)  
Old World prophet of the 12th century  
Chichen Itza, Mexico

(1993), an old man from Xochimilco informed Emperor Montezuma that he had seen old books pertaining to the foreigners who had arrived on the coast. “They were not strangers,” he said, “they were people returning to their own land.” Cortes took advantage of this mistaken identity to conquer a nation whose armies numbered in the tens of thousands, while his own force numbered only a few hundred armored soldiers. Cannons were not the deciding factor: his most formidable weapon was his mistress and co-conspirator, the native Melinche.

Following the conquest of Mexico in 1521, Dominican missionaries toured the land and spoke to the natives. Wherever they went, they found evidence that Christians had visited Mexico in ancient times preaching the Gospel of Brotherly Love. According to the Dominican Las Casas:

The natives affirmed that in ancient times there came to that land twenty men, the chief of whom was called Cocolcan. The foreigners were dressed in flowing robes and wore sandals on their feet, they had long beards, and shaved heads. They ordered the people to confess their sins and fast.<sup>20</sup>

Mexicans called their prophet *Quetzalcoatl*—literally “The Feathered Serpent.” His Mayan name was Kukulcan. When Spanish priests entered Mexico in 1521, they were amazed by the similarity of Quetzalcoatl’s religion to Christianity. According to legend, the prophet was the virgin-born son of God; his birthday was celebrated on December 25th, and his mother’s birthday was the same day as the birthday of the Catholic Blessed Virgin. Like Jesus, the Prophet had the ability to restore life, he visited the Under World, and he died a martyr promising to return. He also carried a great book which seemed to be modeled after the Old Testament of Judaism. The book contained laws of righteous behavior, a description of heaven and hell, an account of the dispersal of ancient tribes, and a record of the Deluge.<sup>21</sup>

Missionaries learned that Quetzalcoatl’s religion included circumcision, baptism, confession of sins, forgiveness of sins, penance, communion, and belief in a supreme being (*Ome-teotl*). The bearded prophet required an end to human sacrifice, while instructing his followers to observe a strict code of ethics. A cadre of priests administered the sacraments. They observed strict celibacy, lived in monasteries, and practiced meditation. Women priests lived in nunneries. Natives called their priests *papa*, or “father,” which was another uncanny similarity to the Christian term *padre*, meaning “priest” or “father.”

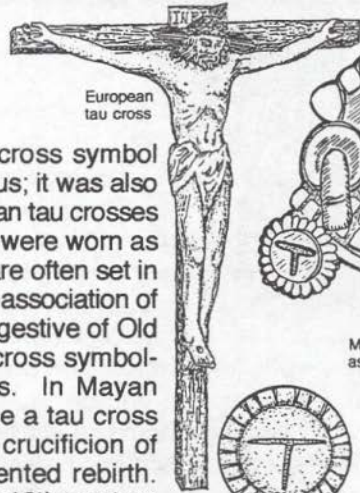


# Christian Cross

## in Ancient Mexico

The most common use of the cross symbol was to represent the planet Venus; it was also the symbol for gold. Classic Mayan tau crosses of the 5th-through-9th centuries were worn as emblems of high priests. They are often set in sun-burst emblems. The Mayan association of the tau cross and the sun is suggestive of Old World influence where the tau cross symbolized the of crucifixion of Jesus. In Mayan religion the sun was God, hence a tau cross with a sun symbol suggests a crucifixion of god. The Venus cross represented rebirth. The cross was adopted by the 12th-century prophet, Quetzalcoatl, whose teachings can be traced to Judaic-Christian traditions. The cross carried by Yiacatecuhtli, "Lord of The Vanguard" represented the mission of evangelists to carry the message of the unseen God (symbolized by footprints) on their travels.

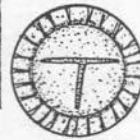
Historian Hugh Thomas (*Conquest*, 1993) notes that Mayans at Cozumel maintained a whitewashed cross that was observed by Cortes, Hernandez de Cordoba, and Grijalva: "The Mayans thought that the new Christian cross was in some way an act of homage to their own whitewashed structure."



European tau cross



Mayan tau cross as emblem of rank



Mayan tau cross with sunburst

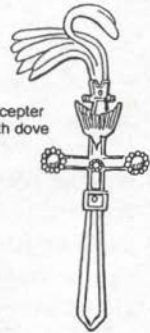


Mayan cartouche day name of the sun

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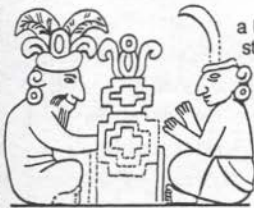
tau cross Palenque



Mayan scepter cross with dove



Jerusalem cross on world mountain Comalcalco, Mx.



a Mexican altar stone carving

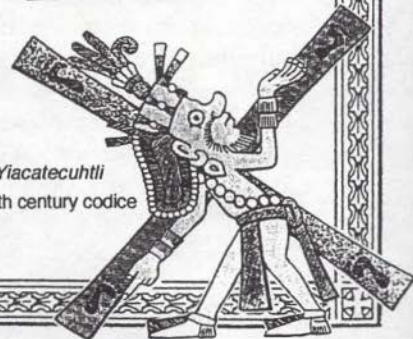


maltese cross shell carving



Palenque incense bag

Vatican codex



Yiacatecuhtli 15th century codice



Venus Cross  
Mexican emblem for  
gold and resurrection

Even more surprising was the fact that the Prophet's emblem was the cross. Although crosses are common in many ancient religions, the cross of the Mexican prophet has clear cultural affinities to the cross of Jesus. Historian Peter Martyr, author of *Decadas del Nuevo Mundo* (1520), noted Mexican beliefs regarding the importance of the symbol:

Our men saw that they had crosses, and on asking them about their origin, by means of interpreters, some answered that on passing through those places, a certain most handsome man had left them this relic as a remembrance. Others said that on the cross had died a man more resplendent than the sun.<sup>22</sup>

The Prophet had a corps of disciples called *Pochtecas*, or "guildsmen." They were traveling merchants who carried crosses bearing footprints of the unseen god—the Holy Spirit. The *Pochtecas* were the native equivalent of the Masonic order; their mission was to spread the gospel of brotherly love and the quest for enlightenment through the practice of righteous living. They were also the builders of a righteous civilization. Hallmarks of their order were a strict ethical code and a creed against the accumulation of excessive wealth.<sup>23</sup> One of their functions was to hold festivals for the purpose of redistributing material goods whenever too much wealth was accumulated by a few individuals. The festivals helped preserve the vitality of the marketplace.

Who was this foreign Prophet who brought Christian values to Mexico? The missionaries who followed Cortes at first believed that the Apostle Saint Thomas had preceded them. When they discovered Quetzalcoatl's name meant "Feathered Serpent," they assumed the Prophet was actually a hoax perpetrated by Satan. So they burned all the relics of his religion.

The priests acted in haste. The term *Quetzalcoatl* was an ancient title of supreme honor which Mexican priests conferred upon several great leaders. Its true meaning was "Beautiful Spirit." The unknown Prophet was undoubtedly an Old World Christian, although he might have been a heretic. Similar encounters were repeated throughout the New World. Europeans were welcomed with great generosity; they responded with ignorance and destruction. Some historians sought to justify the conquest by characterizing *all* the natives as savages who practiced human sacrifice. The fact is, human sacrifice was rare. There were numerous religions in ancient Mexico; one of them was Christianity.

## **Dawn of The Renaissance**

Fourteenth-century Europe witnessed the dawn of the Renaissance. It was a time of creative thinking, a rebirth of the arts, and a revival of Classical Greco-Roman culture. Paradoxically, the Roman Catholic



## AMERICAN DISCOVERY

Church led the revival and simultaneously restrained its creators. Throughout Europe, church officials organized massive building projects. The rising cathedrals were partially funded by indulgences (a payment to absolve a relative's sins) and built by faith. Although they were monuments to Christian supremacy and doctrine, they also inspired rebellion. Ultimately, art transcends the bounds of orthodoxy. Church authorities were aware of the potential threat of too much creativity, and they were often suspicious of artists' loyalties.

Monasteries were equally responsible for the Renaissance revival of Classical learning and the scientific method. Although created for the purpose of preserving doctrine and recording *only* the history of the Divine World Order, monasteries paradoxically trained rebels of the Renaissance. Devout monks burned manuscripts deemed offensive to Church doctrine, but the books they saved contained seeds of wisdom that inspired rebels. Literate monks taught rebels how to read. Curiosity and the ability to read led to *discovery* of unknown worlds.

The Inquisition was another paradox: although established to enforce doctrine, the wanton abuse of power tarnished the credibility of doctrine. For every heretic burned at the stake, at least one observer realized the condemned man was not a demon but a martyr.

Even American discovery resulted from a paradox of Christian values. For centuries, Church doctrine maintained that overseas lands either didn't exist, or they were *forbidden*. Exploration was supposedly a fruitless endeavor, because everything worth finding was already enumerated in the *Bible*. However, the Church also encouraged evangelism, and Bishop Augustine's doctrine of the *Divine City* envisioned a world united under Christianity. Therefore, missionaries were dispatched to foreign lands to preach the Gospel. In the course of their travels, some missionaries yielded to temptation and became explorers. Although obedient clerics viewed the world through the clouded lenses of doctrine, a few removed their glasses and discovered new worlds.

### **An Invitation to China**

The record of Christian evangelism in Asia dates to the 12th century. In 1122 AD, the *chronicles* of Pope Calixtus reported that a bishop from India, known as "John- patriarch of the Indians," boasted about his own miraculous powers and the marvels of India. Of particular interest to Europeans was India's Shrine of St. Thomas where John performed feats of "Christian healing." Thomas was a 5th century evangelist who was once popular in Asia. Faithful Christians shunned medical practitioners because physicians were tainted with heresy; yet they believed miracles could cure their ills. People were so desperate for treatment that anyone professing to be a faith-healer gained an instant following.

Bishop John's popularity was soon overshadowed by another Oriental Christian evangelist named "Prester John." Although he was known to Europeans only from a single letter, dated 1162 AD, he became an instant celebrity. Superstitious Christians eagerly believed Prester's claims that he was the ruler of "Three Indias," and the leader of a huge army. So popular was this 12th-century fraud that many Christians sought out his kingdom in the following years. The location of Prester John's Paradise was even marked on Martin Behaim's 1492 globe.

In 1269 AD, the Venetian traveler Nicolo Polo returned from China carrying a letter from emperor Kublai Khan. The letter, addressed to Pope Clement IV, requested Christian missionaries and educators to bring the Gospel to China. The Khan's letter inspired Europeans to dream of converting the world's most powerful nation to Christianity. Nicolo's son Marco traveled to China and served as the Khan's personal manager for several years. He returned to Venice in 1295 and intrigued his colleagues with stories of Chinese culture and society. They called him "Marco Million," because everything he said about the Chinese was so incredible that he kept repeating the word "million." His travelog called *The Travels of Marco Polo* (1299) inspired Europeans to dream about the wonders of Asia. A few daring seafarers even planned to go there.

One of those who was intrigued by stories of Prester John and Kublai Khan was the Spanish mariner, Christopher Columbus. He dreamed of leading a world-wide crusade; he also dreamed of finding a fortune. In Polo's travelog, Columbus found the perfect objective: it was a little island named *Iocathe* situated east of Java in the Indian Ocean. The words of Marco Polo were tempting beyond his wildest dreams:

Beyond these islands, almost two hundred miles farther, stands the country of Iocathe. They speak the Persian tongue and worship idols. On Iocathe is found great plenty of gold.<sup>24</sup>

.... "great plenty of gold!"







***It's A New World!***

*Riding heavy seas in the western Atlantic, Amerigo Vespucci  
discovers a new continent between Europe and Asia, 1501 AD.*



Doomsday heralds  
of the Medieval Ages

## ***THE WESTERN CRUSADE*** (Europe: 1480 to 1582)

As the Middle Ages faded into the past, Church authorities lost their grip on society. No longer were monks, bishops, and cardinals the only judges of morality and the meaning of existence. The Renaissance blossomed during the late 15th century under the leadership of brilliant artists and intellectuals. Master painters such as Titan, Michaelangelo, and DaVinci inspired bold new visions; astronomers Copernicus and Galileo conjured up visions of the Earth revolving around the sun; and disillusioned priests including Luther and Calvin challenged the pope's interpretation of scripture. Scientific geographers even questioned Church dogma about an Earthly Paradise near China.

The Renaissance was a time of philosophical and technological transformation that split asunder the fabric of European society. In spite of threats from the Inquisition, daring scientists expounded controversial theories about the Earth, the heavens, medicine, and morality. Intellectuals proclaimed that the world was not dominated by angels and demons, but was subject to *human* will. A new philosophy called "Humanism" declared mortals free of antiquated doctrine. Although most people remained loyal to traditional values, increasing number of independent thinkers risked Church sanctions in the pursuit of truth—and hedonism.

The new social order was dominated by technology and inspired by Oriental inventions. Moslem trade introduced mechanical clocks, astrolabes, paper, block printing, gunpowder, and canons. Europeans used the astrolabes and clocks to make accurate charts of sailing routes. Sailing between European ports became more reliable and commerce prospered because of the regular flow of supplies. In 1454, the German inventor Johann Gutenberg devised a mechanical printing press using moveable type. His invention was copied throughout Europe. Within a few years, European presses released a flood of newspapers and popular books, including the *Bible* and *Marco Polo's Travels*.

Another invention, the cannon, proved more of a curse than a blessing. Asian prototypes were bulky and hard to move, so strategists assumed they were destined to be the ultimate defensive weapons. However, the Moors used cannon during their conquest of Spain in 1118



**Gutenberg's Press**  
Invented in 1447, it spread from Mainz, Germany, throughout all of Europe within 36 years. 15.1



Spanish Field Canon  
15th-16th century



Heck (1857)

AD; Spaniards took cannon into the field against the Moors at Cordova in 1280. An awesome technological advancement occurred with the European invention of miniature cannons for infantry use. In 1381, French craftsmen designed *bastons-a-feu*, or "fire-sticks," which were carried by an individual soldier. The Spanish invented *espingardas* (a primitive musket) and *lombards* (or ships' cannon) during the early 15th century. Spanish muskets and cannons played a key role in the Christian reconquest of Grenada, but they were too late for the Crusades. After two centuries of fighting in Palestine, Europeans abandoned the war they couldn't win. Their attentions and aspirations turned west—where Christian armies were victorious and Christian fleets ruled the waves.

## Racism and Elitism

During the Renaissance, hedonism and social decadence became commonplace. So did racism. By 1450, European aristocrats imported black slaves to perform tasks deemed beneath the dignity of white Christians. Slaves kidnapped from African villages and imported to Europe understood neither the language nor culture of their captors. The seemingly ignorant behavior of slaves reinforced racial prejudices that characterized black Africans as ignorant by nature. Religious doctrine also promoted belief in black racial inferiority and white racial superiority. Racism in Europe wasn't particularly unique, however, the combination of racism, evangelism, and the world's most advanced weapons resulted in cruelty and hypocrisy of the most despicable order.

Racism and religious bias combined in the mistreatment of Jews. Ordinarily, Christian kings *tolerated* Jews, because they were vital to business. Besides, Jews paid an extra tax for the "privilege" of living in Christian kingdoms. However, Church doctrine held that *all* Jews were responsible for the Savior's crucifixion in antiquity. Superstitious



Spanish Arquebus  
15th century musket

Europeans often failed to distinguish between *real life* and doctrine. One hideous consequence was that Christian mobs occasionally massacred enclaves of Jews in England, Spain, and France. Those responsible for the atrocities firmly believed they were performing a service to God. Likewise, Spain's Catholic Sovereigns (Ferdinand and Isabel) believed they would gain God's favor by a total "purification" of their kingdom. This belief led to the deportation of all Moslems and Jews. Those caught in Spain after 1492 were subject to execution. Nearly 165,000 Jews complied with the order—leaving behind their gold and jewels which were appropriated for the royal treasury. Jews found refuge in other Christian kingdoms where the *Jews' Tax* was more highly valued than religious purity.

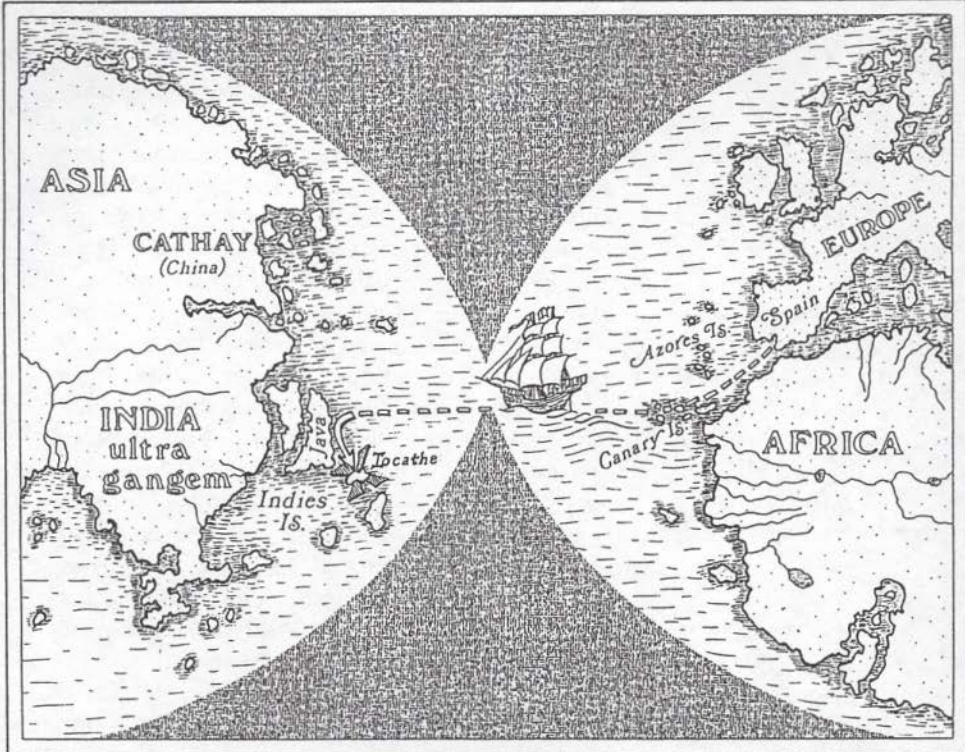


Renaissance artists contributed to the social acceptance of a white racist Europe. Religious and racial biases engulfed Renaissance art: for example, Michaelangelo's Jehovah was a *white* God, and his sculpture of Moses had two horns, implying a demonic influence in Judaism. Some observers were inspired by art; others found affirmation of bigotry.

During the 15th century, Europeans became accustomed to growing affluence and belief in white racial superiority. Military triumphs in Africa rewarded the greed of colonial speculators and fed the egotism of white Europeans. Portable firearms made the capture of African villages easy, and missionaries followed Portuguese armies with the message of Christianity. Conversion to the new faith was rapid, because natives assumed those having superior weapons *must* know superior gods. In this manner, the joint enterprise of colonization and evangelism marched down along the African coast.

By the late 15th century, the ingredients of world conquest had coalesced. The Crusades seduced Europeans with the glory of religious wars; the Renaissance provided technology for success in battle; and Church doctrine supplied the vision of a world dominated by European Christians. Meanwhile, Kublai Khan's plea for missionaries burned in the hearts of devout Catholics; Marco Polo's travelogue evoked images of vast wealth; and European merchants dreamed of finding shortcuts to the Orient. When a Florentine geographer insisted Asia could be reached by sailing *west* across the Atlantic, the die was cast for a Western Crusade.





### Enterprise of The Indies 1492

Two ends of Toscanelli's Planisphere of 1474 (shown above) demonstrate the Columbus plan for sailing across the Atlantic to the Indies Isles located east of India ultra Gangem. Marco Polo said that an island east of Java (locathe) was an island of gold. This was the goal of mariner Columbus in 1492.



## The Quest for Gold & Glory

According to Spanish tradition, the idea of sailing West to India originated with Paolo Toscanelli, a 15th-century geographer who grossly underestimated the size of the Atlantic Ocean. In 1474, Toscanelli sent copies of his map to King John of Portugal and to a Lugerian-Spaniard, Cristobol Colon (later called "Columbus"). The map showed Asia and Europe on opposite sides of the ocean separated by a mere 3,000 miles. Several islands in the middle offered ships places to stop along the way. However, monks still called the Atlantic "A Sea of Darkness," and Christian sailors feared the perils of a westward voyage.

Inspired by the new map, Columbus dreamed of sailing to the Orient and making a fortune. Due to his experience as a sailor and cartographer, he was familiar with Portuguese, Danish, and English voyages across the North Atlantic where islands served as stepping stones to distant lands. Could these islands be used to reach Asia?

In hopes of finding the answer, Columbus sailed to Bristol in 1476. He talked to sailors about Atlantic voyages, and he examined the *Inventio Fortunatae*—a listing of "Northern Isles" written in the 14th century.



Then he sailed north to the Shetlands and on to Iceland. A brief account of his voyage was included in *The Life of Admiral Christopher Columbus* by his son Ferdinand. According to notes left by Columbus, he sailed to “Thule” which he said was also known as “Frisland.” Most scholars believe this was Iceland. He also

mentions sailing “100 leagues” beyond Thule. Historian J.R. Tornoe believes Columbus accompanied one of several Danish-Portuguese expeditions in this region. A 1476 voyage was led by Johannes Skolp (or Scolvus). They sailed between Greenland and Baffin Island in search of a northwest passage to the Orient.

Clearly, Columbus wasn’t impressed with the North Atlantic route frequented by Portuguese and Bristol sailors to northern territories. This land was too cold for his Mediterranean temperament. It was also too desolate: for six months of the year, there was virtually no sunshine. Fernando Colon reports that his father knew of at least four ships that had landed at or seen lands west of Ireland. One was a voyage by Pedro de Velasco of Galicia; another was by Fernao Dulmo. Colon assumed they had sailed to the northern Portuguese territory of *Baccalaos* (the “Land of Cod”)—now recognized to be Newfoundland.

The common assumption of most Europeans was that this northern territory didn’t extend very far south. Actually, it was just the tip of the North American continent. It wasn’t until the mid-1500’s that French explorers confirmed that the Caribbean and “northern territories” were connected by continental land. There isn’t any doubt from the testimony of Bristol merchants, Hanseatic records, Norse sagas, and the writings of Ferdinand that merchant voyages and fishing expeditions to the northern territories were ongoing throughout the 15th century.

However, the Arctic experience left Columbus skeptical about voyages across the North Atlantic to China. Although Norse sagas confirmed there was fertile territory near the North Pole, it was a land of grapes and trees—hardly worth risking a ship and crew in a battle with the elements. Columbus returned to Portugal where he made charts with his brother Bartholomew, and he married Felipa Perestrelo Moniz, the daughter of an aristocrat.

The next inspiration for a westward voyage came while Columbus was living on the Island of Madeira. In 1479, he happened upon a stranded ship whose sole survivor, Alonso Sanches DeHuelva, was near death. According to DeHuelva, his *caravel* had been blown across the Atlantic to a large island inhabited by naked savages armed only with



## Marco Polo's Map

This 14th century Pacific map is believed to be a copy by Bellela Polo of a map left by her father Marco. It is notable for showing Alaska and North America (Land of Women) in the Northeast. It also shows Java east of Asia (larger island, bottom left). Columbus claimed to have a secret map that showed the location of his objective—the Indies Islands near Java. His map could have been a copy made from this map.



spears. The crew took on water, traded with the natives, and headed for Spain. However, the voyage lasted three months and the crew perished from exposure. Before dying, DeHuelva gave Columbus a crude chart and a log of the voyage.<sup>1</sup>

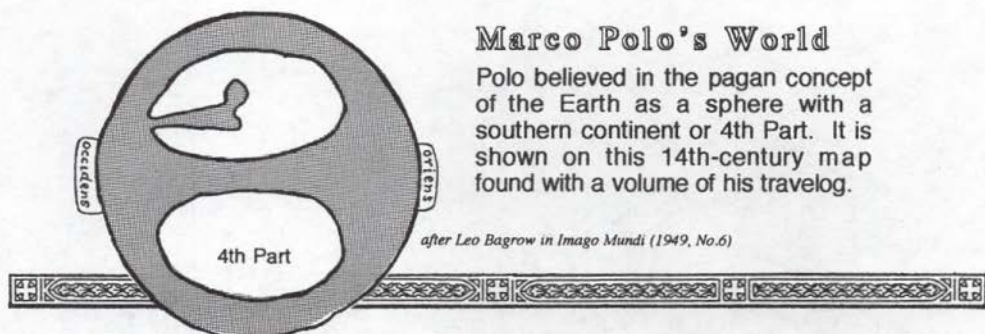
Once more, Columbus dreamed of sailing west to the Orient. DeHuelva's chart was proof of land across the Atlantic—but what land? Columbus found his answer in *Marco Polo's Travels*. At the latitude of DeHuelva's Atlantic crossing, Marco Polo mentioned the Indies Islands which were occupied by naked savages. And Polo described one of these islands, *Iocathe*, as a land 200-miles west of *Java* where the natives spoke Arabic. It was also a land of abundant gold. *Java* was clearly indicated on Toscanelli's map east of India Ultra Gangem (Greater India), and it was included on some of Marco Polo's maps.

In 1483, Columbus took his proposal of a westward voyage to King John II of Portugal. It was referred to a committee headed by Bishop Jose Vizinho who declared it both "impractical and heretical." Most scholars believed the distance separating the coast of Asia from Europe was far too great for a direct voyage—thus Portuguese sailors sought access around the horn of Africa or across the northwest territories. An even greater concern was the Medieval belief that an Earthly Paradise was located in the Western Ocean. Mortals were forbidden from going there. Priests were not about to support a venture that might disturb the sanctified Garden of Eden—or risk exposing Church dogma.

Historians generally note that after dismissing Columbus, John authorized several other captains to seek western lands—implying that John was trying to "steal" the Columbus idea. There were several westward voyages at this time: Fernao Domingo de Arco sailed west in 1484, and Fernao Dulmo sailed in 1486. That these voyages departed after the Columbus visit with John was probably coincidental since there was nothing unusual about Portuguese ships sailing in that direction.

## Marco Polo's World

Polo believed in the pagan concept of the Earth as a sphere with a southern continent or 4th Part. It is shown on this 14th-century map found with a volume of his travelog.



after Leo Bagrow in *Imago Mundi* (1949, No.6)

Historian Rex Rienits believes Dulmo reached North America, because notations on Martin Behaim's globe mention the sighting of Antilia in the west in 1486. The Portuguese didn't publicize their expeditions in order to avoid competition with other Christian nations.<sup>2</sup>

In 1487, Columbus sent his brother, Bartholomew, to London as an emissary seeking financial support for a westward voyage. He proposed sailing to the Indies Islands across the mid-Atlantic. King Henry VII thought it was a joke, because court geographers informed him (accurately) that the coast of Asia was 13,000 miles away from Europe.<sup>3</sup> Besides, the English already sponsored similar missions—one by a Venetian navigator, Giovanni Caboto—or "John Cabot." The Venetian's proposal called for a voyage to China *via* Brasil—a large land supposedly west of Ireland and now thought to be Newfoundland.

Most scholars have assumed that John Cabot did not arrive in England until 1495. However, Cabot's son, Sebastian, reported that his father reached Newfoundland in 1494. Neat trick! Historian R.A. Skelton (author of *Explorer's Maps*, 1958) believes the report is accurate. It is engraved on a world map of 1544 preserved in the Bibliotheque Nationale in Paris. Either Cabot or another explorer sailed west from England prior to 1490. A chart called the Paris Map (1490) shows an archipelago of islands ("Brasil") in the western Atlantic. They are southwest of Frixland (Iceland) and are thought to represent lands near the Gulf of St. Lawrence. We can be sure that some English explorer reached the St. Lawrence by 1490: "It's on the map!"

Apparently, Cabot gave up his idea of sailing to China after reaching Newfoundland and finding only wilderness. No public announcements were made, because the English didn't believe Cabot achieved anything significant regarding his proposal of sailing to China. Although Cabot identified "new lands" west of England, geographers realized these lands were among many uncharted "isles" of the northwest territories. At any rate, they were far from the goal of a shortcut to the spices of the Orient.

Columbus persevered with his ambitious proposal. With the aid of Fray Juan Perez, a confidant of Queen Isabel, Columbus secured Spanish backing for a westward voyage in 1492. He called his proposal "The Enterprise of The Indies" because his ultimate objective was to seek the Indies Islands which Marco Polo claimed were rich in gold and poorly



# European Ships

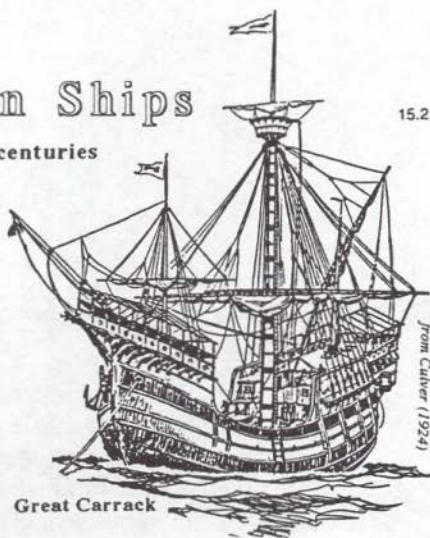
15.2

15th & 16th centuries



from Gordy (1898)

Carrack



from Culver (1924)

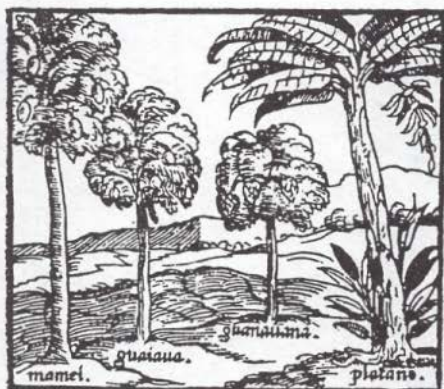
Great Carrack

defended.<sup>4</sup> He proposed sailing across the mid-Atlantic and stopping at the Canary Islands, Brendan's Isle, and Antilia on the way to his objective. There were several goals for the voyage: establishment of diplomatic relations with the reigning Khan of China; annexation of heathen territories found on the voyage; meeting Prester John in India; and finding Polo's Golden Isle.

Due to the fact that Polo claimed natives on Iocathe spoke Arabic (or Persian), Columbus enlisted the services of an Arabic interpreter—Luis DeTorres. The ships and provisions were supplied by royal decree: King Ferdinand assigned two *caravels* from the Palos merchant fleet (*Nina* and *Pinta*). Private financiers funded an additional ship, a *carrack* called the *Santa Maria*. On August 2, 1492, the three ships and ninety men left Palos heading for the Canary Islands northwest of Africa.

The first part of the voyage went according to plan. The Spaniards loaded extra supplies at the Canary Islands, then they sailed toward the mid-Atlantic where they expected to find several uncharted lands indicated on Medieval sailing charts. However, they found neither Brendan's Isle nor Antilia. The crews were about to mutiny after 36 days at sea, when the expedition finally reached San Salvador in the Bahamas. Columbus learned from Arawak natives that a large land was situated in the southwest. The ships sailed in that direction and found Cuba. According to the ship's log, Columbus believed they had reached China. He sent some men to search for the Grand Khan, but they returned having found only a few small villages.

Columbus was puzzled when his interpreter, Luis DeTorres, failed to communicate with the natives who showed no understanding of Arabic. This discrepancy and many others between what Columbus saw



15.5



Courtesy of  
Rare Books and Manuscripts Division  
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### New World Bananas

Columbus brought back bananas or plantains from Hispaniola as proof he had reached the Orient, since bananas were known to grow in Asia. This illustration of New World banana palms, called *plantanes*, is from Girolamo Benzoni's *Historia del Mundi Novo* (1572). 15.5

and what Marco Polo had described as features of the Indies failed to restrain his conviction that the expedition had reached the Indies Islands. Accordingly, he proclaimed that the natives were *Indios*, or "Indians."

There was no gold in Cuba. Columbus dutifully noted in his log that he made an effort to find the Khan, then he prepared to look for more promising islands. According to his log, he asked the natives the direction of the mainland, and they pointed northwest.<sup>5</sup> If Columbus' primary objective had been sailing to China, he would have sailed toward the northwest where Toscanelli's map indicated mainland. However, Columbus asked the Arawaks for directions to the Isle of Gold, and the natives pointed southeast. Columbus decided finding gold was more important than finding China, so his expedition headed southeast where the Spaniards found Haiti. Columbus named the island "Hispaniola."

During several months on Hispaniola, the Spaniards accumulated a few small chests of gold which the natives eagerly traded for European trinkets. Because the natives were so generous, Columbus didn't realize that gold was actually scarce on the island. The natives had only primitive weapons and were easily subdued by Spaniards with arquebuses (primitive muskets) and armor. In that respect, Hispaniola seemed like the primitive islands Marco Polo described in the Indian Ocean.

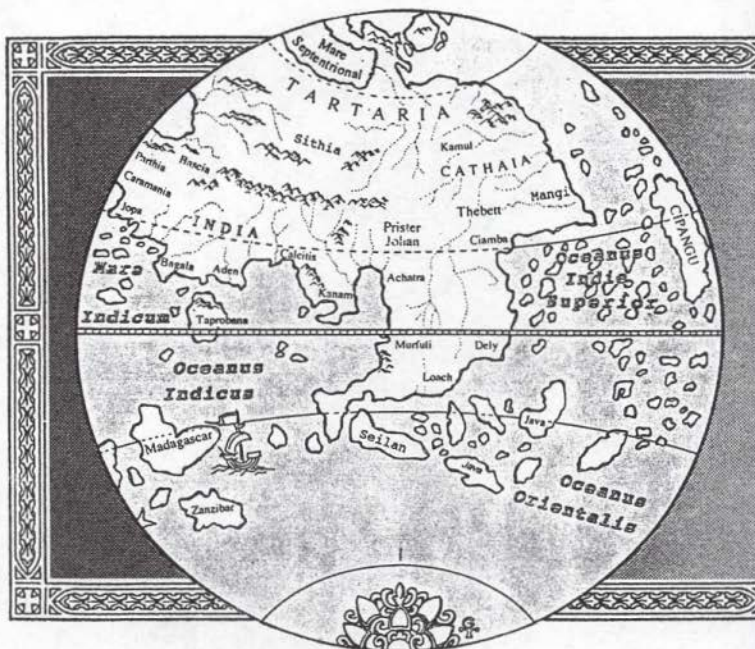
But was Hispaniola Polo's fabled "Golden Isle?" Columbus didn't think so. Even though he later claimed that the riverbeds of Hispaniola were "covered with gold," he realized that the Golden Isle was somewhere else. Finally, a cooperative Arawak told Columbus what he wanted to hear: further south in the Caribbean Sea, there was an entire island of solid gold. However, the Spaniards lacked sufficient time for confirming the existence of the golden isle. They established a fort called La Navidad which was manned by forty volunteers, and the crews of *Nina* and *Pinta* prepared for the return voyage.

As proof that they actually reached the Indies, the crews kidnapped several Arawaks and loaded the caravels with plants they believed were typical of India. Columbus is said to have returned with bananas, sweet potatoes, *maize*, rhubarb, cinnamon, allspice, and cloves. Of all these,



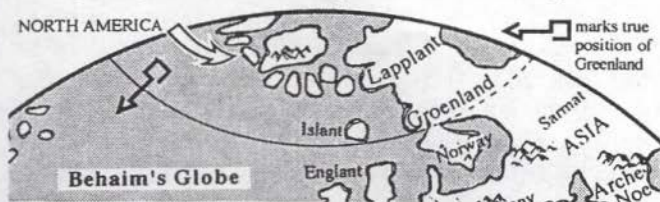
## Behaim's Globe 1492

Nuremberg mapmaker Martin Behaim produced this globe in 1492, from nautical reports, from Ptolemaic traditions, and Biblical doctrines. It includes captions showing the site of Noah's Ark and the location of an Oriental evangelist, Prester John (Prister Johan) in India. It supports the biblical interpretation that no significant lands were located in the Atlantic between Europe and China (Cathaia).



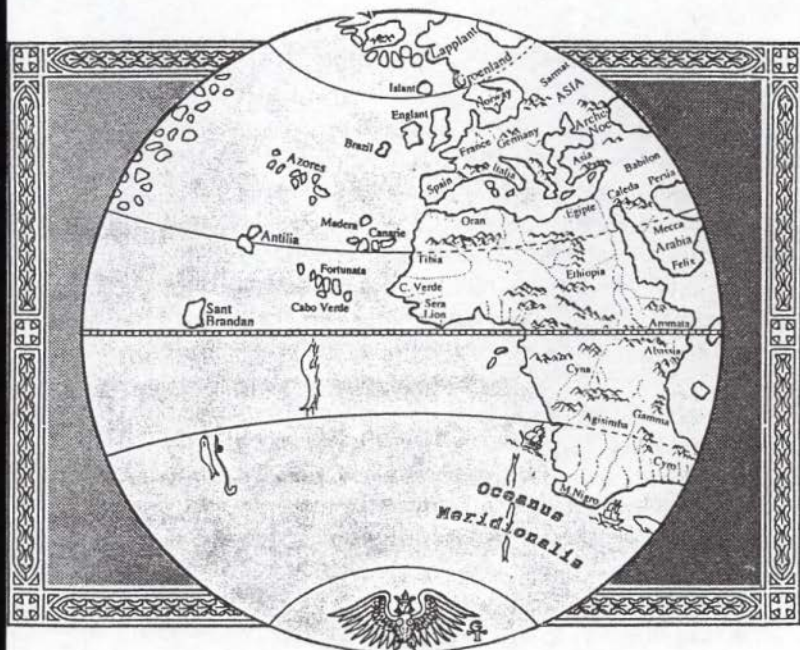
only sweet potatoes might have been new to Spain. They were certainly common in Asia before the Portuguese arrived. The spices and rhubarb were all known to be Asian plants—though isolationist historians assume Columbus misidentified his spices. No one seems to have questioned the rhubarb—which originated in China. Columbus also claimed to have seen hogs, “woolly chickens,” and barley on Hispaniola; all of these originated in the Old World.

The voyage back to Spain was a violent contest between the elements and skilled mariners; the mariners won. Columbus emerged from the Atlantic a heroic figure due to the miraculous survival of his ship and crew. After a brief stay in Portugal, he headed for Spain where he announced the successful discovery of a “shortcut to India and the Spice Islands.” In order to make certain that everyone appreciated the importance of his achievement, he hired a parade to accompany him to the royal palace. By the time he arrived, he was surrounded by a throng of revelers, fans, and curious peasants; his parade had been transformed into a triumphal procession worthy of a Roman conqueror.



Northern section of Behaim's globe. Arrow shows true location of Greenland (Groenland).





Legends written on the map described Antilia as the mid-Atlantic refuge of Portuguese Catholics who fled the Moslem invasion in 734 AD. Also shown are Brasil, an island some thought to be southwest of Ireland, and Brendan's Isle near the equator in the mid-Atlantic. The map has Japan (Cipangu) which Columbus mentioned he had seen on a globe but not on maps of the 15th century.

14.M4

## Finding a New World

The announcement of a shortcut to India was a triumph for ignorance: Christian Europe rejoiced at the news of a quick-and-easy route to the Spice Islands; the pope lauded Columbus for confirming the validity of Church doctrine; and biblical geographers scoffed at intellectuals who believed the ocean was too broad for such a voyage. Historian Peter Stanford (editor of *Sea History*, 1992) observed that: "Some hailed it as the greatest event since the birth of Christ."

Geographer Martin Behaim had just released his world globe showing the Atlantic Ocean as a clear pathway between Europe and Asia. This was what Toscanelli had also theorized. Initially, Europe's intellectuals criticized Behaim for misrepresenting the great distance between Europe and Asia. However, the Columbus triumph provided conclusive, empirical evidence that Toscanelli's planisphere and Behaim's globe were accurate. At least that was the conviction of biblical geographers.

The pope (who happened to be a Spaniard) immediately declared a Spanish monopoly over Christian voyages to the west. Ferdinand ordered Columbus to make a second voyage in 1493—this time with 13 ships and 1,500 men. The expedition had four goals: 1) establishment of a colony; 2) conversion of pagan natives to Christianity; 3) mapping the Indies; and 4) shipping back the hoards of gold which Columbus claimed were on the islands.

However, the expedition proved to be a financial and moral disaster. Upon arrival at Hispaniola, Columbus found the garrison he had left, Fort Navidad, in complete ruin. During his absence, the men had gone on a



## AMERICAN DISCOVERY

rampage raping and stealing from the natives. In revenge, a Carib chief ordered extermination of the foreigners. It was a chilling blow to new recruits who thought the natives were friendly and defenseless. Columbus found a new site for the colony near a swamp, and he ordered his men to begin building a city called "Isabella." Unfortunately, Spanish troops were poorly suited to the mundane tasks of building a city; they preferred to carouse with native women and provoke fights. Many became ill with a native disease they called *mal aire*—now known as "malaria." They got it from mosquitoes and from drinking contaminated swamp water. Equally devastating was the scarcity of gold which new recruits expected to find scattered on the ground. Columbus was forced to send his ships back to Spain laden with diseased and disappointed Spaniards. The ships also carried 500 natives to be sold as slaves in Seville.

Columbus hoped that income from the sale of slaves would recoup some of the expedition's losses. "In the name of the Holy Trinity," he declared, "we can send all the slaves that can be sold."<sup>6</sup> However, half of the poor wretches died on the way to Spain, and few survivors endured Europe's harsh climate. When more boats arrived with young, pregnant Arawak women, Queen Isabel sent them back to Hispaniola. She also sent a stern warning to Columbus: it was converts she wanted, not slaves. Columbus had overlooked an important distinction between African natives and New World natives: the color of their skin.

Investors were enraged, the king was suspicious, and diseased sailors spread rumors that Columbus was a liar. They claimed that he had lost his mind and that his island of gold didn't exist. From Palos to Seville, Columbus was reviled as "The Viceroy of Mosquitoes." Public outrage was so intense that unjust rumors spread throughout Europe blaming Columbus' men for a syphilis epidemic. Due to the harsh publicity, few Spaniards left for the overseas colony.

In the space of three years, Columbus' grandiose "Enterprise of The Indies" became an international embarrassment for Spain and a disaster for Arawak natives. Columbus made a desperate attempt to extract gold from an island where there was very little. He ordered natives to work in mines and rivers. Those who produced a "hawk's bell" full of gold each year received a copper emblem to be worn around their necks; those who failed were punished by having their hands chopped off. Anyone who tried to escape was hunted down by huge dogs called "mastiffs." Many natives were eaten alive by the frenzied beasts. Because there was so little gold, natives spent long hours looking for tiny grains when they should have been farming and caring for their villages. Crops failed, people grew sick and demoralized. Many died from exhaustion and disease; others committed suicide to escape the Spaniards' brutality.

Columbus made another desperate effort in 1494 to reestablish his

credibility as Spain's ambassador to China. He sailed on an "exploratory" voyage along the southern coast of Cuba. Due to the considerable length of the island, Columbus was convinced he was sailing along continental land, that is, China. As proof they had reached their objective, Columbus forced his men to swear an oath that the island was indeed China. He emphasized the power of his convictions and the depth of his delusions by threatening to cut out the tongues of anyone who recanted. Columbus sent the sworn statement to the king with hopes of gaining royal favor, but it was a treaty with China the king wanted, not testimonials. Columbus sent letters to the Catholic Sovereigns claiming he had found the Biblical Garden of Eden, and he continued to promise ships loaded with gold; but none arrived in Spain.

As rumors of colonial mismanagement spread throughout Europe, Isabel and Ferdinand were accused of being "duped" by an imposter. In 1495, Ferdinand dispatched Juan Aguado to investigate charges of mismanagement. By 1497, the king was skeptical that anything positive would ever come of the "Indies Enterprise." On June 2nd, 1497, Ferdinand cancelled the Columbus monopoly that gave his admiral total control over Atlantic voyages.<sup>7</sup> Fourteen days later, a ship bearing the king's future chief navigator, Amerigo Vespucci, sailed past Hispaniola and began charting the coast of the western continent.

Vespucci's presence in the Atlantic was shrouded in secrecy due to his service as the king's confidential representative. It was a perilous task, because Ferdinand was caught between his wife's loyalty to Columbus and demands by courtiers that Columbus be demoted for incompetence. Vespucci sailed west in a "supply ship" ordered specifically for the king's reconnaissance of the Indies territory. Although listed officially as merely a "passenger," Vespucci kept detailed accounts of the voyage—including copies of navigational charts later used to verify the coastline of North and South America.

Vespucci's activities as an observer and his later reward by King Ferdinand betray his secret role as the king's informant. The captain had instructions to go west until reaching the peninsula of Cattigara marked on Ptolemy's 2nd century map and then head on to China. However, the ship never reached Cattigara, because there was land in the way. On June 16th, 1497, the ship reached the eastern shore of what is now Costa Rica and headed north following the coast past Honduras and the Yucatan peninsula.<sup>8</sup> When they came to a huge gulf (the Gulf of Mexico), they headed northeast past the Florida peninsula and up the Carolina coast as far as Chesapeake Bay.

Vespucci was mystified. There was indeed continental land where everyone had expected to find China, but there were none of the golden cities that Marco Polo described in *The Travels of Marco Polo*. Nor did





from Jacques Reich, illustration of statue  
by Grazzini in Florence, Italy (1898)

### Amerigo Vespucci

Renaissance Florentine navigator, cartographer, and writer, Vespucci was first to popularize the idea that the New World was a separate continent from Asia.

they encounter vast fleets of Chinese junks which Polo claimed sailed along the China Sea. In 1499, Vespucci sailed with Portuguese captain Alonso DeOjeda along the Venezuela coast as far as Brazil. Vespucci's third voyage in 1501 took him along the coast of Brazil to Argentina as far as Rio Cananor. During four years of voyaging, Vespucci sailed past a coastline stretching more than 7,000 miles. He was convinced the land was not China, nor did it appear on any known nautical chart. In 1502, Vespucci wrote a letter to an associate in Europe expressing his belief that he had discovered a *Mundus Novus*, or "New World:"<sup>9</sup>

In days past, I wrote of my return from lands which I can justly call the *New World*. We learned that the land is not an island, but a continent, because it extends along far-stretching shores that do not encompass it, and it is populated by innumerable inhabitants. I have discovered the lands to be occupied by many more peoples and animals than our Europe, Asia, or even Africa. The air is more temperate and pleasant than in other regions known to us. The continent extends from eight degrees above the equinoctial line towards the antarctic pole.<sup>10</sup>

Vespucci's letter, called the "Mundus Novus" document, was not the first time that a European had used the words "New World" to describe the western lands. Historian Peter Martyr had used a similar expression for finding a passage to India. However, when it became apparent that Columbus had lost his grip on reality, Martyr's praise was soon forgotten.

Vespucci's awareness that the continental land was not China, as Columbus believed, but an entirely "new" continent represented a startling breakthrough in the geographical thinking of the Renaissance. In the *Mundus Novus*, Vespucci described the tremendous resources of the continent, and he detailed the many different tribes and cultures of the native inhabitants. Copies of Vespucci's letter were reprinted and circulated throughout Europe, and they inspired the populace to dream about an overseas land of unlimited opportunity. The profound impact of Vespucci's letter was reflected in the literature of Europe, in colonial immigration records, and by improvements in Atlantic cartography.

A study conducted by Princeton University scholars confirmed that 16th-century documents about Vespucci outnumbered those on Columbus by a margin of *three-to-one*.<sup>11</sup> Most of the Columbus documents



from Britain (1903)

Vespucci's Travelog

were in response to his claim of finding a shortcut to India. When that claim proved false, the literature about his "discoveries" ceased. By the time of his death in 1506, Columbus was barely remembered outside of Spain, while the fame of Vespucci's discovery of a huge continent, the New World, continued to inspire Europeans. Thus, Vespucci's influence went far beyond the short-lived impact of Columbus' colonial enterprise. The *Mundus Novus* also left an indelible mark on the literature of the Renaissance: it was the inspiration behind Sir Thomas Moore's popular work, *Utopia*, which envisioned an idealistic society in the unspoiled New World.<sup>12</sup>

Colonial immigration records attest that the flow of new settlers shrank considerably after rumors spread about mismanagement, disease, and the lack of gold on Hispaniola. Spaniards blamed Columbus for the difficulties and false promises. In 1498, there were only 200 new settlers.<sup>13</sup> The year *Mundus Novus* was published (1502), a flood of new settlers, numbering 2,500, sailed for Hispaniola. From that year on, new immigrants numbered at least 1,000 per year until the mid-1600's. The immigrants were responding to the realization that Vespucci's *New World* was a land of vast potential, while only a few years earlier, it seemed that Columbus' Hispaniola was a death-trap.

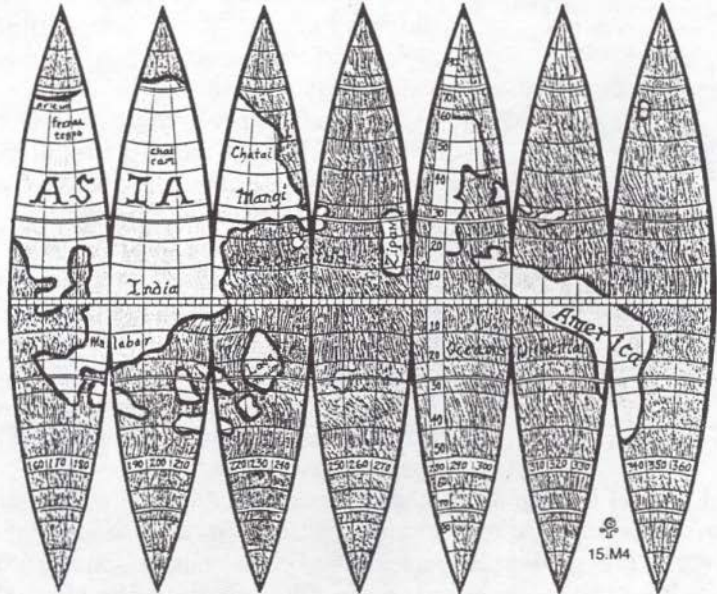
Vespucci's disclosures were of tremendous importance to the geographical sciences. Their impact is confirmed by maps published between 1501 and 1507. In 1502, Lisbon geographer Alberto Cantino produced a map of the Caribbean showing a peninsula of unnamed land (Florida) directly northwest of Cuba. Because the *official* discoverer of Florida, Ponce DeLeon, didn't chart the area until 1513, the Cantino Map is evidence of an unnamed navigator who sailed through the strait between Florida and Cuba before 1502. Furthermore, the entire area from Argentina to the Chesapeake which Vespucci reported in his *letters* was portrayed on a 1507 world map by German cartographer Martin Waldseemuller. The map confirms European navigation *before* 1507 in the very waters



Cantino Map 1502 AD



# Maps of America - the New Continent



Waldseemuller Globe presently in the James Ford Bell Collection University of Minnesota Library

## Martin Waldseemuller Globe 1507 AD

This is a section of Waldseemuller's globe from a woodcut in the James Ford Bell Collection at the University of Minnesota. The map is remarkable for several reasons. First, it nearly cost Martin his life, because he challenged orthodox religion by showing a separate continent (America) between Europe and Asia. Thus, it was a major breakthrough for scientific geography. It was also the first time the name America appeared on a map. Martin published 1000 copies of a world map that was similar to the globe, thereby assuring the enduring fame of Amerigo Vespucci. Martin clearly shows that the New World continents are separate from Asia, although most historians traditionally give the honor of that discovery to Ferdinand Magellan who sailed 13 years after Martin's map was published. This map, based on scientific principles, was far advanced over the charts produced in accordance with Biblical Geography.



## Leonardo DaVinci Map 1510

Renaissance artist-inventor DaVinci risked censure from Inquisitors for this portrayal of the New World as a separate continent. It was issued to show support for the Waldseemuller version of geography. The map shows Bacalar to the north which represented the ancient Portuguese fishing colony in Labrador.



DaVinci Map after Imago Mundi

15.M4

Vespucci claimed he visited in the *Mundus Novus*.

The tremendous impact of Vespucci's disclosure of continental land resulted from the fact that he was a scientist, a true Renaissance man, who accurately measured and reported what he saw. King Ferdinand was sufficiently confident in Vespucci to select him for the 1497 mission of determining the true location of China. That faith was reaffirmed in 1508, when Ferdinand appointed Vespucci to the office of Spain's Chief Pilot. Meanwhile, Columbus remained true to his Medieval beliefs, insisting until his death that he had succeeded in finding a shortcut to India and China. All of Europe sang the praises of Vespucci; Columbus died a forgotten man.

### **Waldseemuller Names America**

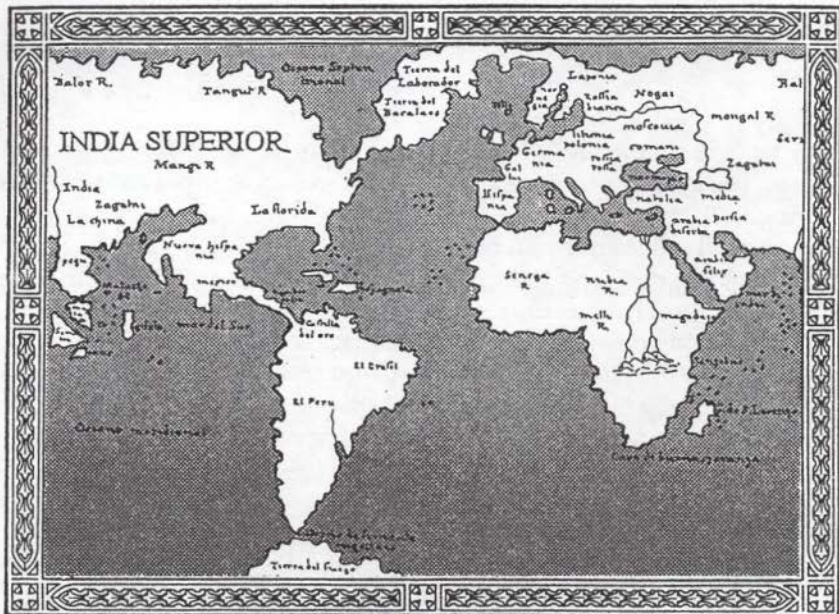
Vespucci's contribution to the advancement of geographical knowledge is apparent from the praise of his Renaissance peers and the fact that his name was chosen for the newly-discovered continent.

Naming the New World is one of those episodes in world history that cause intelligent people to ponder the sanity of our species. From the moment Columbus declared his "shortcut to the Indies," European geographers were embroiled in the conflict between Church dogma and science. Medieval doctrine specified that *all* significant lands were enumerated in the *Bible*, and Columbus was a champion of that belief until his death. Furthermore, the *Bible* specified that Earth was "three parts land and one part water," thus it was impossible for the oceans to be so broad as Renaissance intellectuals had theorized.

Opposed to the Biblical interpretation of geography were the scientists. Leonardo DaVinci was among those who criticized the Toscanelli geography as showing the Earth too small and the distance across the Atlantic to Asia grossly diminished. Most Renaissance geographers also believed Classical reports about uncharted lands or "terra incognita" across the ocean. In one of his many confrontations with Church authorities, DaVinci made a world map showing Vespucci's New World as a separate continent from Asia. He also raised the hackles of Church authorities by naming this land "America" in accordance with scientific mapmakers in Germany.

In 1502, the German geographer Martin Waldseemuller began work on a world atlas. Because he was part of the growing movement of *scientific* geographers working outside the Church, he was not committed to antiquated, biblical concepts regarding the shape of the Earth, its lands, and seas. Like most intellectuals, he assumed archaic doctrines were of no consequence; but he was wrong! The seeds of the Protestant Reformation were already beginning to sprout in Germany, and Church authorities believed any deviation from dogma was a mortal threat.





after Smithsonian Institution BAE

### Ptolemy of Strassburg World Map 1548

This map shows the revised version of Biblical Geography used to explain how the New World is actually an extension of Asia in accordance with dogma. The map or a similar one is also attributed to J. Gastaldi. It shows the New World connected to Asia by a huge land called *India Superior*. In spite of Ferdinand Magellan's voyage in 1520, orthodox cartographers continued to believe the continents were all joined together until the late 1500's. Absent from the map is the name *America*, because Amerigo Vespucci had been declared a heretic.



Waldseemuller published his atlas in 1507, along with a world map and a globe. His map showed two large continents situated in the mid-Atlantic. They were completely surrounded by water, thereby establishing them as *separate* from Asia. According to Waldseemuller's atlas, the "new continents" were thousands of miles east of Asia. The larger of the two lands was named "America," after *Amerigo Vespucci*. Waldseemuller had chosen the name after great deliberation with his associates. It was their belief that the title was appropriate, because Vespucci was the first European to realize the land was a new continent.

It was clear from the charts submitted by various mariners that Vespucci had been charting continental land in a scientific manner, while Columbus had been chasing mirages of golden isles, proclaiming Biblical territories, and imagining forays into China without confirming his claims with scientific data. As a scientist, Columbus was an obvious failure; while Vespucci's achievements were monumental. Therefore, it was the judgement of Waldseemuller's associates that Vespucci deserved the honor of having a continent named after him. The 16th-century poet Ringmann agreed: "It is fitting that this fourth part of the world be named America, in as much as Amerigo discovered it."<sup>14</sup>

The Inquisition believed otherwise. Vespucci was declared a heretic

for claiming the existence of a continent not mentioned in the *Bible*. He didn't improve his standing before Church authorities by questioning how the great many varieties of animals he identified in the New World could possibly have fit on Noah's Ark—or how they were able to inhabit a land that was separated from the Old World by ocean barriers. Vespucci died before the Inquisition could do him any harm. However, Waldseemuller was ordered to recant. He was also told to remove Vespucci's offensive name from the atlas. The German mapmaker complied, although his lack of enthusiasm for the Inquisitors was evident from later maps. After 1513, he deleted the name "America," although he defiantly showed the land as a continent separate from Asia. He rejected the official designation of the land as "New India." Instead he called it *Terra Incognita* and noted on his new maps that Columbus had indeed made the discovery—but under direction from the king of Spain. A more cynical Waldseemuller escaped the Inquisition's wrath without completely abandoning his commitment to scientific *truth*.

Biblical geographers portrayed the New World as a peninsula of land extending east from Asia. They called it *Nuvo India* ("New India") or *India Superior* to affirm Columbus' claim that he had found a shortcut to India. Even after Ferdinand Magellan's voyage around the world in 1524, Church-sponsored cartographers sustained the hypocrisy of an Asian peninsula reaching all the way to the Caribbean. This is surprising in light of orthodox traditions that credit Magellan with supposedly proving the New World was *separate* from Asia. Two examples of the mega-continent, India Superior, are nearly identical maps by Ptolemy of Strassburg and J. Gastaldi—both in 1548. The northern territories of Danish-Portuguese renown were shown as a bulge in the trans-continental peninsula which presumably connected Europe to the New World. In this manner, Church loyalists attempted to explain how the New World could have been populated by the descendants of Noah's Arc.

It was of no consequence that accurate placement of Labrador and Newfoundland (Bacalaos) on these maps implied that earlier voyagers had crossed the ocean. Indeed, the glory of Columbus rested upon his role as an evangelist—not as the first European to reach India.

Had it not been for the Protestant Reformation, America would still be called "New India." Portuguese, Spanish, and Italian mapmakers led the field until Johan Gutenberg invented the printing press. Then the center of publishing shifted to central Europe. At about the same time, many *scientific* geographers fled to Germany to escape the Catholic Inquisition. Although Protestants also had Inquisitors, they weren't concerned with matters of geography. Indeed, German Protestants relished the thought of causing the Catholic Church embarrassment over its dogmatic commitment to biblical geography. Accordingly, former



Courtesy of  
Rare Books and Manuscripts Division  
The New York Public Library  
Astor, Lenox and Tilden Foundations



from Bartholome Las Casas  
*Narratio Regionum Indicarum  
per Hispanos quosdam  
devastatarum verissima*  
Frankfurt, 1598



### American Genocide

Invading Europeans slaughtered many defenseless natives. Among those exterminated were natives who fed and honored 16th-century European explorers who appeared along the Atlantic coast. This engraving accompanied a book by Bartholomew Las Casas in 1598 condemning the atrocities of invading Spaniards. The men of Columbus set the example for those who followed by cutting off the hands of natives who failed to produce a "hawk's bell" full of gold in the mines of Hispaniola.

Catholics were encouraged to print maps praising the heretic, Amerigo Vespucci. Among the Protestant converts were Johann Reichart and the Flemish heretic, Gerhard Kramer (a.k.a. Mercator). Because of their efforts and the unequalled volume of folios published by German presses, the name "America" endured on maps of the New World.

When former British colonists in the New World chose the "United States of America" as the official name of the new nation in 1776, the term *Nova India* vanished from all maps of the northern continent.

### American Genocide

Sixteenth-century Europeans invaded the New World with Renaissance technology and Medieval values. The slaughter of innocents began with Spain's Western Crusade—which combined the goals of evangelism with the brutality of conquest. According to the standards of Medieval Europe, Columbus was a devout Christian. Historians quote





16th-century illustration by DeBry



### Massacre as Entertainment

Conquering Europeans enjoy the spectacle of mastiffs tearing apart defenseless natives. Although condemned by the likes of Spanish bishop Bartholomew Las Casas, ignorant Europeans with guns fancied themselves ordained by God to enslave or exterminate the Native Peoples. This holy mandate was called "Manifest Destiny." Cruelty and use of dogs made the rampage seem like a sporting event. Perpetrators believed they were contributing to the ethnic cleansing of the Divine City.

numerous anecdotes of his pilgrimages, his religious services prior to sailing, his months of worship following successful voyages, and his plantings of crosses whenever he confiscated native lands. Columbus believed he was chosen by God to lead a Christian army to recapture the Holy Lands, and he claimed that his relentless search for an Isle of Gold was merely to raise money to hire an appropriate army.

In spite of his professed godliness, he brought terror and destruction to the natives he claimed to "save" for Christ. Indeed, Columbus virtually enslaved the entire population of Hispaniola with his edict that natives produce a "hawk's bell" of gold each year; he introduced the *encomienda* system that forced natives into slavery under Spanish rule; and he brought the Inquisition which tortured and executed natives for failing to adopt the foreign religion. Historian Samuel Morison acknowledged that: "The cruel policy initiated by Columbus and pursued by his successors resulted in *complete genocide*."<sup>15</sup>



## AMERICAN DISCOVERY

Historian David Stannard (author of *American Holocaust*, 1992) noted that foreign treatment of natives amounted to "purposeful genocide." Within two decades, Spain's colonial army called *Conquistadores* (or "conquerors") had virtually exterminated the native population of Hispaniola. Several million natives met death from disease, famine, and the conquistadors' deadly games of genocide. Lazy European colonists next imported black slaves to work the farms and mines.

The Dominican Friar Bartholomew Las Casas lamented the poor treatment of natives in his book *The History of The Indies*. According to Las Casas, young girls were routinely raped; children were targets for mounted riders who charged upon them and decapitated them while on horseback; hunting dogs were trained to attack natives and tear out their stomachs; and babies were fed to hungry dogs while soldiers mocked pleading mothers. Las Casas estimated that three million natives died in the Caribbean and twelve million died in Mexico.<sup>16</sup> The priest was not only concerned with the savage genocide; he was also disturbed by "the loss of souls." Spanish mistreatment of natives often made survivors reluctant to join the Christian Faith.

Over 75 million natives died during the march of European *civilization* across the continents.<sup>17</sup> Although Europeans inadvertently transported epidemic diseases across the ocean, indigenous diseases such as tuberculosis, malaria, smallpox, and measles also ravaged the population. Otherwise "mild" diseases became major killers because Europeans destroyed native villages and farms. Natives who were weakened by disease froze because they had no homes; others faced starvation. In 1687, Baron Lahontan of the New York militia boasted that his men had burned the huts and cornfields of Seneca villages. Native survivors of such raids were doomed with the onset of winter storms.

Even those who converted to Christianity were not immune from "Christian" mobs. In 1782, a contingent of the Ohio militia captured a group of Christian natives living at a Moravian mission. The unarmed natives sang Christian hymns while their captors beat them to death.<sup>18</sup> In 1838, peaceful Cherokees—including many Christians—were forcibly evicted from their lands because they were in the path of white Real Estate speculators. Many Cherokees died on the forced march from Georgia to Oklahoma—survivors suffered immeasurably. In the early 1800's, frontier soldiers gave blankets contaminated with smallpox virus to freezing natives. This sham "Christian generosity" concealed a brutal mentality warped by beliefs of racial and cultural superiority.

Conquest and evangelism marched in tandem. The weapons of the world's most advanced military technology combined with Medieval values in a *righteous* conquest of supposedly "heathen" nations. Superior weapons assured ultimate victory over native peoples, thus

European settlers believed their culture and values were superior to those of natives. Meanwhile, white historians lauded the "Manifest Destiny" of the white race in New World conquest. It was a collective delusion of white racial superiority: colonial settlers often regarded the natives as subhuman, referring to them by such degrading terms as "savage," "red-skin," and "injun." White militias decimated frontier tribes and forced natives to flee deeper into the wilderness. Many tribes vanished from the Earth. Those that survived were grievously wounded; their lands were taken; their cultures were ravaged; their vitality was drained away.

### Making The Columbus Myth

Between 1502 and 1992, the true heritage of America was systematically concealed and "history" was re-invented to further the interests of white racism. Over a period of five centuries, a virtually forgotten Medieval mariner, Columbus, was transformed into the so-called "Hero of American Discovery." The process of that transformation and the motives of those who contributed to the gross misinterpretation of events is a shocking indictment of the *mythology* commonly referred to as "American History."

During the early 1500's, the lingering reputation of Columbus as one of the world's most daring con-artists gradually faded from the consciousness of Europe. Few of his countrymen were aware of his death in 1506. The king scorned him; his funeral was poorly attended; even the local paper ignored his fate: there was no obituary for Columbus.<sup>19</sup> Italian historian Gianni Granzotto, author of *Christopher Columbus* (1985), wrote of the deep abyss that surrounded his hero:

His oblivion lasted for more than three centuries, from the 16th century to the mid-19th century. His name was forgotten over the course of so many generations, as though lost forever in the depths of the past.<sup>20</sup>

Granzotto's assessment of the mariner's lack of popularity echoed that of earlier writers, such as Columbus biographers Eliot Morison, Washington Irving, and Baron von Humboldt. They gave several excuses for the neglect of their common hero: he was maligned by "enemies;" King Ferdinand was jealous of his wife's support for Columbus; his glory was "stolen" by Vespucci; and Waldseemuller was "misinformed." The common assumption among modern historians is that Columbus was cheated in the past, but the *error* of history has been rectified. Their solution has been the creation of a white demigod.

Ferdinand's role in demoting the legacy of Columbus was documented in several court cases. Columbus' heirs demanded that the king bestow upon them the titles and royalties he promised Columbus for



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“discovering new lands.” Ferdinand’s attorney countered that Columbus hadn’t found any “new lands,” because the lands were *previously* known to the Portuguese as *Antilia*. The 16th-century historian Gonzalo Fernandez wrote in his *Historia Natural De Las Indias* that Iberians (Spaniards) once had settlements in the New World as a result of Phoenician voyages. Consequently, he supported the king’s position that the Spanish mariner had only “found” lands previously known to Spain. Columbus’ heirs sought release of the ship’s log and maps; the king refused—citing royal prerogative. Columbus’ heirs insisted the king had promised *perpetual* titles in a legal document called “The Capitulation.” However, Ferdinand countered that it was also royal prerogative to nullify *any* agreement.

Court battles continued until Ferdinand’s death. The new monarch, Emperor Charles V was very supportive of the Colon Family and efforts to restore the glory of their patron. He opened state archives to the family and authorized Luis Colon to seize and destroy any writings in Spain that were prejudicial towards the Columbus legacy.<sup>21</sup> The ensuing purge of anti-Columbus literature eliminated all resistance to the growing support of the Columbus Myth in Spain. In 1538, Fernando Colon completed a biography of his father: *The History of The Indies*. It presented a glowing account of the mariner’s achievements and helped bolster his image as a national hero. However, it did little to influence the rest of the world.

In 1527, Las Casas began work on his own *History of The Indies*. The Church-sponsored project, completed in 1563, sought to document Columbus’ role in world evangelism.<sup>22</sup> The issue wasn’t regarded as important during the mariner’s lifetime, because the colony on Hispaniola was still a disaster when he died, and Europeans had only begun to exploit the vast continents. However, 1522 marked the announcement of huge shipments of gold which the adventurer Hernan Cortes confiscated from Mexico. His victories on the mainland brought Spanish missionaries into contact with millions of so-called “heathen Indians.” At this point, Church authorities began to realize that Columbus was instrumental in starting a *Western Crusade*. The “saving” of millions of souls was serious business; so was the *tithe* which Spanish conquistadors paid to Rome on the gold they took from Mexico, Colombia, and Peru.

As monks sought information about Columbus, they came to the realization that the maligned mariner was a man of absolute loyalty to doctrine, that he suffered great hardships for the faith, and that he achieved many miraculous feats. Columbus had believed in prophesy and regarded himself as the man chosen by God to lead the Final Crusade in the Holy Lands. His dedication to the Church was evident from his adopted signature: *Christoferens*—“Christopher the Christ Bearer.”

A striking example of God’s apparent favor in Columbus was a 1502

hurricane that demolished a fleet of his adversaries near Hispaniola. Columbus seemed to have all the qualifications of a saint: unswerving faith, superhuman achievements, and miraculous luck. Monks came to regard Columbus as God's *chosen* messenger who brought Christianity and "salvation" to the New World. Las Casas reasoned that because Columbus served as the instrument of "Divine Will," all of his faults (such as kidnapping, slavery, and adultery) were excusable. The fact that Cortes shipped a hoard of Mexican gold back to Spain seemed like divine confirmation of the Columbus' vision of a Golden Isle in the Indies.

Nearly twenty years after the mariner's death, Church authorities began searching for materials relating to Cristobal Colon—the man they named "Columbus." This Latinization of "Colon" was adopted by Church scholars to convey the mariner's elevation to the rank of "Significant Layman" in the Church history of world evangelism.

Documents poured in from all across Spain, Portugal, and Italy. Within a few years, Las Casas found his office packed from floor to ceiling with materials, and he began the arduous task of sorting the documents and testimonials.<sup>23</sup> Because Columbus had been dead for two decades, many items were already lost; there were no portraits from life, and no birth certificate. Consequently, monk-historians were forced to speculate when and where Columbus had been born.<sup>24</sup> Although Columbus told his son that he began sailing when he was 14-years-old and was "always a mariner," Las Casas couldn't find any documents confirming such a claim. Nor was there any confirmation of the mariner's statement that he had an uncle who was an admiral. Instead, Las Casas found records of an Italian weaver, Christoforo Colombo, who was in Genova (1478) and Madeira (1479) on business trips at about the same time as Columbus. The weaver was the first-born son of a family of Genoese weavers. Las Casas presumed the weaver was born at Genoa, Italy, in 1451. According to Italian documents, Colombo's early life was spent as a weaver's apprentice, and then he went to an Italian university in Genoa to study business. Because of the coincidence of records showing Colombo in Genova and Madeira when Columbus was in those cities, Las Casas presumed the Italian Colombo and the Spaniard Colon were the same person.

However, historian Peter Martyr, disagreed: he cautioned that the Genoese weaver (Colombo) was being confused with a Spanish mariner (Colon). Modern historians have argued for decades about the composite hero Las Casas invented. Historian W.R. Anderson points out that Columbus never wrote in Italian, always a Spanish dialect (Catalan); and, his marriage to the daughter of a Portuguese aristocrat was hardly the kind of matrimony open to middle-class Italian weavers. Besides Columbus' own testimony that he was "always a mariner," Anderson has



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found substantial evidence that Columbus was born "Cristobol Colon," the bastard son of a Spanish prince.<sup>25</sup>

Paolo Taviani, archivist for the State of Genova, identified testimonials that Colombo was in Italy from 1470 through 1479—at the same time Colon was pursuing his fortunes as a "life-long" mariner. Clearly, the *Columbus* that Las Casas wrote about was derived from two people. Las Casas ignored Martyr's warning—possibly because he was accused of heresy in 1535. Martyr fled to Austria and became a Protestant.

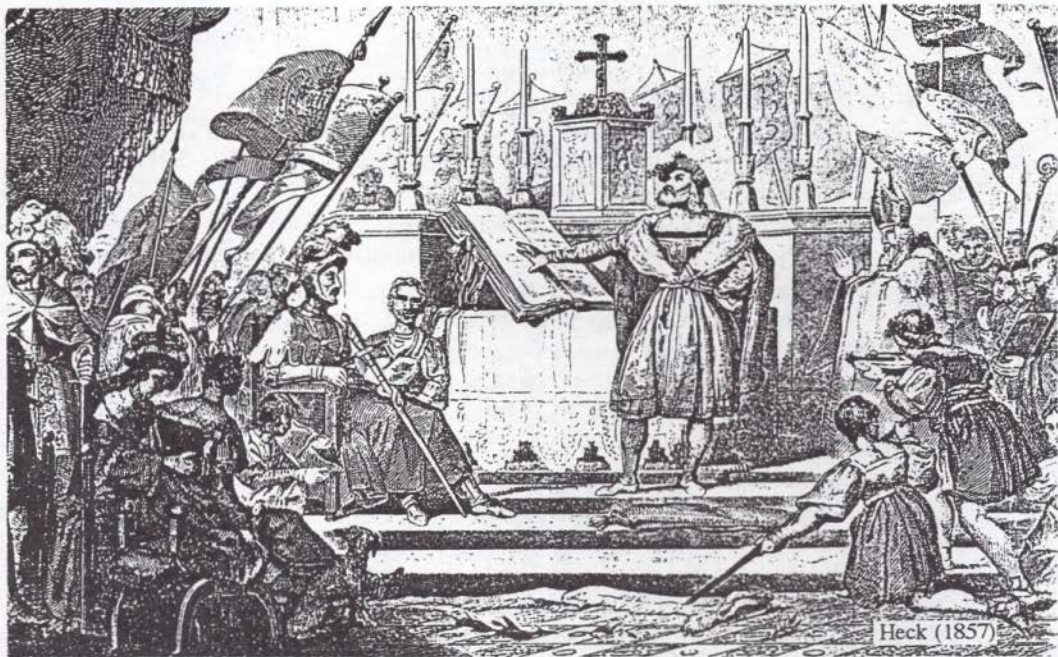
Las Casas' manuscript on Columbus and the New World Crusade was not released to the public until 1875. The documents he accumulated provided Church scholars with verification of the mariner's role as an evangelist. During the centuries following Las Casas' research, the importance of America to Catholic interests and world history became more evident. Colombo's Western Crusade inaugurated the Anglo tide of Manifest Destiny that swept across the New World creating colonial regimes to serve the interests of European empire builders. Parishes in Canada, Mexico, and South America doubled the population of the Divine City. They also delivered substantial revenues to Rome. Natives were virtually enslaved in their own homes or summarily evicted to make way for "superior" races. Simultaneously, natives were "converted" and indoctrinated in the dominant cultures. Those who failed to assimilate were forced to the margins of society.

The world situation changed drastically by the mid-1500's with the Reformation in Europe. British colonies in America became a sanctuary for Protestants and Humanists. The Official History that monks had preserved over the centuries was jeopardized by rebels demanding a broader view of world events. Catholic leaders realized that something had to be done to assure that their view of world history prevailed.

In 1622, Spanish and Italian Catholics organized their efforts to promote the interests of Columbus as an international hero and champion of Christianity. Their organization was the beginning of a movement that within two centuries achieved its goal of revising popular history. Italian historian Granzotto acknowledged the intentions of historical revision embodied in the Propaganda Fraternity:

In 1622, the de Propaganda Fide confraternity was founded for the purpose of reshaping America's image according to religious ideals and overcoming the distortions caused by the excessively protracted period of conquest and plunder. Columbus fit in well with a providentially oriented interpretation of history: he had been chosen by God to spread the gospel throughout the New World.<sup>26</sup>

This characterization of Columbus as "God's messenger" echoed



Columbus as Divine Champion & Mythical Hero

the assessment of Las Casas, whose *History of The Indies* portrayed American discovery as the fulfillment of a divine plan. Although Las Casas acknowledged that other seafarers reached the New World before Columbus, they were dismissed as *insignificant* to God's plan for world evangelism which was presumed to be the only worthy endeavor. Likewise, the *Propaganda Fide* confraternity regarded Columbus as the only Christian explorer who embodied the ideals of faith and victory.

The 17th-century priest, Father Giovanni Botero, proclaimed Columbus an "apostle" and "martyr." Botero's declaration primed young priests to regard Columbus as a champion of the *true faith*, and they shared this conviction with parishioners. The mariner's fame spread throughout Catholic parishes, however the resurrected Columbus was virtually unknown throughout most of the world.

According to historian Samuel Morison, there was little interest in Columbus among thirteen English colonies that later became the United States.<sup>27</sup> Amerigo Vespucci, John Cabot, Giovanni Verrazano, and Henry Hudson were popular heroes among North American settlers, while Columbus bore the humble status of a second-rate mariner. Mexican landowners honored Hernan Cortes who conquered the Aztecs; Brazilians praised Portuguese explorer Pedro Alvares Cabral for "discovering" their land in 1501; the Portuguese claimed the *real* discoverer of America was Joao Vaz Cortereal; the British believed it was John Cabot; the Chinese lauded Hui-Shen or the "ancients;" and the Norse had their sagas about "Lucky Leif" which nobody else took seriously. Columbus wasn't even in the running outside of Italy and Spain.



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Historian Granzotto summarized Columbus' poor standing at the end of the 18th century:

The best anyone said of Columbus was that he had been an adventurer. Many believed that he had attempted to steal Vespucci's glory, which had remained intact over the centuries and won him most of the credit for the discovery. On the other hand, no one forgot that Columbus had set in motion the corrupting process of slavery.<sup>28</sup>

The War of 1812 was pivotal to the revision of American history. United States naval vessels repeatedly won in battles with British frigates, leading to a renewed belief that the nation was both ordained by God and protected by divine guidance. However, British marines invaded Washington and burned the White House in revenge for American raids in England. It was a sobering setback, and many Americans grew disillusioned with old English heroes. Because of this disillusionment, American historians sought a non-British hero to assume the role of a *God-ordained* founder of the American republic. As a presumed leader of the Italian Renaissance, Columbus seemed like a perfect candidate.

In 1828, Washington Irving wrote his fictionalized biography, *The Life And Voyages of Christopher Columbus*. Irving erroneously credited Columbus with proving that the Earth was round, thereby generating a popular misconception that Columbus was a consummate geographer.

Gradually, the mariner's popularity began to rise. Throughout the 1800's, a New York organization called "The Colombian Order" staged yearly parades to popularize Columbus as the "First American."<sup>29</sup> There was no competition for the title: ancestors of the native peoples weren't even considered; Vespucci lacked a constituency; John Cabot was defunct because of his British ties; the Norwegians weren't organized; and the Phoenicians were unknown. Columbus was the winner in a race where he was the only entry. As pundits have declared: "Everyone loves a parade!" Columbus was the champion of an annual event of increasing popularity—the "Columbus Day Parade."

When Italian Abbot Mastai-Ferretti toured North and South America in 1825, he found no statues dedicated to Columbus, nor were there any cities, streets, or libraries bearing the mariner's name.<sup>30</sup> Because the abbot was convinced of Columbus' divine role in New World salvation, he dedicated his life to restoring the mariner's glory. In 1845, the abbot was elected Pope Pius 9th. During his stewardship, Pius 9th issued testimonials and decrees honoring Columbus as the paragon of evangelism and exploration. King Philip VII of Spain responded to the pope's appeal for reviving the legacy of Columbus by ordering a search for ancient manuscripts. During the search, Spanish archivists found Las

Casas' *History of The Indies* and a book by a Columbus confidant, Frey Bernaldez. By 1866, the Columbus Myth acquired such grandiose proportions that Catholics demanded the mariner's elevation to sainthood, and a Congregation of Rites was convened to examine the candidate. Although the cardinals voted against sainthood in 1891, public interest in the proceedings and news reports substantially enhanced the mariner's popularity.

American scholars popularized Columbus as a champion of the Renaissance. Geographer Elisee Reclus (*The Earth & Its Inhabitants*, 1892) praised Columbus for a host of seemingly brilliant achievements:

The world, hitherto supposed to be flat, he proved to be round; he thereby opened the modern era of history. His genius was shown to be of the first order by his many observations on the winds, the marine currents, the declination of the compass, and the confidence with which he had boldly plunged into the unknown sea of darkness.<sup>31</sup>

Such proclamations by American scholars provided academic credibility to the Columbus Myth. By the time historians actually examined the context of 15th-century exploration, they realized all the achievements attributed to Columbus had already been done by someone else. However, the popular fiction endured that Columbus, against insurmountable resistance, prevailed in proving the Earth was round. For this presumed achievement, historians decided that Columbus deserved the lasting devotion of humanity.

As a consequence of Columbus' new popularity, historians had to explain why *two continents* were named "America," if they were actually discovered by Columbus. Historians invented the pretext that Vespucci "stole" the glory that rightfully belonged to Columbus. Some historians claimed Vespucci never sailed and that his ideas were all stolen from other mariners. Ralph Waldo Emerson's 1856 essay eloquently characterized Vespucci as the quintessential scoundrel of the Ages:

Strange it is that broad America must wear the name of a thief. Amerigo Vespucci, the pickle dealer at Seville, whose highest naval rank was boatswain's mate in an expedition that never sailed, managed in this lying world to supplant Columbus and baptize half the earth with his own dishonest name.<sup>32</sup>

With Vespucci disposed of as a "thief" and Columbus eulogized as a saint, the Roman Catholic organization known as The Knights of Columbus succeeded in efforts to establish October 12th as a legal holiday in many states.<sup>33</sup> Numerous cities adopted the name "Columbus." Others chose the name "Columbia." Congress declared the federal





Burning of Huss in Prague, 1418 AD



Burning of a Cuban medicine man, circa 1510

### The Inquisition in America

Christian authorities in Europe used public burnings as a way of terrorizing people into submission. The illustration (above left) from Ridpath's *History* shows the 15th-century execution of the heretic Huss in Prague. A few decades later, Columbus brought the Inquisition to Hispaniola. From this foothold, religious zealots spread across the land executing native seers, medicine men, and prophets, because Christian authorities believed these native religious leaders were "in league with the devil." In the illustration (above right) from Las Casas' *History of The Indies*, Spaniards burn a native medicine man while a priest urges him to embrace Christianity. Thus, religious animosity, ignorance, racial bigotry, and ethnocentrism combined in the conquest of the New World paradise.



district around the capitol "The District of Columbia;" a South American nation adopted the name "Colombia;" many municipalities named schools, libraries, and public buildings after the mariner; many statues were erected to the memory of Columbus; even the United States became known by the designation "Columbia The Gem of The Ocean"—or just "Columbia." American scholars have stated that "Columbus" is now the most popular name in the Western Hemisphere. Public sentiment reached such a crescendo that Chicago declared a world's fair called the "Columbian Exhibition" for 1892. During this mega-event, the nation celebrated the 400th anniversary of the famous voyage—not to India—but to "America." In the revised history that had created a white superhero to meet the glorious image of Manifest Destiny, the real Columbus was forgotten.

President Benjamin Harrison issued a proclamation calling upon all Americans to support the 1892 celebration. Schools and municipalities organized programs and parades with the theme of "Columbus' Discovery of America." Although the Columbian Exposition opened a year late, it was a roaring success. Throughout the land, the name "Columbus" was identified with futuristic technology. Thus lifted out from Medieval boots, Columbus became a mythical Renaissance hero and was praised as the "greatest explorer" the world has ever known.

Twentieth-century historians contributed to the mariner's glorification and concealment of his "dark side." Although historians acknowledged Columbus' "atrocities" and "genocide," they insisted such aberrations should be ignored because Columbus was "God's chosen messenger of American salvation."<sup>34</sup> Accordingly, Columbus was given a holy veil of infallibility. The leading Columbus biographer, Admiral Samuel Eliot Morison, set the tone for a romanticized view of genocide in his book, *Christopher Columbus, Mariner* (1954):

Never again may mortal men hope to recapture the amazement, the wonder, the delight of those October days in 1492 when the New World gracefully yielded her *virginity* to the conquering Castilians.<sup>35</sup>

Morison's Orwellian phraseology served to perpetuate the stereotype of timid savages yielding to the inevitable progress of "civilized" Europeans. The author's prestige as the preeminent Columbus biographer added scholarly credibility to the Columbian legend.

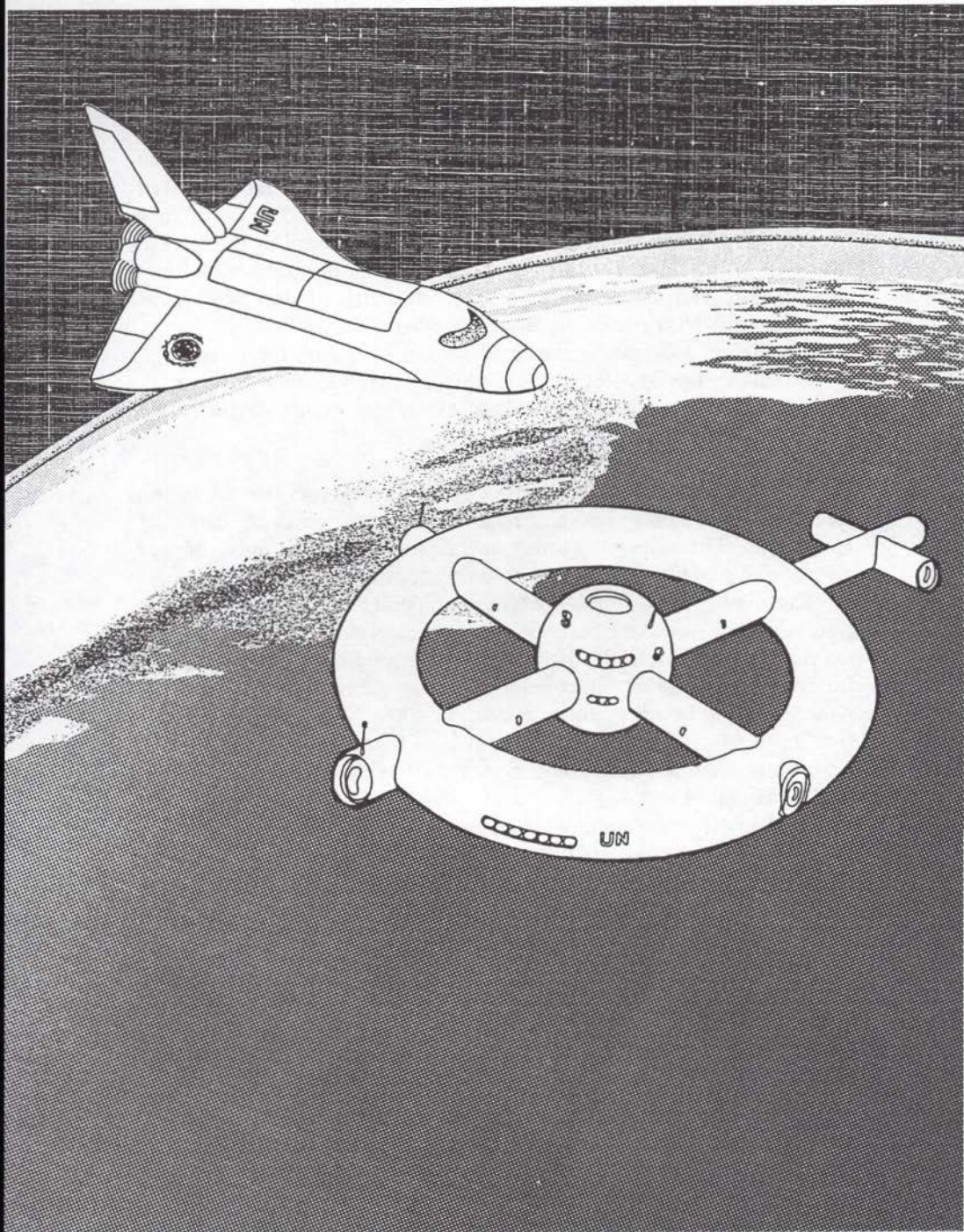
Eventually, the Columbus Myth dominated American society: writers praised the many attributes of the mythical figure; schools instructed the masses with doctrines that originated from a religious propaganda fraternity; and communities celebrated the "Columbus Discovery of America" with holidays and parades. In 1909, New York became the first state to establish October 12th as a legal holiday in honor of Columbus. Within a few years, more than 30 states honored Columbus as the official "Discoverer," and in 1964, President Lyndon Johnson declared a permanent national holiday. By 1992, Americans produced the most expensive celebration in history—the "Columbus Quincentennial." The year-long gala featured television specials, movies, parades, T-shirts, banners, and a commemorative voyage by replicas of the *Nina*, the *Pinta*, and the *Santa Maria*.

However, some people didn't join in the parade.

Minority groups wondered what all the fuss was about. The Irish and Norwegians insisted their ancestors were being cheated. And a few young bucks from native tribes threatened to "discover" Spain. Native elders wondered if descendants of the pioneers would ever learn the real story of American discovery.



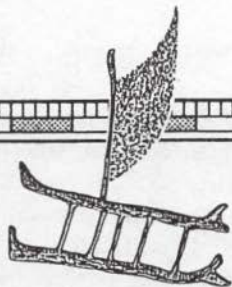




***Mother Ship Gaia—the Earth***

*Voyagers from a United Nations science task force prepare to seek  
New Worlds in Space, circa 2010 (UN year 78).*





## VOYAGERS OF THE DAWN

The legacy of New World exploration reveals a powerful truth: we share a common destiny. Curiosity led many voyagers to America seeking the abode of the sun. Their voyages taught them the world was round, and beyond the horizon, there was a paradise. For many centuries, knowledge of the distant continent survived in myth and folklore tempting the curious, the bold, and the desperate to sail across the ocean. All races and creeds participated in the great epic of American discovery.

The Real Story of those explorers is of great importance to our modern world of rapid technological change, international business, trans-continental travel, space exploration, and cultural diversity. Indeed, the sacrifices and achievements of people who came to the New World laid the foundation of our future. They began the process of forging a multicultural family. It is our responsibility to continue building the framework for Tomorrow's World Community. Although many trials lie ahead, we have much to gain from the knowledge, arts, dreams, and spirituality of our diverse cultures.

### **History or *Myth*-story?**

Historians often quote a 20th-century philosopher George Santayana who cautioned: "Those who forget the past are doomed to repeat it." Presumably, if we heed Santayana's advice and remember our history, it will protect us from making repeated mistakes. But what happens if the "history" we remember is wrong?

Ever since the 1892 Columbian Exposition in Chicago, Americans have been stuck with the unwieldy spectacle of Columbus the Medieval White Crusader masquerading as the ultimate Renaissance explorer. This contrived super-hero resulted from the combined efforts of a Catholic propaganda fraternity and romantic historians. During the 19th century, novelists sought to dramatize history in order to make it more interesting. Their efforts coincided with a movement among Western academicians to portray history as the record of divinely inspired heroes. British historian Thomas Carlyle led the movement to attribute great events, such as American discovery, to heroes led by divine revelation.<sup>1</sup>



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The role of Christopher Columbus as a *divine hero* was immortalized by the distinguished American poet, Ralph Waldo Emerson. The popular novelist, Washington Irving, painted a glowing image of a humble, divinely-inspired avatar. And historian Samuel Morison contributed scholarly edification with a Pulitzer-Prize winning biography in 1942.

From the perspective of 19th-century Anglo historians, the most important achievement of Columbus was to establish European supremacy in the Western Hemisphere. Historian Jean DuPouget in *Prehistoric America* (1895) said: "With the glorious name of Christopher Columbus, we must place...Pizarro, and especially Fernando Cortes, as the first to establish the supremacy of European civilization in the New World." The dogma was thus established in education that all other cultures, particularly those of Native Americans, were inferior.

Although 20th-century historians realized that Columbus wasn't responsible for proving the sphericity of the Earth, they credited him with a host of other grandiose achievements—including "introducing" the Old World and the New, showing people how to sail across the ocean, bringing the "first" New World plants to Europe, introducing horses to America, and bringing Christian salvation to "heathen" natives. These false "achievements" served as the basis for a fictitious tale of European discovery. So-called "scientific" arguments were expounded as rationale for continuing a myth whose origins stemmed from a religious propaganda fraternity. Museums, books, and television specials reiterated the so-called scientific importance of Columbus during the 1992 Quincentennial. The Smithsonian "Seeds of Change" exhibit was among those that glorified Columbus for erroneous "achievements."

As recently as the 1990's, most American history books began with the mythical story of Columbus. Historians justified this practice on the basis of assumptions that Columbus initiated the story of American civilization in the New World with the first written records in starting 1492. Of course, that assumption is erroneous. Mayans and Mexicans had considerable libraries which Spanish conquerors burned due to the arrogant rationale that these were "works of the devil." Blas Valera's *History of Peru* (1595) noted that natives used dried plantain leaves for writing before arrival of the Spaniards. Algonkians carried on correspondence using birchbark scrolls. Barry Fell identified several native writing systems in North America that isolationist scholars mistakenly attributed to French missionaries. Finally, stone inscriptions left by many voyagers to the New World as well as records of their travels left behind in the Old World attest to writing and written history about America long before the voyage of Columbus.

Due to the presumed lack of writing and the associated belief that natives weren't civilized, Native Studies are usually relegated to the field

of anthropology whose focus is *primitive* society. Native Studies are identified as *pre*-history—providing a convenient scholarly rationale for excluding native cultures and achievements from mainstream American history. The arrangement is blatant institutionalized racism: American history did not start in 1492—regardless of what isolationists might choose to believe. Native Peoples and Old World voyagers contributed substantially to our multicultural heritage—and they were certainly “civilized.” In many respects, it can be argued that native tribes were more civilized than the conquerors who invaded their lands.

Although some citizens insist the United States is a “Christian nation,” the reality is that the United States is a multicultural, multi-religious society. The Constitution and Federal laws assure equal participation for all persons without regard to race, religion, or ethnicity. Educational institutions, museums, textbooks, and historical programs that fail to include Native Peoples in the context of American Civilization and History engage in the abhorrent and illegal practice of racism.

The historians’ dogma of *No Significant Voyagers Before Columbus* creates an artificial *Myth*-story that promulgates a racist belief in the superiority of Christian European civilization—and white males. Historian Edmundo O’Gorman warned his colleagues about the dangers of creating such an artificial history of America in his book *The Invention of America* (1961). O’Gorman branded the Columbus discovery a “false belief” which promoted the cultural superiority of European Christians. When such a belief becomes institutionalized in American schools, holidays, museums, and the media, it sends a strong message to children of minority ethnic backgrounds that they are less-important and have less to contribute to society than their white peers. Such beliefs are counter-productive to social harmony, self-esteem, and individual achievement in our multi-ethnic society.

### **Ethnocentrism—A Cultural Disease**

The distorted version of the past embodied in the Columbus Myth has been caused by powerful cultural forces which impact our lives. People are naturally loyal to their own ethnic group. Such loyalty can be of great benefit to the individual and society. However, when ethnic loyalty denies the rights and achievements of others, it becomes a cultural disease called “ethnocentrism.” This perception of excessive greatness and superiority of one’s own ethnic group is dysfunctional in a world of cultural diversity where survival depends upon harmonious interaction between peoples having diverse ethnic backgrounds.

The Columbus Myth arose from a particular version of ethnocentrism called “Euro-centrism,” or the belief that European civilization is superior to all other kinds of civilization. That belief was the principle



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justification for European conquest of America, the philosophy of "Manifest Destiny," and the tragedy of genocide. Euro-centrism has led most historians to ignore the primacy of Native Peoples in the cavalcade of American discovery, and it serves as a convenient rationale for ignoring the contributions of other ethnic groups.

Implicit in Euro-centrism is a religious bias towards Christianity. Many European historians have lauded Columbus as "Evangelist of Half the World" or "Savior of the Indians." Religious bias is evident in Samuel Morison's popular biography, *Admiral of The Ocean Sea* (1942):

The whole history of the Americas stems from the four voyages of Columbus; and as the Greek city-states looked back to the deathless gods as their founders, so today a score of independent nations and dominions unite in homage to Christopher the stout-hearted son of Genoa, who carried **Christian civilization** across the Ocean Sea.<sup>2</sup>

Morison's emphasis on the "Christian" aspect of discovery ignores the role of other faiths in the development of native religions. Native religion was a synthesis of numerous Old World religions and native inspirations. Buddhists, Taoists, Hindus, and Moslems visited the Americas in ancient times and contributed to the fabric of native religion.

Most tribes believed in a divine spirit—*Manitou*; most natives led very spiritual lives. Wherever white explorers traveled, they observed that natives were more generous and moral than European Christians. Arawak natives treated Columbus like a king on Hispaniola. When the Pilgrims of Massachusetts faced starvation, natives brought them food; when Jamestown settlers had a famine, they too were fed by so-called "heathen" natives; and when DeSoto's army marched into Alabama, the natives provided food and shelter. However, "Christians" often rewarded good deeds with slaughter and enslavement.

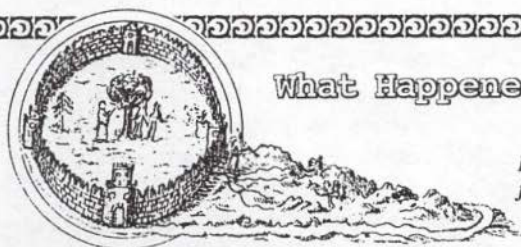
Under the auspices of Columbus and Cortes, "evangelism" was a convenient justification for genocide. Historians often excuse their hero, Columbus, by claiming he was only following the standards of his own era. However, the shame that the Dominican friar Las Casas experienced after witnessing the behavior of Spanish soldiers argues for a different perspective. Indeed, moral standards of the 15th and 16th centuries were moving away from the religious fanaticism of the Middle Ages. In that respect, Columbus' life straddled the transition from archaic brutality to the more humane and compassionate values of the Renaissance.

The genocide of Native Americans was a tragic consequence of Medieval thinking and a Medieval view of the world. Historians mistakenly laud Columbus as a "Renaissance explorer" who dramatically challenged antiquated beliefs: actually, the opposite is true in

matters of geography, morals, and religion. The American genocide began with the Western Crusade launched in 1493 under the command of Columbus. As leader of Spain's determined thrust at the heart of the New World, the commander of the invading forces bears a substantial share of blame for the tragedy that followed. Both Columbus and Cortes had ample opportunities to build peaceful relations with natives on the basis of the welcome receptions they initially received. However, both foreigners eventually chose violent tactics to impose their will on Native Peoples. History does show that some explorers and settlers treated natives with respect and kindness. Some even practiced values that moderns might regard as actually "Christian" in word and deed.

Yearly celebrations of the 1492 beginning of European conquest, the "Columbus Day" holiday, are an insult to those who continue to grieve because of the genocide of millions of natives and the cultural extermination that accompanied European conquest. The annual revival of the Columbus Myth sets a poor example for tomorrow's youth, because it glorifies conquest and the myth of white superiority.

In the realm of history, ethnic and religious bias is intolerable. In the context of an emerging world community, history is not the private domain of a single ethnic group; history belongs to everyone. By failing to acknowledge the contributions of native peoples and ancient voyagers, scholars promote a mockery of history that justifies continued racism in America. Truth must be our guiding light, because history sets the very tone and direction of our society, and only a truthful society can effectively meet the challenges that lie ahead. A society that denies the truth about its past will never be free to face the realities of the future; it will always have its institutions mired in a *false* identity.



### What Happened to Paradise?

*Fra Mauro's Paradise  
from a 1457 World Map*

Medieval European maps consistently featured Paradise east of Asia. This scene from a 15th-century map by Fra Muro shows the biblical Garden of Eden east of China. The garden was surrounded by a fortress to keep out mortals—that is, it was forbidden territory due to the "sins" of Adam & Eve. After Amerigo Vespucci confirmed the existence of a New World continent east of Asia, cartographers quit placing these biblical scenes on scientific maps—so, it seems that Paradise disappeared from Earth. Or was the name simply changed to America?



after Hartmann Schedel  
Nuremberg Chronicle 1493



## Eve's Vision

According to biblical dogma, mortals were evicted from the Earthly Paradise after Eve dared to take a bite of the "Forbidden Fruit"—often symbolized by an apple. Whoever she was, her curiosity infuriated those who favor dogma over discovery. We are in her debt for initiating the human quest of world exploration. Indeed, all real discoverers must be willing to forsake dogma in search of the truth.



## Real Discovery

When 15th-century Europeans talked about "discovery," they usually referred to a game of conquest and evangelism played by kings

and popes. It was a formal act of territorial annexation that had nothing to do with encountering something new or unexpected and learning about its nature. When Columbus set out to "discover" new lands—he already knew where he was going—to the golden isle of the Indies. According to his own testimony, he even had a map of his intended conquest. After his return, it was impossible for anyone to convince him that he had missed Asia by 10,000 miles. Even so, some historians have praised him as "The greatest explorer the world has ever known."

Such grandiose claims are best left to sports promoters. Real discovery is an incremental process that depends upon the prior achievements of many explorers. To single out one individual as "The Discoverer of America" trivializes the inter-personal *process* that is necessary.

The *Real* story of American discovery recognizes that many races and creeds contributed to the foundation of American society. By coming to America, the world's peoples began the difficult process of forging a new identity. From the hardship of ethnic conflict emerged tolerance for racial and religious diversity; from the struggle to survive in the same land emerged the realization that we are all dependent upon each other's contributions, each other's wisdom, each other's daring, and each other's love. Our ancestors set out from around the world as many nations; by coming to America, they became *E Pluribus Unum*—one people of diversity.

Columbus provides us with the classic case of a person so-obsessed with finding gold that he missed the beauty and potential of peaceful relations with the Native Peoples. He also failed to realize that the Caribbean islands were not located near Asia. Even when others told him about their geographical discoveries, Columbus refused to waver from the approved dogma of Biblical Geography. It was in recognition of his



absolute loyalty and not skill as a geographer that Church authorities selected Columbus as their champion of evangelism. New Age historian Patrick Huyghe (*Columbus Was Last*, 1992) commented that: "Never have we praised anyone so highly for being so wrong."

Real discovery requires having an open mind, practicing mental discipline, and employing the methods of art and science. As poet Marcel Proust observed: "The real voyage of discovery consists not in seeking new landscapes, but in having new eyes." Poet T.S. Eliot believed the purpose of life was to gain a greater understanding of ourselves: "We shall not cease exploration," he declared, "until we arrive at the place where we have started from and really know it for the very first time." He realized that habitual lives dulled the senses to the point that people often lost track of a greater reality in their existence. Scientist Louis Pasteur believed that a person's mind had to be trained in the art of inquisitive thinking. "Discovery," he stressed, "favors only the mind that is prepared."

Real discovery requires honesty—and that is difficult in a world often dominated by dogmatic and deceitful people. Vespucci's disclosure of a new continent didn't win him friends among the crowd of dogmatic loyalists who believed Columbus reached India. Nor was Waldseemuller's use of the term "America" very popular among adherents of Biblical Geography. However, the boldness of Martin and Amerigo were vital to the progress of geographical science.

### The Future of Diversity

During the 15th century, Catholic scholars believed Earth was destined to end in about 200 years with the expected return of the Savior and the final Day of Judgement. But it didn't happen. Chaldeans and Peruvians had a similar belief that the world would end when all the planets lined up in the constellation of the crab. What most people don't realize is that the so-called "alignment" will never happen. Such a myth provided a single solution to those who wanted to believe in the end of the world *and* those who believed in the endlessness of time.

When people are raised to believe that the end of the world is imminent (and many religions still hold that belief), there isn't much incentive for future-oriented projects. Why bother to invest in mass-transit systems, health care, conservation, education, or jobs programs if the world will end at any minute—as some believe? Such is the case with antiquated dogma concerning the End of The World—always lurking around the next corner.

One of the realities of our existence is that time is virtually never-ending. Egyptians, Mayans, Hindus, and Sumerians conceived of life as an eternity. So far, nothing has happened to prove them wrong over the



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course of Earth's several hundred million-year existence. If we realize that the story of humanity is just beginning, our world acquires a different meaning. Pollution, warfare, crime, education, unemployment, politics, and religion must be viewed in a different context. We have the option of living in ways that contribute towards future generations; or we can selfishly waste the resources that tomorrow's children need to survive. The choice is ours.

The great lesson of the Cavalcade of American Discovery is that New World societies were greatly enriched by the continuing influx of new plants, animals, religious ideas, arts, technologies, inspirations and physically diverse peoples who came from abroad. New World societies were not mere replications of foreign civilizations, rather they were hybrids that took advantage of new ideas and wove them into the fabric of existing culture. Spaniards who saw Tenochtitlan (Mexico City) thought it was the most beautiful city in the world. The arts, architecture, and religion of Mayan states were equal to the highest achievements of Egypt—in spite of the harsh jungle climate. Representative government adapted and refined by the Iroquois Confederacy served as the model for the Continental Congress—and eventually much of the world.

Europeans have given the world many valuable contributions—some of which were adaptations of Asian inventions. However, European culture in spite of frequent claims of “superiority” has many deficiencies in the arts, spirituality, medicine, community values, education, and family life that are in need of new inspiration. Western societies have achieved incredible technological feats—such as landing astronauts on the moon—yet they are burdened with high crime rates, rampant substance abuse, tragic educational failures, deficit spending, widespread pollution, spiritual decay, high divorce rates, wasteful unemployment, antiquated transportation systems, inadequate health care, homelessness, and low job satisfaction. Lawmakers who have sought to “cure” these problems within the framework of Western Culture have failed to make much progress. In many respects, the statistics of America's social health continue to deteriorate.

If we look to the ways other societies have used multicultural solutions to social problems, we might just discover there are ways to effectively resolve our social, educational, and environmental problems. For example, native Hawaiians are raised within the context of an extended family. Part of the cultural heritage is the *Ohana*. There is a simple definition that means “extended family,” but the real meaning has to be learned in the context of traditional Hawaiian society. *Ohana*, when combined with *Aloha* (love) and other traditional values, provides a supportive context for living and learning not experienced in typical Western Society. Hawaiians have been very happy to share their *Ohana*



## Goddess Pele and the Ohana

Holding a Kalo plant, Hawaiian Goddess Pele calls out to mortals urging them to care for the children of the Earth. The Kalo or Taro symbolizes the vitality of extended families (the Ohana) whose shoots emerge from the parent plant. In this manner, the Kalo nurtures succeeding generations.

and *Aloha* with visitors. They are but two of many gifts traditional societies can offer the multicultural family of the future. Indeed, all the world's cultures have gems of wisdom, knowledge, and spirituality that can help build a truly remarkable culture—a hybrid culture—for future generations.

Many North American tribes have a ritual called the “vision quest” that all males undertake upon coming of age. The purpose of the ritual is to seek out a spirit guide that can help the individual learn about his purpose in life.

Fasting, dancing, singing, drums, and the elders’ council provide an existential matrix for a catharsis of the soul. In the context of native society, the vision quest is a vital step in the process of establishing a viable bond between adults and the tribal community. In the olden days, women did not engage in the quest because their role in child-bearing introduced them to tribal responsibilities as an adult.

Times have changed. Women are now welcome to participate in the vision quest or any other ritual that they desire to increase knowledge or spirituality. People of any heritage—whether of Western, Oriental, or African ancestry—might find the vision quest to be a vital avenue of inspiration. The potential of the quest in the realm of artistic perception, social insight, and human spirituality is immeasurable.

## The Future of Religion: Toward a Multicultural Spirituality

Albert Einstein was once asked his opinion on religion. He responded that there were two ways of looking at existence: “Either nothing in the universe is miraculous,” he said, “or everything is miraculous.” Such a response from a scientist opens the door of reconciliation between science and religion. Scientists and scholars tend to avoid issues dealing with religion, because most people are not very open-minded when it comes to examining their own beliefs. Nevertheless, religious transformation and tolerance of divergent religious traditions are critical to the future of world peace.

In the past, most faiths have promoted aggressive evangelism—out of a sincere belief that their prophets and rituals are essential for salvation. Religious indoctrination has also led to prejudice, arrogance, warfare, and hatred—often in “the name of God.” Christians and



### **Father Bartholomew Las Casas**

*"Friend of the Indians" and one of the few heroes of the 16th century who learned from the tragedy of conquest.*



*From Lorenz's Biography of Las Casas (1822)*

Moslems shared the vision of a Divine City on Earth—they just couldn't agree on whose bureaucrats were going to rule the planet. Had they been more tolerant from the beginning, we would be much farther along on the path toward world peace.

Building a peaceful world community requires the ability to leave behind archaic beliefs of superiority. One of the few religious leaders of the 15th century who was able to achieve a new vision of spirituality was the Dominican friar Bartholomew Las Casas. Initially, he marched in step with Spanish conquerors who invaded native lands. When disease and exhaustion nearly exterminated the natives of Hispaniola, Las Casas recommended that black slaves could be brought in to take over the arduous task of mining for gold. He thought the use of black slaves would spare the lives of natives—who by definition could be "saved." Blacks, due to their presumed legacy of God-ordained servitude, were generally regarded as beyond salvation. However, Las Casas observed—and discovered—that blacks were really no different than any other human beings.

After his conversion to "reality," Las Casas vehemently resisted the archaic doctrine of spreading Christianity by the sword. He became known as the "Friend of The Indians," and he led a valiant effort to convince his countrymen that natives deserved to be treated as equals. He also challenged the legality of *encomiendas* (slave farms started by Columbus) by declaring all forms of slavery to be intolerable. Indeed, Las Casas is remembered for the words: "All humanity is one."

At the First World Congress of Religious Leaders held in Chicago in 1892, many of those in attendance hoped to use the occasion to persuade rivals to become converts to the "True Religion of God." But there was no agreement regarding whose religion was favored by the Almighty.

The Second Congress in 1992 was more encouraging. Religious leaders acknowledged that the dogmas of their own faiths had promoted wars, tortures, desecrations, hatred, and genocide. As an assembly of holy people, they committed their resources to resolving ethnic, religious, and economic conflicts which continue to threaten world peace. Representative Pir Vilayat of the Sufi Order urged the Congress to facilitate the process of a "global awakening of the spirit" by building an inter-faith vision for the future. However, he cautioned that such a vision would

require leaving behind archaic doctrines and antiquated heroes.

### **A New Holiday for The New World**

By now, we should realize that the New World isn't just America. All the world's peoples are part of a New World Community emerging on Earth. As a united people, we need a history and institutions that can sustain the growth of our common spirit. We have reached a point in cultural development where we have an opportunity to achieve a higher level of civilization—and spirituality. The old banners of nationalist-warrior states are fading as we become more aware of the world's economic and spiritual interdependence. We can facilitate the transition to a new cultural level by establishing an international holiday to celebrate the human quest for our global identity. An appropriate title for this holiday is "Discovery Day."

Our global community has all the resources necessary to meet any challenges that confront our planet, but those resources can't be mobilized effectively until the lingering shadows of racism, ethnocentrism, and religious bigotry are enlightened with love, truth, and education. Ignorance has always been our worst enemy: truth and knowledge—our best guides.

Many prophets have come to us from the Universal Spirit bringing the same universal message: we must love one another; we must work together as a team. Love and truth are the foundation of the future: by sharing the voyage of discovery—by celebrating the richness of our cultural diversity and the inherent beauty of all our physical beings—we will discover our common destiny.

*So grab your oars, mates, and "heave ho!"  
—We're all shipmates on Gaia!*





# AMERICAN DISCOVERY

## REFERENCES

Abbreviations: AJC—*Anthropological Journal of Canada*; BAE—*Bureau of American Ethnology*; BP—before the present; CPCC—*Circum Pacific Prehistory Conference* (Seattle, August, 1989); EB—*Encyclopedia Britannica*; ESOP—*Epigraphic Society Occasional Publications*; f—figure; IM—*Imago Mundi*; ISAC—*Institute for the Study of American Cultures*; NG—*National Geographic*; NEARA—*New England Antiquities Research Association*; P—Plate.

### PROLOGUE

1. Davies (1986:71). Alain Bombard rowed from Casablanca to Barbados in a rubber raft. Peter Bird of Britain rowed 9,000 miles from San Francisco to Australia in 1983. Gerard deAbville rowed 6,300 miles from Japan to Washington State in 1971. Riens (1970:7) reports J. Ridgeway and C. Blyth rowed from Cape Cod to Ireland in 91 days (1966) and Tom McClean rowed from Newfoundland to Ireland in 72 days (1969), also John Fairfax rowed from the Canary Islands to Florida in 6 months (1969). Single-person yacht crossings are frequent. 2. Gardner (1986:75) indicates recent dating of prehistoric man in Australia between 40,000 and 100,000 BP based on evidence at Lake Mungo. The oldest skeletal remains are from Willandra Lakes and date to 35,000 BP (Donald Tyler, "The Initial Populating of Australia," CPCC, 1989). Alan Thorne (NG vol. 174-4, 1988: 467) indicates a distance of 150 kilometers separating land masses in southeast Asia. 3. Walker (1983: 934).

### CHAPTER 1

1. James Hays and Nicholas Shackleton demonstrated Ice Age cycles of 100,000 years, 43,000 years, 24,000 years, and 19,500 years up to 500,000 years into the past by measuring *radiolaria* deposits (Walker 1986:127). 2. Gladwin (1947:2). 3. Thomas Lee in AJC, 19 (1), 23, 1981. 4. L.S.B. Leakey did field work in Kenya, Africa, leading to discovery of *Homo habilis*. 5. Carter (1980: 239, 302, 311), 6. Begley, 1991: 16) (Childress, 1986: 10). According to DeWain (1990), archaeologists generally accept an arrival date of 12,000 years ago for the first native peoples. 7. MacNeish (1991) and *Newsletter*, 40, of the Louisiana Mounds Society, page 2. 8. Bill Deirich, *Seattle Times*, March 16, 1992, F5. 9. Bonnichsen in *Seattle Times*, March 16, 1992, F5. 9. (NG, v. 156, n. 3, 1979: 350). 10. Gladwin, 1947: 2. See Canby (NG, 156(3), 1979: 352) for flint knapping. Shao (1983: 31). Carter (1980: 301), Bailey (1973: 320) and Breuer (1972: 279). 11. Paul Martin in *Highwater* (1978: 22). See ESOP 18 (1989: 214) for recent mammoths in America. 12. According to Robert Freed (*The Oregonian*, September 7, 1989: B3) and presenters at CPCC, Southern California sites (dating at 9,800 years) and sites along British Columbia and Alaska (dating at 12,000 years) argue convincingly for migration via a coastal route. 13. Ruslan Vasilievskii (CPCC). 14. Allison Stengar, Ceramics Analysis Laboratory, Portland State University; CPCC. 15. Davies (1986: 66-67). 16. For bottle gourds, see: Carter in *Cyr* (1991: 106); Heiser (1981: 196); ESOP 18 (1989: 27); DeCandolle (1959: 248); Solheim (1971: 338); Baker (1965: 50); and Bradley (1981: 136). See Heyerdahl (1954). The bottle gourd (*Lagenaria siceraria*), or "pilgrim's gourd," is known in Sanskrit as *tiktaka* or *tiktika* (DeCandolle, 1959: 245). It dates to 9700 BC at Spirit Cave, Thailand (Solheim, 1971: 338). It appears in Mexican caves at about 7000 BC and in Peruvian burials about 3000 BC (Baker, 1965: 50). Heiser (1981: 196) reports bottle gourds are older than 7000 BC in China and India. Thomas Whitaker says "introduction by human transportation remains a distinct possibility" (in Riley, et al., 1971: 327). Bradley (1981: 136) reports that Carter and Heyerdahl have proven bottle gourds cannot survive in an ocean environment. 17. Don Smithana (1990: 136) translates Eskimo into Old Japanese as *ashimo* which means raw meat eaters. 18. According to Murdoch (BAE, 1892: 65) tobacco came to the Inuit (Eskimo) via Siberia. 19. Bardi (1969: 76). 20. See William Allman, "Mother Tongue," in *U.S. News & World Report*, November 5, 1990:68. 21. English approximation of a native word *Swa htw-let* used by Salish speakers according to Vie Hilbert, Native American elder (1992). 22. Ward & Arvedson (1989: 43). 23. Rensler Shervette ( *Vikings & The Red Men* (1942). 24. In Joseph (1961:19). 25. Campbell (1974: 33). 26. Bailey (1973:33) and Van Sertima (1976:22). Deacon (1966: 110), Gardner (1986: 19, 34), and Covey (1975: 10-12). 27. Meyer (1970: 224). 28. Arizona State University anthropologist Christie Turner identified three distinct Asian physical types based on tooth morphology (in Begley, 1991: 20). 29. Davies (1986: 66).

### CHAPTER 2

1. Jumsai (1988: 6-9) indicates rising waters from post glacial melting led to major migrations out of Southeast Asia. Solheim (CCCP, 1989) reports evidence of a Southeast Asian maritime network back to 5000 BC. 2. Heyerdahl (in Jumsai, 1988: 8) dates major marine migrations to 4000 BC. Hawkes (1976: 73) reports adzes in East Asia between 5000 and 3000 BC. 3. Buxton (EB Vol. 5 (1954: 518). 4. Jumsai (1988: 6-9) reports bronze in Bon Chai (Siem) by 3600 BC. 5. Quimby (1985) indicates the source of early iron blades in the Northwest Coast area was Japan. 6. Davies (1986: 66). 7. Thompson (1989) 8. The similarities of Jomon and Valdivia wares are well documented. See for example, Meggers (1971: 123); Mertz (1993); and Meyer (1970: 229). 9. Highwater (1978: 26) notes Chalco pottery near Mexico City dating to 4500 BC. Lapiner (1976) reports ceramics at Puerto Hormiga in Columbia concurrent in time with Valdivia. See Farb (1968: 202), Davies (1985: 69). 10. Griffin (1952: 151). Jon Muller (in Riley, et al., 1971: 71) disputes the stylistic basis of the Valdivia—Jomon comparison. Lapiner (1976) called the comparisons "inconclusive." Early Mayan dates at Cuello, Belize are in the 2400 BC range (NG 162(1), 1982: 126). Drift voyages have been postulated to explain the sudden appearance of Jomon style in Ecuador. The *Yastigo III* completed such a voyage across the Pacific in 51 days from Japan to Ecuador (Meggers CCPC 1989). 11. Linguistic similarities of the Haida and Japanese were reported by George Quimby at CPCC 1989. Similar petroglyphs were reported by Japanese archaeologist Nobuhiro Yoshida at the ISAC Conference in Columbus, Georgia, June, 1990. 12. Bancroft, *Antiquities of Vera Cruz* (1883, 428). 13. Keddie, "Liberets" at CPCC, 1989. 14. See *The Mother Tongue*, *U.S. News & World Report*, November 5, 1990, 60-69. 15. Linguistic similarities of the Haida and Japanese were reported by George Quimby at CPCC 1989. Similar petroglyphs were reported by Japanese archaeologist Nobuhiro Yoshida at the ISAC Conference in Columbus, Georgia, June, 1990. 16. From Weldon Ellis, "Inca Link" in *Modern Maturity*, October-November, 1987. 17. George Quimby (CCCP, 1989) notes the striking physical similarity of the Haida people with residents of northern Japan. Smithana (1990) notes the Mongolian Spot is found among Japanese and Native Americans. It is a dark coloration at the lower back after birth and disappears following infancy. 18. Professor Cecilio Orozco, California State University, Fresno, and Domingo Valdez (1990). One linguistic commonality is the soft "r" encountered often among Japanese speakers. 19. The Japanese folktale is found in Kurosawa's "Dreams" (*Time*, September 10, 1990, 82) while the Purepecha tale was retold by Cecilio Orozco. 20. Paper presented by Nancy Davis at CPCC 1989. 21. Publications of the Japan Petroglyph Society, "Semitic Inscriptions Found in Japan, 1991. Also, seminar presented to ISAC National Conference, June, 1991. 22. Fadmark (1986: 68) reports adzes and stone wedges used in British Columbia for splitting wood by 1500 BC to 500 AD. 23. Jett (1978: 605). 24. Several authors have noted the similarity of Eskimo and Northwest Coast armor to Japanese equipment. See Covarrubias (1954), Niblack (1988: 14). 25. Bardi (1969: 76) says iron from 3rd century BC China may have reached settlements along the Bering Sea by the Okvik phase. See Philip Drucker in Quimby (1985). 26. Carter (1968: 559). 27. Breuer (1972: 255); the tail-less breed which lays blue eggs originally came from Japan. Japanese brought pigs, dogs, and rats. 28. Vennum (1988: 28-29) reports pollen studies show wild rice in the Great Lakes area by 500 BC; it was an important food plant circa 7000 BC until the Late Archaic period; it grew throughout North America. 29. Smithana (1990). 30. Vennum (1988: 31, 302) Professor J. Matsumura reports identical species of wild rice in America, Japan, Formosa, and Eastern China. 31. Rice domestication by 4000 BC at Spirit Cave (Solheim, 1971: 333). Smithana (1990).

### CHAPTER 3

1. Solheim (1971: 332-5). 2. Hunt (1991: 56). 3. Hunt (1991: 97). 4. Oxford University Press translation by Benjamin Jowett in the EB, see Hunt (1991: 52). 5. Oxford University Press translation by Benjamin Jowett in the EB, see Hunt (1991: 52). 6. Hunt (1989: 11). A date of 8000 BC has been suggested for buildings at Cayonu, Turkey. 7. Heiser (1981: 6-8) reports flint sickles in Mesopotamia (Iraq) by 8000 BC indicating collection of wild grain. 8. Radio Carbon dates at the Spirit Cave site in Thailand from 6000 BC to 9700 BC (W. Solheim in NG, 139(3), 1971: 338). 9. Heyerdahl (1978: 821-3). 10. Gibson (1974: 3). Bailey (1973: 157). 11. Eratosthenes in Ashe (1971: 148). 12. See Nishimura (1925) and Forde (1927: 9). 13. Reports by Gloria Farley and Cyrus Gordon at the ISAC National Conference in Columbus, Georgia, June, 1991. 14. Bailey (1973: 73) indicates Peruvian rulers and the grandson of King Sargon were known as ruler of the Four Quarters. 15. Walker (1983: 696). 16. Campbell (1974: 149) and Walker (1983: 183). 17. Monson (1942: 60). 18. DeCandolle (1959: 138). 19. Simmonds (1976: 198) reports that the oldest cotton remains from Central Mexico at 3500 BC represent fully domesticated species (see also Smith in Simmonds, 1976). 20. Baker (1965: 58, 61). Transport of cotton by sea is not a serious possibility since cultivated cottons are not seashore plants. See Fryxell (1978: 164). 21. See Baker (1965: 58) and Fryxell (1978: 164). 22. Munro (1987: 3) indicates that the earliest cotton fabrics from Mohenjo-Darro



(west Pakistan) at 3000 BC represent a fully developed craft as do Peruvian textiles at 2500 BC from Huaca Prieta, Peru. 23. Bailey (1973: 73). 24. Bailey (1973: 274). 25. Morrison (1988: 20) reports cranial deformation among the Nasca. See also Gladwin (1947: 337). 26. Jairazbhoy (1974). 27. Rawlinson in Collins (1960: 2). 28. EB vol. 2 (1954: 66). McGlone & Leonard (1986: 250). 29. Walker (1988: 85) indicates that the Biblical account of the Great Flood is based on Chaldean scripture. Also Heyerdahl (1979: 367).

## CHAPTER 4

1. Gibson (1974: 3). 2. Jairazbhoy (1974: 12-13). 3. Jairazbhoy (1974: 13). 4. Jairazbhoy (1974: 13). 5. Gibson (1974: 3). 6. Bailey (1973: 150). 7. Duran (1954: 147-179). 8. EB vol. 1 (1954: 579). 9. The stepped pyramid of Zoser at Saqqara in intermediate between the zigurat and the smooth sided pyramids of later years. 10. Haddingham (1984: 211) notes the availability of these instruments by 1500 BC. 11. The Peri Reis Map depicts accurate coastal lines for portions of Antarctica now covered by ice. (Hops, 1988: 13). 12. Haddingham (1984: 175) says Nazca lines represent several purposes. Hawkins (1969) determined 20% had a solar alignment. 13. Jairazbhoy (1974: 12). 14. Van Sertima (1976: 269). See also Gordon (1971: 135). 15. Parsons (1980: f42) identifies the two-chambered vessels as inkwells. 16. Marx (1992: 308). 17. See Fell (1989: Chapter 17), Marshall McKusick in Cyr (1986: 109), and Hope (1988: 112). 18. Fell (1989: v) believes that a substantial portion of Algonkian is derived from Iberian, Celtic, and Egyptian contacts beginning 1500 BC. 19. According to Jet (1978: 624) traditions of eastern sailors were recorded by Father Sahagun and others. See also Jairazbhoy (1974: 13) who regards the arrival as an Egyptian expedition. The pointed pyramid of Panche, Colombia, is illustrated in Fell (1980: 41). 20. George Carter in Farley (1994, intro.). 21. Priest (1834: 111-116). 22. Bancroft (1883: 523) reports the jackal's head at Tezcuczo, Mexico. 23. Hernandez regarded the Mexican Techichi as similar to the European spaniel breed (Hamblin, 1984: 106). Analysis of bone remains at Cozumel correspond in size and configuration to the spaniel. 24. Riddle (1987: 69, 169). 25. EB vol. 7 (1954: 495) reports the terrier in Egypt by 5000 BC.

## CHAPTER 5

1. Diop (1981: 70). 2. Black pharaohs include Taharka (25th Dynasty), Rahotep, and Nubian kings from 800 BC to 625 BC. 3. Bradley (1981). 4. Bradley (1981: 9) and Van Sertima (1976: 45). 5. Bradley (1981: 9). 6. Van Sertima (1976: 257) reports sailing time from Morocco to the Caribbean of 64 days for Amerigo Vespucci and 52 days for Hannes Lindemann (1955) who made the journey using an African dugout canoe. 7. Bradley (1981: 5). 8. Van Sertima (1976: 13). 9. Van Sertima (1976: 13). 10. Jairazbhoy (1974: 17). 11. Davies (1986: 89, 90-91). 12. See Van Sertima's *African Presence in Early America*. 13. Bailey (1973: 33). 14. Van Sertima (1976: 22). 15. Weise (1984, 311). Huyghe (1992, 191). 16. McGlone and Leonard (1986: 8). Bradley (1981: 141) regards the Black Caribs as descendants of escaped colonial slaves. 17. Jairazbhoy (1974: 17). 18. Van Sertima (1976: 253) reports on an extensive list of similar tribal names encountered between Africa and America. 19. Bradley (1981: 141). 20. Van Sertima (1976: 31). 21. Fell (1989: vi) Van Sertima (1976: 261-263) indicates the 1250 dating was declared uncertain after saltwater contamination of the site. 22. Van Sertima (1976: 32). 23. Carter in Cyr (1991: 106). 23. Bradley (1981: 139). 24. For yarns see Kenzer (1989); for jackbeans see Schwerin in Cyr (1991, 24). 25. Donkin (1985: 45-7). 26. Josephy (1971: 177-186). 27. Von Wuthenau (1975: 231-3). 28. Lewenstein (1978: 61-2) reported that experiments using bifacial chert choppers proved them to be ineffective for carving even soft volcanic tuff. 29. Van Sertima (1976: 32). 30. McGlone and Leonard (1986: 8) and Van Sertima (1976: 14). 31. Dor-Ner (1991, 70). 32. Pohl (1944) in Wuthenau (1975: 195). Van Sertima (1976: 11) indicates that *gua-nin* from Espanola was assayed at 18 parts gold, 6 parts silver, 8 parts copper. He equates the word *Ka-ni* as the parent African form of the word *guanin*. 33. Bullock (1962: 144). Robert Blust (CPCP, 1989) regards *tumbago* as a Spanish derived name given to the gold-copper alloy after 1492. 34. S. African maize. See: Jeffreys and Willett in Van Sertima (1976: 258) and Carter in Cyr (1991: 106). 35. Miracle (1966: 89). 36. DeCandolle (1959: 62) suggests Manioc was introduced by 16th-century slave traders. 37. S. G. Stephens in Riley, et al (1971: 413) reports American cotton was found in Guinea in 1466.

## CHAPTER 6

1. Hwang-ti is called "founder" of Taoism (Ch'en, 1964: 27). 2. Shang bone inscriptions regarding plank boats and long distance naval engagements are reported in Worcester (1971: 11) and Heine-Geldern (1966: 292). See Carter (AJC, vol. 14, no. 1, p. 11, and Thompson (1989: 57-74). 3. Recent underwater archeology confirms that the Chinese used curved bottoms on junks prior to the 13th century. (Throckmorton, 1987: 158-165). 4. Throckmorton (1987: 158). 5. Harris (1975: 302-303). 6. A list of Chinese world maps can be found in Cyr (1989: 29). 7. Steiner (1979: 18-24) reports Chang Ch'en's voyage to Rome. 8. Ballinger (1978: 109). 9. Temple (1986: 187). 10. Siberian mammoth tusk pendants are reported by Ballinger (1978: 109). 11. Thorndike (1977: 198). 12. Steiner (1979: 31). 13. Carter in AJC, vol. 14, no. 1, p. 14. Hui Shan's account is reported by Yu-Kie Hui (Harris, 1974 (II): 62). Another account was given to Emperor Tsi in 499 AD (Harris, 1974 (II): 69-153). Shao (1976: 15) maintains that Hui Shan was from Fu Sang (i.e. Japan). 14. According to Hopi tradition, the people were descended from snakes, while women took husbands from the snakes (Harris, 1974 (II): 43-48). 16. According to Von Hagen (1960: 87) Mayan traders were regarded as a special class and an honored profession. The state maintained free warehouses while merchants paid no tax. 17. Carter in AJC, vol. 14, no. 1, p. 12. 18. Heyerdahl (1952: 729). 19. Stewart (1991). 20. J.G. Anderson in (EB vol. 5 (1954: 518)). 21. Heine-Geldern (1966: 277). 22. Discovery of tablets with Chinese writing in Mexico City was reported by Manly Hall (in Harris, 1974 (II): 174). 23. George Carter, "Chinese Contacts with America: Fu Sand, in *Anthropological Journal of Canada*, 14 (1), 1-24. 24. The Burmese jade in Yucatan, Mexico is reported in Cyr (1978: 88). 25. Davies (1986: 122) believes the artifact might have been an "intrusive" burial. 26. Cyr (1978: 45) and (1986: 116). DeLacouperie (1892: 319) and Lauffer (1912: 192) verify that metal coins from the Chow period, 1200-213 BC, were produced in China with holes in the center. 27. Hibben (1946: 71) reports Chinese coins in dancing masks seen by the earliest Russian fur traders (Mid 1700's) and Curtis (in Coleman & McLuhan, 1972: 165). 28. Pablo Patron, "Un Huaco con Caracteres Chinos," in *Sociedad Geografica de Lima*, vol. 23, p. 24-25; also Carter in AJC, vol. 14 (1), p. 15. 29. Carter in AJC, vol. 14 (1), p. 20. 30. The Olmec pendant showing a possible bow is from Monte Alban, circa 300 BC. See Beecher (*Archaeology*, 2-7, 1974: 131). 31. Itzamma arrived to Mesoamerica with the eastern migration according to Heyerdahl (1952: 277-278) while Morley (1946: 195-196) indicates Itzamma came from the Peten of southern Guatemala near the Pacific. He was regarded as the god of the East—of the Sunrise (Willard, 1933:40). He is credited with the invention of writing (Benson, 1977:112). 32. Ludwig (1982: 18). 33. Patron in Carter (AJC, vol. 14, no. 1, p. 15). Academics called Patron's claim that Peruvians at Eten understood Chinese "heresy." 34. Elias (1987). Smithana (1990: 146, 95) defines Manitou (*man-ito*) as talents of the First Order Great Spirit. 35. Campbell (1974: 124). See also Thompson (1989). 36. See Freidel in Linda Schele and Mary Miller (*The Blood of Kings*, New York: Braziller, 1986). 37. Davies (1986: 117). 38. Carter in AJC, vol. 14 (1), p. 15. 39. Finnes (1968: 531, 591) notes the similarity of the little Aztec dogs to the "ha-pi" dogs of China. EB vol. 7 (1954: 498) indicates the Mexican hairless is descended from hairless dogs of China. Palmer (1981: 85) indicates the hairless breed came from Northeast Asia. 40. Palmer (1981: 85). 41. See "Chinos" in Steiner (1979: 42). Steiner (1979: 7). 43. David Fasold (in Cyr, 1978: 88). 44. See Meggers (1975) and Heine-Geldern (1966: 292). 45. Campbell (1974: 133-147). 46. Hodges (1972: 276-281). Ekholm (in Weaver, 1972: 293) attributes fresco techniques to Chinese influence. 47. See Coe & Diehl (1980) regarding abandonment of San Lorenzo circa 600-400 BC; also Wenke (1984: 358). Von Hagen reports on the emergence of a "confederacy" near Monte Alban during the Mayan formative stage. 48. Blanton (1980) calls Monte Alban the capital of a new "confederacy" circa 200 BC in Robert J. Wenke, *Patterns in Prehistory*, New York: Oxford Univ. Press, 1984, p. 366. Bernal (1969: 113) notes that Monte Alban is "proto-Mayan" and independent of the Olmecs. 49. See L.W. Patterson in AJC, vol. 18 (2), p. 50. Coe & Diehl (1980: 256-257) suggest that Mexicans did not use arrow points until the Villa Alta Phase, circa AD 900-1100. 51. Discovery of the ancient Huiy Chinese 18 month calendar of 20 days each with 5 festival days dating to 8,000 BC was reported by Professor Liu of Yunnan Society Science College in *China Daily*, October 27, 1989. Liu believes Mayans adopted Huiy calendar. 52. Jeffreys in Riley, et al. (1971: 387). 53. Jeff in Cyr (1991: 26). 54. Brooks (1952: 6-8). 55. Itzamma arrived to Mesoamerica with the eastern migration according to Heyerdahl (1952: 277-278) while Morley (1946: 195-196) indicates Itzamma came from the Peten of southern Guatemala near the Pacific. He was regarded as the god of the East—of the Sunrise according to Willard (1933:40). He is credited with the invention of writing Benson (1977:112). 56. DeCandolle (1959: 168-173) indicates an Asian source for the American name given to sugar apples. 57. Professor Sidney H. Chang of California State University proposed a dating of AD 900; curators of the San Francisco Asian Art Museum, Reiko Kimura and Pat Burger, suggest a 19th-century date; while Cyr (1991: 103) suggests AD 25-221; and James Brett suggests AD 600. 58. Jeffreys in Riley, et al. (1971: 386). 59. Jeffreys in Riley, et al. (1971: 387-9). 60. John Cole, *Amaranth* (52). 61. Tindall (1983: 347). 62. Carter (in Cyr, 1991: 15). Carter in AJC, vol. 14 (1), p. 15.

## CHAPTER 7

1. Weiner (1986: 263). 2. Landstrom (1964: 26) indicates cultural connections to Greece ca 3400 BC. 3. Landstrom (1964: 4). Fell (1982: 261) reports that copper taken from Isle Royal and nearby mines exceeds 500,000 tons. 5. Fell (1982: 261). 6. Mallory & Harrison (1979: 225). Mallory and Harrison (1979: 224). 7. Scripps Howard News Service, March 27, 1991. 8. Honore (1963: 167). 9. Campbell (1974: 133). Honore (1963: 216), and Bailey (1973: 231-2). 10. Bailey (1973: 230-5). 11. Bancroft (1883: 638). Grant



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(1967: 66) believes the Spanish brought the design to America. 12. Fell (1980: 113-115). 13. Nobuhito Yoshida, *Petroglyph News*, 22 & 23, 1991. 14. Mallory & Harrison (1979: 57). 15. Bailey (1973: 37). 16. Bailey (1973: 39) and McGlone & Leonard (1986: Table I). 17. See EB vol 20 (1954: 951) and EB vol 16 (1954: 807). 18. Marx (1992: 308). The date on the Madrid map is 1367. 19. Fell (1989: 95, 160). Yale historian Robert Lovell called the Bourne Stone an obvious hoax "in *Reader's Digest*, 1978: 55). 20. Revised translation after Cyrus Gordon in Bailey (1973: 39). 21. Gardner (1986: 18) and Gordon (1974: 29). 22. Marx (1992: 308). 23. Marble (1980: 223). 24. Carter in Cyr (1991: 106); ESOP # 19 (1990: 25); Gibson (1974: 58-9). 25. Hamblin (1984: 102-9). 26. Homet in Bailey (1973: 98). 27. Heyerdahl (1979: 214) notes red hair on Peruvian burials; see also Bailey (1976: 98). 28. Marx (1992: 309). 29. Irwin (1963: 191-92) suggests a Phoenician introduction of chert farming in Peru. 30. Lewenstein (1978: 61-2) noted a 30-65% deterioration rate in chert choppers used on soft volcanic tuff after 3 hours of use. 31. Steward (1949: 215-17). 32. According to Joyce (1920: 141), cast copper bells and blades contain a percentage of tin—but it may be regarded as purely accidental. 33. Priest (1834: 186, 260-268). 34. Ruffledge and Gordon (1987: 578). 35. Metal casting in South America dates to the 1st millennium BC, or earlier. Low relief stone sculptures at Chavin de Huantar were made in about 1000 BC. Moche metal workers of the 7th century AD are shown blowing on pipes to produce heat in a smelting furnace (Griener, 1982: 180). Bronze fabrication was known in Bolivia by 1000 AD (Steward, 1949: 215-17). Sheet copper and copper wire were common items of Moche and Inca burials, while sheet copper was known to the Mayans circa 500 BC (Thompson, 1989: 127, 217 note 18 after Smith). 36. Gibson (1974: 55). 37. Bailey (1973: 77). 38. Eratosthenes (in Ashe, et al., 1971: 68). 39. Ashe (1962: 183). Romans who believed the accuracy of Crates globe included the 4th century AD scholars Macrobius and Martianus. 40. Von Hagen (1960: 105). See also Yellow Fever in EB vol 232 (1954: 883). The cinchona tree was also cultivated in Java and India—presumably for its medicinal properties. 41. Prior Malarial epidemics: Von Hagen (1960: 105) indicates it is unknown whether or not malaria was present in pre-Columbian America. 42. EB vol 14 (1954: 706). 43. EB vol 9 (1954: 397).

## CHAPTER 8

1. Chiapelli (1976: 24-5). 2. Seneca after translation in Steiner (1979: 19). 3. Covey (1975: 2). 4. Barker (1971: 103). 5. Steiner (1979: 30-31). 6. Steiner (1979: 30-31). 7. See Ralph Waldo Emerson's *Collected Works* (New York: Graystone Press, 324). Emerson attributes the compass to Phoenicians circa 1200 BC. 8. Bailey (1973: 323). The mariner's compass, consisting of a magnetized needle and a calibrated dial, is generally thought to have come into use in the 13th century AD—subsequent to its invention by the Chinese, although Chinese sources indicate knowledge of the compass as early as the 2nd millennium BC. Ludwig & Loo (1982: 2) report Chinese records that 5 compasses were given to the ambassadors of Tong-king in 1100 BC to aid them in their travels. 9. Fell (1989: 119). 10. Strabo believed there might be a western continent (McGlone & Leonard, 1986: Table I). 11. PBS ("Shape of the World," 1991) attributes the first use of the grid mapping technique to Ptolemy. However, Eratosthenes is known to have used a grid system in 250 BC. Chinese cartographers were also using grid mapping by the 2nd century BC. 12. Grasso (1991: 7-24) notes that an island named by Ptolemy in the Far East, Iabadiou (or Ise of grain), reflects native terms for maize, such as iaba, aba, ava, and avati. See also Gandia (1987). 13. The precise location of Cattigara is unknown. Cajamarca, Peru, is located about 10-degrees south of the equator and is in the approximate location indicated on Ptolemy's map. Spanish cartographer Mesinna placed "Carta Gina" on the Peruvian coast 10-degrees south on his 1562 map, when Cartagena is actually located further north on the Gulf coast of Colombia. Spanish cartographer Mesinna placed "Carta Gina" in the presumed location of Cattigara at 10-degrees south on his 1562 map, although Cartagena, Colombia, is actually 10-degrees north of the equator. Mercator placed "Cattigara" in 60-degrees north of the equator in Siberia on his 1569 map. 14. Ashe (1962: 135). 15. Ashe (1962: 135). 16. Bailey (1973: 40). 17. John Schwartz, "The Great Flood Migration," in *Newsweek*, special issue on Columbus, October 1991: 58. 18. Ashe (1962: 137). 19. Trento (1978: 13). 20. Bailey (1973: 39). 21. From Ashe (1962: 176-182). See also Fell (1980: 55 & 88). 22. Fell (1983: 170). 23. Fell (1989: 319). Trento (1978: 193-4). 24. Marx (1992). 25. ESOP (Number 19, 1991: 115-145). Fell attributes the Caldas texts to a Masonic organization. 26. For a complete report of amphoras found near Brazil and Honduras see Fell (1989: 319-320) and ESOP (vols. 10, 11, & 14: 1982-1989). According to Childress (1986: 236), Marx was declared an Italian agent and banned from entering Brazil. 27. Bailey (1973: 34) and Gordon (1971: 68). 28. Marx (1992: 309). 29. Fell (1983 and 1989). ESOP (1989: 313). 30. Fell (1983: 125). 31. Fell (1983: 126). 32. Priest (1883: 141). 33. Marx (1992: 83). 34. Covey (1975: 2). 35. Covey (1975: 6 & 7). 36. Fell (1983: 131). 37. Fell (1983: 129). 38. Fell (1983). 39. Mayassas (1966: 148, 196) and Walker (1988: 83). 40. Walker (1988: 96). 41. Walker (1988: 143). 42. Gardner (1986: 293) indicates Coaticue is translated as "She of the Serpent Shirt." 43. Hope (1988: 13). 44. Cyr (1989: 109) reviews McKussack's rationale for believing the Bat Creek Stone is a Cherokee artifact of the 19th century. 45. For a translation of the Bat Creek Stone see Gordon (1971: 185). 46. Scripps Howard News Service, March 27, 1991; the *ISAC Report* 203 (1988: Feb. 1989: 316); or the *Tennessee Anthropologist*, Fall 1988. 47. Scripps Howard News Service, March 27, 1991. 48. Fell (1983: 168). 49. Hope (1988: 112-4). 50. Cyrus Gordon in Mounds Newsletter, May 1994, p. 17. 51. Covey (1975: 184-5). 52. ESOP (Number 19, 1991: 115-145). Fell believes the Calalus texts are of recent Masonic origin. 53. Covey (1975: 47-51). 54. Von Wuthenau (1975: 231-33). 55. Gardner (1986: 36). 56. Heyerdahl (1979: 74). 57. Kaplan in Riley, et al. (1971: 416-427). Botanist Lawrence Kaplan differentiates between hairy-podded Asiatic beans and American garden beans—suggesting the two were confused by ancient writers. 58. Gordon (1971: 136-7) and Fell (1989: 71). 59. McGraw-Hill (1966: 5); P37). 60. Joseph (1961). 61. ESOP (1991). 62. Covey (1975: 47-51). 63. Andrews (1975: 416). 64. Steiner (1979: 30-31). 65. "Pumpkins" are reported in a Roman-era list of plants with an illustration showing small gourds on a vine in Toynebe (1972: 279, 1221). 66. Collins (1966: 19). 67. Bailey (1973: 34).

## CHAPTER 9

1. Hunt (1991). 2. The horse skull is identified in Cyr (1991: 75, 102 reference 31). See also Mertz 1972. Jim Sherz at ISAC National Conference, June, 1991. 3. Hunt (1991: 39). 4. Fell (1989: 90). 5. Hunt (1991: 98). Gibson (1974, 121), 6. Chapman (1973: 179). 7. Mallory & Harrison (1979: 57). 8. Ashe (1962: 149); McGlone & Leonard (1986: 20). 9. Chapman (1973: 112). 10. Priest (1834). 11. Priest (1834: 135-6). 12. Shipp (1897: 245). 13. Priest (1834: 392). 14. McGlone & Leonard (1986: 20). Norse historian Helge Ingstad believes the term *vinberja* used in the sagas refers not to grapes, but to black cranberries. Swedish philologist Sven Soderberg speculates that the "vin" in Vinland is an old Norse word for "meadow." According to Riensitt (1970: 9), Jacques Cartier found grapes growing along the St. Lawrence river in 1530. 15. Charles Bailey reports horse remains in Michigan associated with a copper arrowpoint, while James Sherz reports a horse skeleton found at Aztalan, Wisconsin—presumably in pre-Columbian context in seminars at ISAC conference, 1991. The horse skull is identified in Cyr (1991: 75, 102 reference 31). See also Mertz 1972. 16. Priest (1834: 225). 17. Fell (1989: 250). 18. Fell (1989: 283). 19. Mallory & Harrison (1979: 112). 20. *Hakluyt's voyages*, Vol. II, p. 297; Weise, 1884. Timreck (1987). 21. Price (1954: 38). 22. Fell (1989: 279); Priest (1834: 234). 23. Covey (1975: 13). 24. Fell (1989: 279); Priest (1834: 234). 25. Priest (1834: 227). 26. Hope (1983: 201). 27. McGlone & Leonard (1986: 11). 28. Covey (1975: 13). 29. Hope (1983: 202). 30. Deacon (1966: 110) and Gardner (1986: 34). 31. McGlone & Leonard (1986: 8). 32. Gardner (1986: 19). 33. Hope (1983: 201). 34. Covey (1975: 10-12); McGlone & Leonard (1986: 7); and Gardner (1986: 35). 35. Covey (1975: 10-12). 36. McGlone & Leonard (1986: 7). 37. Hope (1983: 201). 38. Mallory & Harrison (1979: 40-41). 39. Mallory & Harrison (1979: 29). 40. Mallory & Harrison (1979: 4, Appendix A). 41. Mallory & Harrison (1979: 4, Appendix A). 42. Chapman (1973: 179) and Hobhouse (1985: 191-3). 43. Hobhouse (1985: 191-3). 44. EB, vol. 18, 1954: 324; 45. EB (1954, V. 22, p. 263). Mallory & Harrison (1979). 46. NEARA Conference 1992; NEARA Journal #27, p. 1.

## CHAPTER 10

1. A.J.C. vol. 17 (3), p. 28, 1979. 2. Darian (1976: 30). 3. Karrow (1962: 31). 4. Heine-Geldern (1966: 293). 5. The cowrie: see Carter in Cyr (1991: 16) and Smith in Cyr (1978: 96). 6. Bancroft (1883: 118), Roberta Smith in Cyr (1978: 90), and Marx (1992). 7. Covarrubias (1954: 32). 8. Carter in Cyr (1991: 15); Carter in Riley, et al., (1971: 198-217). 9. Jett (1991: 81-102). 10. Blackmore (*Hunting Weapons*, 1971). 11. Blackmore (1971: 339) and Steward (1949: 249). 12. Jett in Cyr (1991: 27) which duplicates Jennings (1978). 13. Jett in Jennings (1978: 635). 14. Jett in Cyr (1991: 27) suggests migrations occurred as early as 3600 BC, or as recently as 300 BC, as villages along the Sunda Shelf of Southeast Asia were inundated by rising seas. For Peruvian tribe see Jett (1991: 98). 15. Boonstein (1983: 257). 16. Lewenstein (1978: 61-2) noted a 30-65% deterioration rate in chert choppers used on soft volcanic tuff after 3 hours of use. 17. Bronze tools in Mexico are reported in Thompson (1989: 197); Thompson (1937: 84-95); and Riley, et al., (1971: 8, 20). 18. Willard (1933: 402). 19. Thompson (1989: 197); Thompson (1937: 84-95); and Riley, et al., (1971: 8, 20). 20. Jett in Jennings (1978: 637) notes Semitic influence in the calendar. Thompson (1989: 128); and Proskourakoff (1968: 24). 21. Walker (1983). 22. Von Hagen (1960: 201) and Tolstoy (1991). 23. Sherz (1991). Prime candidates for American voyages were the Sak, Kushana, and Yuchi tribes of India. 24. Mahan (1983). 25. Van Sertima (1976: 254). 26. See Kenneth Maxcy's article "Typhus," in EB vol 22 (1954: 648). 27. Jett (1991: 98) and Ibera-Grasso re hookworm. 28. Rumphius in DeCandolle (1959: 1334). 29. Ashraf (1985: 92) indicates tobacco in India by AD 1329. 30. DeCandolle (1959: 144). 31. Collins (1960: 19). 32. Thordmike



(1951: 133). 33. DeCandolle (1959: 311). 34. California State University biologist Howard Lattimer identified the Hoysala sculptures as *matze*. 35. Jett in Jennings (1978: 637); Carter in Cyr (1991: 105); and Van Sertima (1976: 250).

## CHAPTER 11

1. EB vol 18 (1954: 188-95). 2. EB vol 18 (1954: 188-95). 3. Solheim and Saengvichien reported proto-Polynesian skeletons in Siam. Cultural similarities with the Cambodian Naga tribes suggest the mainland as the source of Polynesian tribes. Some believe the name Hawaii was derived from the ancestral homeland of *Iloway*, or *Jawa* (EB vol 18 (1954: 188)). See Carter in Cyr (1991) for blood group similarities. 4. The word *chau* has widespread distribution in the Pacific and along the Pacific rim. See Morley (1946: 195); Benson (1977: 112); Heyerdahl (in Bacon, 1975: 340); (Bruer, 1972: 249); (EB vol 15 (1954: 430)); Cheng (1963: xxii); and (Heyerdahl, 1952: 729). 5. EB vol 18 (1954: 188-95). 6. EB vol 18 (1954: 188). 7. Priest (1834: 186). 8. Davies (1986: 195). 9. The travels of Maui—see ESOP (1990: 161, 238). See EB vol 18 (1954: 188). 10. Ettie Rout, *Maori Symbolism*, London: Harcourt & Brace, 1926. 11. Smith (1910: 58); in Heyerdahl, 1952: 40. 12. Heyerdahl (1952). The Peruvian leader was called "Con-ti-viracocha." 13. Heyerdahl (1952: 195). 14. Fanin (1975: 198) in Joppin & Smith (1985: 198, 72-95). 15. Heyerdahl (1952: 183). 16. For Polynesian and North American native blood group similarities see Heyerdahl (1952: 36); Heyerdahl (1958: 366); and Carter in ESOP (1990: 237). 17. Irwin (1963: 308). 18. See EB vol 11 (1954: 267). 19. Heyerdahl (1952). The Peruvian leader was called "Con-ti-viracocha." 20. Bellwood (1979: 16, 3). 21. Heyerdahl (1979: 78-80). 22. Heyerdahl (1979: 79). 23. Bellwood identifies the Polynesian bananas as *Musa Troglodytarum* and *Musa sapientum*. Alphonse DeCandolle (1959: 144) was explicit regarding the banana's Old World origins: "The antiquity and wild character of the banana in Asia are incontestable facts. There are several Sanskrit names. The Greeks, Latins, and Arabs have mentioned it as a remarkable fruit tree. Pliny speaks of it directly. He says the Greeks of the expedition of Alexander saw it in India, and he quotes the name *paki* which still persists in Malabar. It dates in India, in China, and in the Archipelago from an epoch impossible to realize." 24. Carter in Cyr (1991: 105). 25. Bruer (1972: 252). Under laboratory conditions, coconuts have remained fertile after a year's immersion in a salt-water solution. However, simulated computer models indicate that floating plants would only reach the Northwest American coast—a region too cool for coconut propagation. 26. Lathan (1951: 134). E.D. Merrill (*The Botany of Cook's Voyages*, 1954: 269) suggested that Captain Cook planted pineapple "seeds" on Tahiti—from where missionaries were presumed to have taken plants to Hawaii. Merrill's rationale is dubious, since pineapples rarely produce seeds. They are propagated primarily by planting crowns, slips, or shoots. Although the British expedition leader is known to have taken along a supply of European garden seeds, there is no indication that his stock included either the coconut, or the pineapple, nor is there any indication that he experimented with cultivating non-European plants (Whitely, 1987: 191-215). 27. Beaglehole (1961: 232). 28. Other American plants in the Pacific include frangipani (perfume), crotons (the castor-oil berry plant), papaw (papaya), *Mimosa pudica* (the sensitive plant), and *Ageratum*. Hawaiians also grew the white-flowered *Argemone*, which was favored for its narcotic and anesthetic properties. Feddi and Prain noted the plant's genetic affinity to the Peruvian *Argemone*, which was also used as a medicinal (Heyerdahl, 1972: 230-31). A useless variety of the diploid American cotton, *Gossypium tomentosum*, with short lint has been found on Hawaii. Heyerdahl (1979: 254) noted that the Spanish introduced *matze* into the Marquesas in 1595, but it was no longer being cultivated by the mid-1800's when Cook visited the islands. Likewise, missionaries introduced *matze* into Easter Island in 1786, but it failed to take hold—either due to the climate, or a lack of importance to the native palate. 29. Heyerdahl (1972: 230-31). 30. Heyerdahl (1972: 230-31). 31. Heyerdahl (1972: 230-31). 32. Irwin (1963: 308); Davies (1986: 200-1); and Carter in ESOP (1990: 239). 33. For a discussion of terminology see Davies (1986: 200-2); Carter in ESOP (1990: 241); Riley, et al. (1971: 451). Carter in Cyr (1991: 15 & 104). Carter believes the term *kumar* was originally derived from the Hindu Sanskrit language. 34. Heyerdahl (1979: 239-40). 35. Heyerdahl (1979: 75); Easter Island is about 2000 miles from Chile. 36. Lathan (1951: 134). 37. Heyerdahl (1979: 243). 38. Bellwood (1979: 422).

## CHAPTER 12

1. For the ice-blink phenomenon see Cyr (1989). 2. See Ashe (1971: 97) and Chatterton (1909: 90). Ragnar Thorsh reported a 45-degree to windward sailing capability of his replica of a Viking ship in a round-the-world trip sponsored by Tideman's Tobacco Company in 1986. 3. Jordanes in Ashe (1962: 138). 4. Suggested locations for Vinland include Cape Cod, Aux Au Meadows on Newfoundland, the mouth of St. Lawrence Mt. Hope Bay, Rhode Island, Martha's Vinyard, and Nova Scotia. 5. Two manuscripts were eventually recorded and preserved in church archives. *The Flateyrbok* and the *Grœnland* (NEARA, Journal, 26, p. 72, 1992). 6. Herbert Taylor, in Riley, et al. (1971: 485). Hope (1988: 171) suggests the refugees may have numbered 25,000. 7. Mallory & Harrison (1979: 143) report that Adam of Bremen wrote in Latin about the fine wines of Vinland grapes. 8. Sopus Bugge in Fell (1980). 9. For a report on Adam of Bremen see Gardner (1986: 52); for Bishop Eric see Ingstad (1969: 94); Riens (1970: 10); for mention of Vinland see EB, vol. 13 (1954: 892) and Mallory & Harrison (1979: 157). Gardner (1986: 64) indicates that a voyage from Markland to Iceland brought a cargo of American lumber. For Vidar Viking's saga see Johan Baner and *Vikingship*, 27 (3), 1991. For a list of historical notations of Vinland see EB vol 13 (1954: 892). 10. Ingstad (1969: 94). 11. For Friso's map see Mallory & Harrison (1979: 145 & 148) also Holland (1956: Fig. 28—Resen's Map). 12. The most recent copy of Stephansson's Map was done by Thord Thoraksson (Mallory & Harrison, 1979: 148). For Magnus' map see EB vol 2 (1954: 295). Mallory & Harrison (1979: 56). 13. Ingstad (1969: Plate 5). 14. See Walter McCrone, "The Vinland Map," in *Analytical Chemistry*, (60) 1988: 1009-18; and Kenneth Thorne, "The Vinland Map—Still a Forgery," in *Accounts of Chemical Research*, 1990: 23. Dick Schwab and Tom Cahill at the Chertkov Nuclear Laboratory (University of California, Davis) believe the map is authentic. Cahill's report "The Vinland Map Revisited," appeared in the journal *Analytical Chemistry* in 1987. See also Pritchard (1987: 31). 15. Chapman (1981: 73-6). See Holand (1956: 252-256) for a discussion of linguistic studies concerning Norumbega. 16. Herbert Taylor, Jr., in Riley, et al. (1971: 248) and Hope (1988: 171). 17. Wahlgren (1986: 106) and Pohl (1961: 182). 18. Priest (1834). 19. Courtesy of Toru Bohu, Trondheim, Norway, in *AIAR Journal*, 8 (1), 1992. 20. Gardner (1986: 57). Descendants of Ohman's neighbor claimed their father helped fabricate the artifact. Cyr (1986: 108-9). 21. Hope (1988: 17) and Mallory & Harrison (1979: 56). 22. Mallory & Harrison (1979: 31). 23. Mallory & Harrison (1979) discuss copper casting. See *ISAC Notebook* for September, 1989. 24. Ingstad (1969) specifies an AD 1000 occupation, while Chapman (1981: 1) notes that radio-carbon dates fall in the 7th century range. Gardner (1986: 63) indicates dates of AD 860 +/- 90 and 1060 +/- 70. Carter believes an Irish occupation of the site. McCrone & Leonard (1986: 15-16). 25. Thomas Lee, "The Cartier Site, Payne Lake, Ungava, Part I," in *AJC*, 17 (1), 1979. Enterline (1972: 129); McCrone & Leonard (1986: 16); and Francis Most, *New Cry Wolf*, 26. Hope (1988: 218). 27. Chapman (1981: 85). 28. Smith in ESOP (1989: 258). 29. Fell (1989: 308). 30. Andrew Anderson in *Vikingship*, 26 (2), p. 7, 1990. 31. Mallory & Harrison (1979: 184). 32. Mallory & Harrison (1979: 184, Appendix C). 33. Holand (1956: 256) and Chapman (1981: 69). 34. Mallory & Harrison (1979: 170). 35. Wahlgren (1986: 125) and Stromstead (1974). 36. See the journals of Captain George Rogers Clark—expeditions to Detroit, 1779-90. (Courtesy Louis Stah). 37. Stromstead (1974: 55, 116) notes Norse place names along Algonkian territory and a tradition of ancestors crossing the Atlantic. 38. Heyerdahl (1979) and Stromstead (1974) discuss Norse-Aztec contact. 39. Hope (1988: 156). 40. Childress (1986: 342-3). 41. Helmut Zettl in *Vikingship*, 26 (4), 1990: 2-4. 42. Johan Banner in *Vikingship*, 27 (3), p. 4, 1991. 43. Mallory & Harrison (1979: 54). 44. Mallory & Harrison (1979: 181-2). 45. Ingstad (1969: 95). 46. Norse legend of corn transport from Bowman in Finan (1950: 182).

## CHAPTER 13

1. Durant (1950: 298). 2. Wells (1956: 503). 3. Reclus (1899: 8). 4. Fagan (1991: 19). 5. Burton (1885: 177). Grasso (1991: 24-25) bases his interpretation on Antonio Galland's 19th-century translation of the original text. 6. The 15th-century German cartographer Martin Behaim (1492) placed a large island called "Seilan" southeast of Malaya. Flemish cartographer Wyfliet (1597) placed Sabadibe (Sarandib) east of Malaya. Most geographers believe modern-day Ceylon, located east of India, is the Serendib of ancient Arabia, however placement by Behaim and Wyfliet indicates a southeast Asian alternative. 7. Van Sertima (1976: 237). 8. Van Sertima (1976: 237). 9. Other strange plants mentioned in the annals suggest a variety of American plant species, such as avocados, guavas, papayas, pineapples and tobacco. 9. See "Antilia" in EB vol 2 (1954: 66). 10. Gordon (1971: 98). 11. Mallory & Harrison (1979: 202). Hope (1988: 11-15). 12. Fell (1980: 26) has attributed the Arabic coins to Norse traders who presumably obtained them in Europe, or the Middle East. 13. Gordon (1971: 68). 14. Fell (1983: 294). 15. Durant (1950: 298). 16. Historian Henry Hobhouse (1985: 54) reported that Columbus brought New World bananas, or plantains, back to Spain on his return voyage in 1493. For bananas in the Old World see DeCandolle (1955: 304). 17. See Benzoni's woodcut in Josephy (1961) and Kronau (1892: 25). 18. Van Sertima (1976: 243). 19. Bailey (1973: 34). 20. Bailey (1973: 34). 21. The Arabic trade network is implicated in the distribution of Caribbean *matze* varieties from the Philippines to China and along the Silk Road into central Asia and Eastern Europe (Jeffreys in Riley, et al. 1971: 379). 22. Brooks (1952: 9) contends that *tubak* was never smoked, however there is documentation that it was; see Ashraf (1985). 23. Ashraf (1985) and Jett, 1991. 24. Stephens in Riley, et al. (1971: 413) reports American cotton was found in Guinea, Africa in 1466. 25. The prickly pear (*Opuntia ficus indica*)—called the "Indian fig." (DeCandolle, 1959: 275). 26. Botanists once believed the Sugar Apple, *Annona squamosa* originated in Asia due to the ancient traditions of its presence in the



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Far East, as well as the fact that native Americas used Asian names for the plant. Now botanists believe it originated in the West Indies. It was known in ancient Mexico as *ate* and in Brazil under the name *ata* which were derived from the Asiatic terms *atis*, or *attoa* (DeCandolle, 1959). 27. Leonard (1967: 9). 28. Fell (1980: 367-8).

### CHAPTER 14

1. Ora Maritima in Ashe (1962: 136). 2. EB vol. 14 (1954: 840). 3. EB vol. 14 (1954: 840). 4. EB vol. 14 (1954: 840). 5. Durant (1950: 343). 6. Cumming, et. al (1971: 35) attribute the notation to Andrea Benincasa in 1424. 7. EB vol. 2 (1954: 66) and Landstrom (1964: 205). 8. Reclus (1899: 14). DeAvezac identified the unknown pilot of the 1480 voyage to Brazil as John Cabot. 9. David Quinn in Davies (1986). 10. Mallery & Harrison (1979, fig. 9-1). 11. Huyghe (1992, 197). Pohl (1974: 286-7). 12. Hunt (1991: 94). 13. Fell (1989: 321). 14. Sale (1990: 70). 15. EB vol. 11 (1954: 448). 16. Holand (1956: 295). Holand (1965: 293). 17. Morison (1940: 130). 18. Neil Steede and James Sberz, ISAC conference, 1991. 19. Van Sertima (1976: 246). The Chibchas of Colombia attribute many cultural innovations to a visiting white man with a long beard. The Tzendal tribes of Chiapas, Mexico, had a tradition of a bearded, white god, or culture hero, whom they called "Votan" a derivation of the Anglo-Saxon god, "Wotan" or the Norse god "Odin." Heyerdahl (1972) mentions pre-Inca traditions of a tall, bearded and white-skinned prince called "Conitic-Viracocha". Caitlin (1844) in McGlone & Leonard (1986: 7). 20. Heyerdahl (1952: 277). 21. See John S. Carroll, "A Search for Quetzalcoatl," *Stonehenge Viewpoint*, 1992. 22. Carroll in ESOP (1989: 262). 23. Nicholson (1967: 89). 24. Frampton (1929: 102). Bailey (1973: 34). 25. Charles Bailey and James Sberz at ISAC conference, 1991. 26. Howard (1965: 29). 27. Howard (1965: 28). 28. Webster's *New 20th Century Dictionary* (1924: 302). 29. Josephy (1961: 81). 30. G. Cowley, "The Great Disease Migration," in *Newsweek* Fall Special Issue (1991: 55). 31. John Wilford, *New York Times*, 11-17-92. 32. Covey (1975). EB vol. 22 (1954: 648).

### CHAPTER 15

1. Rienis (1989: 20) says that the story of DeHuelva was accepted by Las Casas and Columbus' associates, even though modern historians often characterize the story as an attempt to rob Columbus of his rightful glory. The story was repeated by numerous writers of the era, including Las Casas, Ovidio (1535), Gomara (1553), Garcilaso de la Vega (1609), and Orellana (1639). See Vignaud (1920: 60) and Morison (1942-A: 61-2). Las Casas heard the story in 1500 AD. 2. Rienis (1989: 20-33). 3. Jameson (1925: 222). According to Fernandez (1974: 125) gold returns from the colony were minimal, while the natives failed to respond to evangelism. 4. Vignaud (1920: 18, 25) indicates the goal of the first voyage was to reach Antilia. A witness named "Agron" is said to have confirmed that this was the Admiral's intended destination. The testimony of Roderigo Maldonado, Governor of Salamanca, indicates that the destination was "certain islands" (Vignaud, 1920: 32). All existing records of the Columbus proposal submitted to various kings from Henry VII of England, to John of Portugal, indicate that Columbus' primary goal was a voyage to islands already known to him. His grant from the King of Spain specifically indicates that Columbus would undertake to annex to the Crown certain islands and lands *de los que ha descubiertio en las mares oceanas* or "lands that have already been discovered in the ocean sea." (Vignaud, 1920: 18-25). The idea that these lands were to be annexed to Spain indicates that Columbus was heading for some region of the Orient not already occupied by powerful military forces, i.e. the Chinese. 5. Jameson (1925: 131) indicates the natives of Cuba told Columbus there was a great continent far to the North—10 days sail. 6. Natives who failed to produce the required amount of gold were punished by Spaniards who cut off their hands; many died according to Zinn (1980: 4) and Katz (1986: 26). 7. Thatcher (1971: 63) gives a date of April 10, 1495 for the king's termination of the Columbus monopoly. 8. Rienis (1989: 112). Arciniegas (1955: 163-210) traces the sailing routes of Vesputci. Verrazano is generally credited with establishing the continuity of the North American coast and the absence of a passage to India via the Gulf of Mexico. See EB vol. 23 (1954: 107). 9. The term "New World" is generally attributed to Vesputci and his *Mundus Novus* letter (Arciniegas, 1955: 226-7). Some translations of Seneca's Latin verse also use the term "New World" (Ashe, 1971: 266). The fact that Las Casas often used the term in his revision of the Columbus log is cited by some as evidence of the log's inaccuracy and a deliberate attempt by clerics to revise history to favor the Columbus myth. Arciniegas points out that the Spanish regarded the Americas as an extension of Asia, which they continued calling "Las Indias" until after the early 1520's. Peter Martyr used the term *Orbe Novo*—New World—in a letter of 1494 which wasn't published until 1511. Some authors believe the *Mundus Novus* letter was not issued until 1504. 10. Author's translation, after Arciniegas (1955: 227). 11. See Chiappelli (1976: 574). 12. Thordike (1951). 13. Josephy (1961: 80). 14. Arciniegas (1955: 296) attributes the original Latin passage to Sandaucourt or Ringmann. W.R. Anderson, Paul Chapman, and others believe Amerigo's name derives from ancient names for the New World, such as "Amiorca" of the Veneti, "Merica" of the Mayans (Reider Sherwin in Stromsted, 1974: 55), or the Norse "Mer-rike" for "Sea Nation." 15. Walker (1983: 447). 16. Duff (1957: 244). 17. Stephen Wade of *The Chicago Tribune* (June 24, 1991) attributes an estimate of 75 millions killed to Jose Antonio Barosso—sponsor of a monument in Cadiz to the genocide of the Native Americans. Walker (1983: 444). 18. La Farge (1956: 81). 19. Granzotto (1985: 272-3) indicates that the death of Columbus was unrecorded in the register of Valladolid which usually recorded important affairs of prominent people. 20. Granzotto (1985: 272-3). 21. In addition to Louis Colon's role in purging Spain of anti-Columbus literature, Vignaud (1920:60) suspects him of contributing false information to Las Casas, such as the so-called "Toscanellet letter." 22. See Vignaud (1920) and Jane (1960: xvii). 23. Vignaud (1920: 60) indicates that Las Casas' manuscript on Columbus completed in 1563 was published after 1600; Granzotto (1985) gives a 19th-century date for their publication (1875). 24. The supposed year of Columbus' birth ranges from 1436 to 1460—depending on the historian (Rienis, 1989: 12). Suggested birthplaces include Castile, Corsica, Italy, Greece, Spain, Majorca, Portugal, England, Germany, or Armenia. Tor Busch Sannes (Associated Press, "Columbus Heritage Questioned," March 6, 1991) believes a Norseman, Christopher Bonde, took a trip to the New England region in 1477—the same year Cristobal Colon was visiting Iceland. Sannes believes historians confused the two seafarers. His book is *Christopher Columbus—A European from Norway* (1991). 25. W.R. Anderson "Viking Columbus King of Spain," by the Leif Ericson Society, Chicago; Chapman (1992); and Hope (1988). Anderson believes Las Casas confused an Italian weaver (Colombo) with the bastard son of Prince Carlos of Viana and Margarita Colon of a prominent Jewish family from Majorca. Their son, Cristobal, went to sea at an early age and was always a sailor. Anderson points out that Columbus always wrote and spoke in Spanish (that is, Castilian). Had he been trained in an Italian university as Las Casas maintained, he most certainly would have written in his native language—Italian. Furthermore, Columbus' marriage to Felipa Perestrello from the Portuguese aristocracy indicates Colon was not a lowly weaver. It was customary in Italy for first-born sons to acquire the family business, and Italian records at the Archivio di Stato di Genova confirm that Colombo was weaving until 1479. Meanwhile, the real Colon was sailing to Chios, Lisbon, Bristol, Iceland, and Porto Santo. Thus, Anderson and his associates conclude that the real Colon was a Spaniard. 26. Granzotto (1985: 280). 27. Morison (1942: xvii). 28. Walker (1983: 447). 29. Hatch (1978: 919). The Columbian Order, also known as "Society of Saint Tammany," held their first parade on October 12th, 1792. 30. Granzotto (1985: 273). 31. Reclus (1899: 11). 32. Arciniegas (1955: viii). 33. Hatch (1978: 920). The Knights of Columbus began lobbying state legislatures to establish October 12th as a legal holiday in 1882. 34. Duff (1936) suggested that the tremendous achievement of Columbus rendered the atrocities he committed to a level of relative unimportance. 35. Morison (1942: 920).

### EPILOGUE

1. EB vol. 4 (1954: 883). 2. Morison (1942-A: 671)



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# AMERICAN DISCOVERY

## SOURCES & CREDITS

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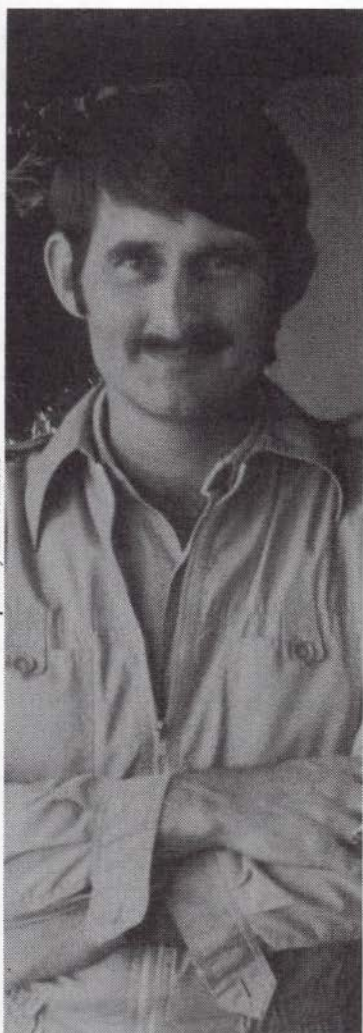


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photo by Karri Simmons



Gunnar Thompson was born in Seattle—the Emerald City—in 1946. His interest in multicultural issues and Native Americans derives from childhood experiences in the Northwest and his mixed heritage of Norse, German, and native ancestors.

Gunnar graduated *Magna Cum Laude*, *Phi Beta Kappa*, and with High Distinction in Anthropology from the University of Illinois—Urbana in 1968. His graduate studies at the University of Wisconsin—Madison took place during the turbulent Vietnam War Era. He supported creation of an African-American Student Center as well as efforts to expand educational services for disadvantaged students. The author's multicultural interests and perspectives soon led to conflicts with hide-bound administrators. When he expressed belief in the *heresy* of pre-Columbian cultural diffusion, orthodox anthropology professors invited him to leave the graduate program with a terminal Master's Degree. Gunnar soon found a more promising career in rehabilitation counseling. He earned a Ph.D. at Madison in 1979.

Gunnar's quest for truth crosses many disciplinary boundaries as he searches for answers to the difficult problems that face society. A multi-talented individual, he has written two books on pre-Columbian art and anthropology: *Spirit Sign* (1974) and *Nu Sun: Asian-American Voyages 500 BC* (1989). His books on public policy, multi-national economics, and creative education anticipated many of the social and economic developments of the past decade. He is a master multi-media artist; he holds a U.S. Patent in ceramics. His most recent endeavor has brought him to the Aloha State, where he is an assistant professor in Counselor Education at the University of Hawai'i.

The author believes a Euro-centric bias in American education contributes to widespread social denial regarding economic and educational disadvantages. He believes our children will dare to face the problems past generations have ignored. *American Discovery—Our Multicultural Heritage* is the Author's gift to the children of the future. Some day, they will know our true heritage and our common destiny.





## AMERICAN DISCOVERY

### INFORMATION SOURCES

- Adventures Unlimited Press & World Explorers Club** (newsletter)  
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- Archaeology Magazine** (monthly)  
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# Western Association of Map Libraries

Volume 27 No. 2

INFORMATION BULLETIN

March 1996

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## Oldest Map of America-1414 AD

by

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### Abstract

A map purchased at Croatian antique store in 1911 and reprinted as a supplement to *Imago Mundi* (1964) includes the oldest identifiable representation of America. Venetian cosmographer Albertin DeVirga compiled this world map on parchment in 1414. It is derived from English, Venetian, Roman, and Arabic sources. The map's most-intriguing feature is a previously-undisclosed continent extending from the northwest side of Norway. This continent is identified as America's east coast from Labrador to Brazil. An equally intriguing isle is situated southeast of Asia. The configuration of the shoreline and the rubric "Ca-paru" identify this as the coast of Peru.

*Editor's note: Dr. Thompson has presented his theories elsewhere, and they have generated a strong response. This issue of the IB is late in part because of the editors' discussions about this article. We include it here not because we agree (or disagree, for that matter) with his conclusions, but because his discussion draws attention to a map with which, we feel, few IB readers are familiar, and which they may want to know about.*

One of the most important documents of early American history was discovered amidst the clutter of a

Croatian antique shop in 1911. It was nearly lost over the passing decades because it didn't fit the orthodox paradigm of Western cartography. Compiled circa 1414 by Venetian cosmographer Albertin DeVirga, it is the earliest map to include identifiable regions of North and South America. This map will add a new chapter to American history because it confirms ancient testimonials of significant trans-Atlantic voyages prior to the 15th century.

DeVirga's map comes to us through a circuitous route. The original finder was an Austrian speculator in old

letters and memorabilia named Albert Figdor. During a field trip on the Adriatic Sea, Figdor stopped to rummage through the antique stores of Sebenico, Yugoslavia. He came across a folded parchment inscribed with a map of the ancient world as it was known in the early 15th century. The artifact was in remarkably good condition considering that it was nearly 500 years old—thus Figdor was convinced he had stumbled upon an item of substantial value. But how valuable was it? That would depend upon the assessment of a reputable scholar, and Figdor had one in mind.



*Fig. 1. World map by Albertin DeVirga (1414) shows two large land areas: "Norveca Europa" in the northwest quadrant and "Caparu sive Java Magna" in the southeast. A peninsula and isles west of the North Pole represent Florida and the Antilles. The large gulf between the northwest land and Europe represents the Gulf of Mexico. Facsimile by the Author after Marcel Destombes (1964; Library of Congress Catalog No. GA101.16 Sup.4).*

A highly-respected specialist in European history and cartography by the name of Franz Von Wieser happened to reside in Figdor's hometown of Vienna. Figdor believed that a favorable assessment from this historian was certain to bring him fame and fortune. With this in mind, he boarded a train back to Austria.

Upon his arrival in Vienna, Figdor headed straight for the University where he found the workings of the

scientific process both tedious and unrewarding. Von Wieser approached the task of evaluating the antique map with all the care and precision demanded by his profession. The condition of the parchment and ink suggested great antiquity, but they were not sufficient to assure authenticity in an era that lacked such modern procedures as radio-carbon dating, infra-red photography, ultraviolet light, electron microscope imaging, and

proton scans. The Austrian relied upon more conventional techniques that were perfectly adequate for this assignment. He established authenticity by comparing the style, content, and handwriting on the map to previously identified examples of DeVirga's papers in archives at Venice and Paris. It turned out that Albertin DeVirga was a well-established citizen of Venice, thus it is not surprising that some of his personal



correspondence and other works have survived to the 20th century. Venetian historians have located his will and some of his personal correspondence; his 1409 map of the Black Sea is preserved at the Bibliotheque Nacional in Paris (Document # Ge. D-7900). Von Wieser determined that the style, handwriting, and ornamentation on the Black Sea map were sufficiently similar to the world map to establish its authenticity.

The exquisitely-crafted parchment document measures 696 cm by 440 cm and includes a circular map of the world along with a zodiac and two tables—a lunar table and an Easter table (Destombes, 1964). Surrounding the world are decorative motifs that are distinctively Arabic in character. The cosmographer's name, city of origin, and date are inscribed on the parchment — although the last figure of the date is illegible. Most scholars assume a date of 1414, but the actual date could be anywhere from 1410 to 1419.

The map shows an elongated Mediterranean Sea which is common in Classical and Medieval maps. Arabia and the Persian Gulf are excessively enlarged; Africa is nearly split into two parts by a gulf on the west coast. The most unusual features of the map include: a huge isle — or continent — southeast of Asia called "Caparu sive Java Magna"; a huge wilderness north of Eurasia representing Hyperborea; and an enormous territory — or continent — extending out from the northwest side of Norway. On the map, this territory is designated "Norveca Europa"—a rubric that Von Wieser took to mean

"Norway." A facsimile of the circular map is presented in Figure 1.

Von Wieser examined the map from his perspective as a Western scholar and his ethnic heritage as a product of Western Civilization. From this viewpoint, it seemed to Von Wieser that the map belonged to a defunct Medieval tradition of mappamonds which scholars held in disrepute because of their biblical themes and general lack of geographic reliability (Kimble, 1938, 187). This mappamond or "wheel-map" pedigree seemed evident from the map's circular shape and the lack of longitude or latitude lines suitable for geographic reference. "Fantastic" lands on the map seemed to confirm Von Wieser's assessment of the map's Medieval heritage. He regarded the northwestern territory — Norveca — as a grossly-distorted Scandinavia. The huge land north of Europe seemed to represent the mythical Hyperborea of Roman tradition. And the huge isle southeast of Asia seemed like an inaccurate representation of Marco Polo's Cipangu (i.e., Japan).

The Austrian scholar devalued the map for another reason: its obvious connection to Arabic sources. The map's portrayal of Africa as a bifurcated continent followed current Arabic practice; the map was centered on Mt. Ararat — symbolizing the importance of the Moslem patriarch, Moses; and the exaggerated size of the Persian Gulf and adjacent Arabian territories accentuated the importance of Moslem domains at the expense of Christian Europe. These distortions along with Arabic symbolism surrounding the map confirmed a strong Moslem heritage.

As far as Von Wieser was concerned, this alien tradition fell by the wayside of history in the early 15th century following the rise of "scientific cartography." Ironically, Europe's version of scientific cartography was assured by Arabian scholars who preserved copies of a 2nd-century map by the Roman cartographer Claudius Ptolemy.

Von Wieser summed up his judgement of the antique map in a poorly-circulated book: *Die Weltkarte des Albertin deVirga* (1912). Although he certified that the map was genuine, he concluded that it was outside the mainstream of Western scientific cartography. In the rapidly-changing context of the Renaissance, DeVirga's map was an anomaly of little historical importance. Unfortunately, Von Wieser's assessment totally missed the broader context of world exploration. Nevertheless, his thoroughness as a scientist assured that his book included an excellent photograph of the map—and for this, the scholarly community is deeply in his debt.

Considering the high stature of historian Franz Von Wieser and the respect his peers gave to his opinions, there was little subsequent interest in Figdor's antique map. The Austrian speculator waited twenty years until 1932 before offering the map for sale at a public auction in Lucerne. In spite of the remarkable preservation and bona fide antiquity of the item, it failed to make the opening bid: such was the fate of an antique scorned by academia. Figdor withdrew his albatross and disappeared. That was the last time DeVirga's creation has



been seen in public; its present whereabouts are unknown.

The only version of the manuscript that modern scholars have to work from is the 1912 photograph that appeared in Von Wieser's book. This photograph was reprinted as one of several mappamonds in a supplement to *Imago Mundi* (Destombes, 1964). At that time, scholars still held the opinion that Von Wieser's assessment was accurate: the map was a Medieval stepchild of little importance to the history of Western science. That limited perspective did not hamper a more-recent search for documents concerning New World discovery. In 1994, a review of sources in the University of Hawaii map collection once again brought DeVirga's map under examination. It was at this time that the Multicultural Discovery Project identified American lands on DeVirga's map.

### Fantastic Lands- An Arabic Tradition

Von Wieser's assessment that the DeVirga map followed Arabic traditions is more accurate than he could have imagined. So-called "fantastic lands" on the Venetian map have precursors in Arabic cartography. But they show real lands — not imaginary isles.

A 14th-century map by the Persian cartographer Hamd Allah Mustawfi (Figure 2) has several characteristic lands which are also encountered on DeVirga's map. These include a bifurcated Africa and an Arabian Peninsula enlarged to the size of Europe. The Mustawfi map also shows the Old World surrounded by mysterious isles across the oceans. In

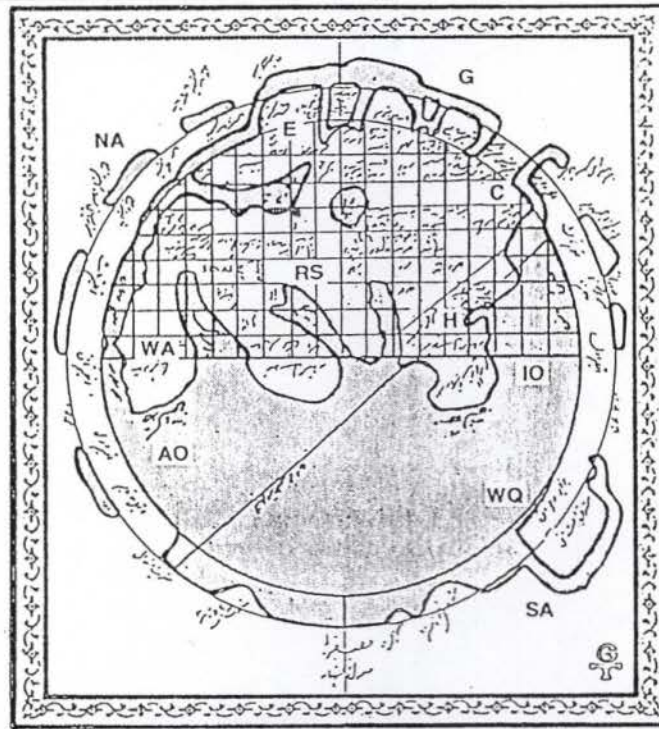


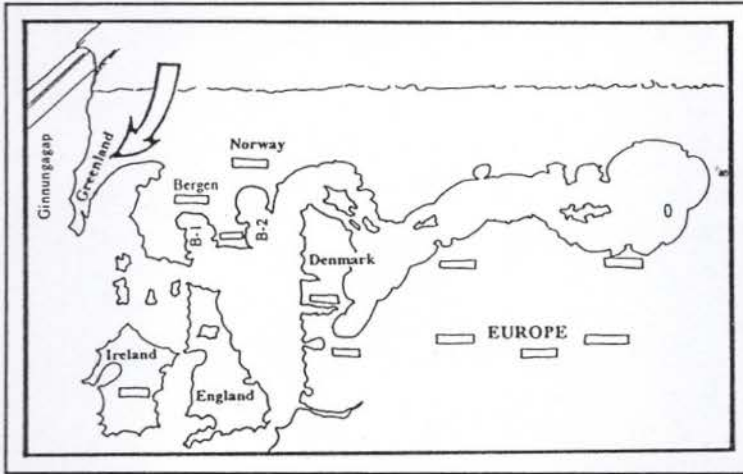
Fig. 2 Arabic world map by Hamd Allah Mustawfi (1350) shows the Old World surrounded by seas and distant lands. Unidentified lands north of Europe (E) represent North America (NA) and Greenland (G). Lands southeast of India or "Hind" (H) across the Indian Ocean (IO) represent Waq-Waq (WQ) or South America (SA). Waq-Waq occupies the same region as Patala on Hindu maps, Cattigara on Roman maps, and Caparu on DeVirga's world map. Facsimile by the Author after Harley & Woodward (1987). A 17th-century manuscript copy is in the British Museum Library, London.

the southeast quadrant across the Indian Ocean is a land called Waq-Waq. This land corresponds in position to the land called "Caparu" on DeVirga's map. It also occupies the approximate position we might expect for South America. There are more "fantastic lands" across the Atlantic north of Europe. These regions correspond in position to Greenland and North America. Are these lands "fantastic?" Or are they "real?"

Several scholars have concluded that overseas lands on Mustawfi's map represent New World territories (Ibarra Grasso, 1970, 1991, 1994; Khoury, 1992; and Thompson, 1994). This belief is buttressed by the presence of

similar overseas lands on other Arabic maps, legends of ancient mariners who sailed across the ocean, Arabic artifacts found in America, and overseas lands mentioned in Arabic geographies. Al-Idrisi's *Tabulata Rotunda* for King Roger of Sicily in 1154 identified a "Far Land" on the western extremity of the Atlantic Ocean. The size and location of Far Land corresponds to later Portuguese representations of Antilia in the western Atlantic. A similar Atlantic isle also shows up as Ansharus directly west of Portugal on the Ibn Said world map of 1250. The renowned Arabist Paul Lunde (1992) mentioned tales of several Arabian





*Fig. 3 Northwest quadrant from the Medici Atlas (1351) shows finger-like peninsula (Greenland-arrow) called "Alogia." Seas west of the peninsula correspond to the Scandinavian concept of a strait (Ginnungagap) situated between the North Pole and Atlantic Ocean. Placement of Greenland west as opposed to north of Norway identifies the map as being derived from a geographical as opposed to a magnetic-based survey. Facsimile by the Author after Nansen (1911, 236).*

mariners said to have crossed the Atlantic in the 12th century; and historian Hui-Lin Li noted Chinese annals of the Sung dynasty that describe Arabian mariners who sailed west from Portugal to lands across the Atlantic (Gordon, 1971, 68). Hui-Lin Li believes these mariners returned to the Mediterranean with maize and pumpkins. Al-Idrisi's 12th-century geography mentions pygmy inhabitants of northern lands — in reference to Inuit natives on Greenland and Baffin Island. Thus, Al-Idrisi's geography confirms that Arabian scholars were familiar with very real lands across the Atlantic.

Moslem sailors — the Moors of Granada and North Africa — even left clues of their visits. Excavators near Cambridge, Massachusetts, found a hoard of 11th-century Islamic coins in 1787 (Thompson, 1994, 294). Paul

Lunde reported New World plants in Moslem territories at an early date: maize, for example, was known in Europe as "grano Turco" or "Turkische korn."

### Norveca & The Polar Regions

The region north of Europe was often referred to on Medieval and Renaissance maps as "Hyperborea" (Land Above The North Wind) or "Europa Septentrionalis" (Europe of The North). Classical legends told of habitable lands near the North Pole that were temperate; they had vineyards, wheat fields, and apple orchards. Residents of this arcadian isle were called "Hyperboreans." Most Renaissance scientists scoffed at such legends — citing the climatic zones of Ptolemaic maps which designated "frigid zones" north of 54°. English philosopher-scientist Roger Bacon was among those

who believed that the "Polar Regions" were habitable. In his 1275 dissertation "On The Habitation of The Earth," Bacon repeated the testimony of ancient writers:

"How far habitation extends north, Pliny shows through actual experience and by various authors. For habitation continues up to that locality where the poles are located; and where the day lasts six months and the night for the same length of time. Martin, moreover, in his description of the world agrees with this statement: whence they maintain that in those regions dwells a very happy race."

Polar Regions on DeVirga's map include lands north of Norway and beyond Greenland. Norway (that is, the western region of Scandinavia) is clearly situated north of Denmark on the map. It is distinguishable by two large bays facing towards the North Atlantic. On a map from the Medici Atlas of 1351 (Nanson, 1911), the same two bays face south towards England. These two bays serve to identify the west coast of Norway. West of Norway, a finger-like peninsula represents Greenland (Figure 3). The Medici Atlas refers to Greenland by the name "Alogia." Some contemporary maps use a similar term, "Alolanda," in reference to the freehold estates of Greenland. Most 15th-century maps of the North Atlantic, including those by Claudius Clavus (1424 & 1467), Nicolaus Germanus (Zamoiski map of 1467), and Henricus Martellus (1489 & 1490) show a finger-like Greenland connected to Norway by a continuous shoreline.



Greenland has a similar, finger-like shape on Joachim Von Watt's world map of 1534 (Figure 4). On this map, a huge land (Hyperborea) extends from Norway to the North Pole above Scandinavia. A second peninsula along the west coast of Hyperborea represents Baffin Land. Von Watt's Hyperborea represents Norwegian domains from the mid-13th century to the 15th century. King Haakon began the tradition of a Norwegian Hyperborea in 1261 by proclaiming sovereignty over all the lands between Norway and the North Pole. The same territory is identified on DeVirga's map as "Norveca Europa." Contrary to Franz Von Wieser's interpretation of the map, "Norveca" is not a "distorted Scandinavia;" it represents an overseas continent claimed by Norway in the Polar Regions. This land is North America.

### Nicholas of Lynn & The Polar Regions

The Medici atlas is unusual in its placement of Greenland northwest of England and west of Norway. Most maps of the age — such as those by Nicholas Donnus Germanus (1482), the Florentine Planisphere of 1447, and the Genoise Map of 1557 — placed Greenland either north or northeast of Norway. The reason Greenland was placed in such a position is that "North" is the direction indicated by compass bearings for ships sailing from England to Iceland and on to Greenland. Consequently, maps made with magnetic bearings arrange land areas not in accordance with true geographic coordinates but in accordance with magnetic poles.

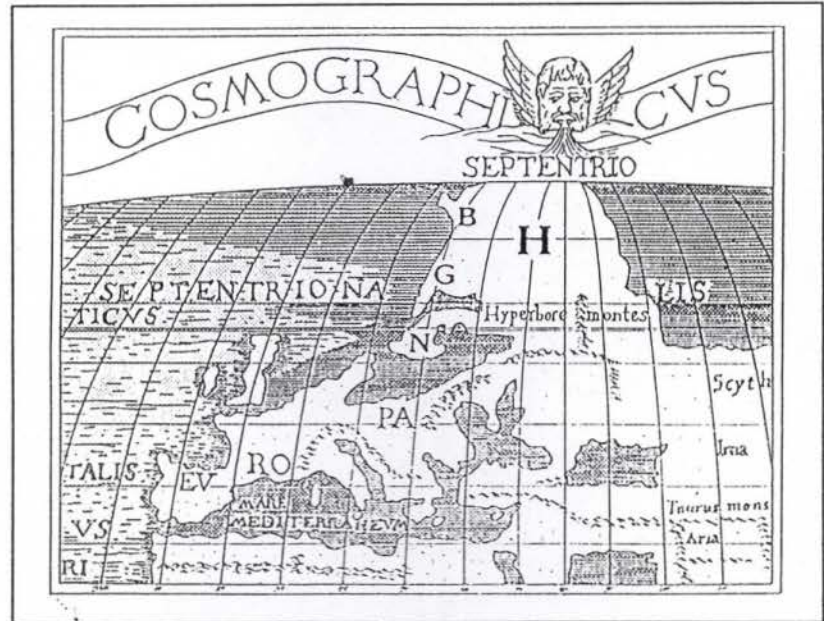


Fig. 4 Northern section from Joachim Von Watt's world map of 1534 shows Hyperborea (H) situated above Norway (N). Two peninsulas on the west coast of Hyperborea correspond to Greenland (G) and Baffinland (B). Norse King Haakon in 1261 declared sovereignty over this region from "Norway to the North Pole." Facsimile by the Author after Nordenskiöld (1889, f. 66).

Most 14th- and 15th-century mariners used the compass to guide their voyages. In northern waters, the compass was of particular importance because Polaris was concealed by sun during the common period of spring and summer sailing. "North" on their compasses pointed towards the magnetic pole which was situated over a thousand miles south of the geographic pole near Hudson Bay. Thus, voyagers who reached what they called "Polar Regions" or lands they thought were near the Geographic North Pole had actually sailed to temperate lands near Hudson Bay.

In his Nancy Manuscript of 1427, Claudius Clavus reported that the North Pole of the Western Hemisphere was

not the same North Pole that was situated above Europe. This western pole was located at 66°N (Nansen, 1911, 261).

Clavus located the Magnetic Pole of the Western Hemisphere just 4° south of the actual location of the magnetic pole (70°N 96°W) which James Ross calculated in 1831. The magnetic pole has continued its northerly migration to 76°N during the last century. It is possible that the location of the magnetic pole in 1427 was close to the 66° reported in the Nancy Manuscript.

Although Clavus does not give the source of his information, historian Fridtjof Nansen credits much of his geographical data to an English friar-astronomer — Nicholas of Lynn.



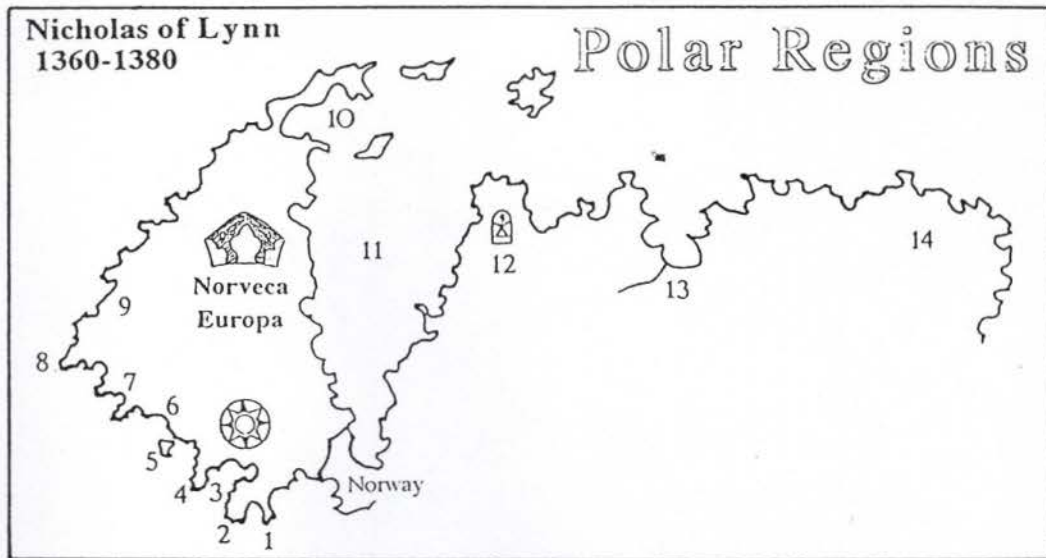


Fig. 5 Northern section from DeVirga's 1414 map reveals legacy of survey by the English Franciscan — Nicholas of Lynn ca. 1360. Most lands identified as "Polar Regions" correspond to territories near-or-beyond the Magnetic North Pole: 1) Greenland; 2) Baffinland; 3) Ginnungagap or Hudson Strait; 4) Labrador; 5) Newfoundland; 6) St. Lawrence river and Gaspe Peninsula; 7) Nova Scotia or Norumbega; 8) Cape Cod; 9) Chesapeake Bay; 10) Florida and the Antilles; 11) Gulf of Mexico; 12) Venezuela; 13) Amazon river; and 14) Brazil.

Some time between 1330 and 1360, King Edward III sent Friar Nicholas on a mission to survey the Polar Regions. As a world traveler and Oxford-trained mathematician, Nicholas was well-qualified for the task. He also carried an astrolabe to aid in his calculations. Nicholas wrote a summary of his travels — the *Inventio Fortunatae* (or *Accounting of The Fortunate Isles*) circa 1360. Historical records indicate that he traveled to the Northern Regions beyond Iceland at least five more times after writing the *Inventio* to continue his evangelical and geographical mission.

Testimonials to the friar's skills and achievements can be found in numerous references of historians and geographers. Columbus knew about the friar's manuscript and requested a

copy from the English merchant John Day. Flemish explorer-writer Jacob Cnoyen summarized the friar's explorations in his own treatise on the Northern Regions which was sent to cartographers Abraham Ortelius and Gerhard Mercator. Lisbon globe-maker Martin Behaim, Ferdinand Colon, and Bertholomew Las Casas had access to copies of the original document. Cartographer Johann Ruysch cited the *Inventio* as a source for the Northern Regions on his map of 1507. John Dee, advocate for Queen Elizabeth in the mid-1500's, referred to the friar's travels as evidence of an English presence in North America prior to Spanish and Portuguese claims on the region. The friar's travels were mentioned in Bale's *Scriptorum Catalogus* (1558) and in historian Richard Hakluyt's *Principle Voyages*

(1599). Hakluyt believed that the friar visited the east-coast colony of European immigrants in North America that was known to his contemporaries as "Norumbega." This Norumbega was featured on most 16th-century maps before diverse waves of immigrants brought new names to the northeast — such as New Amsterdam, New England, and New York. One of the many alternative spellings for the lost Norumbega colony was "Norveca."

Ever since the beginning of the 16th century, historians have assumed that the *Inventio Fortunatae* and the friar's map of Polar Regions were lost. However, examination of the Northern Section of DeVirga's map reveals previously undisclosed territories that correspond to the itinerary of Nicholas of Lynn.



Testimonials to the friar's travels include the following: 1) he visited Arctic lands that had open shores on the western side even while the eastern coasts were engulfed with ice; 2) he identified the location of the Magnetic North Pole; 3) he visited forested lands beyond Greenland; 4) he explored the region where King Arthur had left colonists; 5) he saw villages with houses having huge timbers that were deserted and ships that had been left to rot; 6) he visited western isles at the latitude of the Azores; 7) he visited lands southwest of the Cape Verde Isles; and 8) he traveled to a land that was the source of valuable red dyewood trees (called brasilwood). At the time of his travels, the Polar Regions belonged to the Kingdom of Norway.

Although the friar's travels may seem fantastic, lands on DeVirga's map substantiate their accuracy (Figure 5). The continental land pictured northwest of Norway—called "Norveca"—was known by other names prior to the mid-13th century. Medieval maps often referred to the land as "Gothia Orientalis," "Albania," "Thule," or "Wineland." By the 15th century, "Greenland Province" (a Danish territory) or "Baccalaos" (a Portuguese territory) were common names. So the map is consistent in showing a huge land that corresponds to Norse claims of dominion over the Polar Regions. During the mid-14th century, a cooling climate in the northern regions of Europe combined with bubonic plagues that devastated Norse kingdoms. Danish, Portuguese, and English forces exploited the weakness of their Scandinavian adversary by taking North American

territories that were formerly occupied by Norwegian subjects. Subsequently, the name "Norveca" for the overseas land was soon forgotten. By the time Claudius Clavus (a Dane) drew his 1424 map of the north, the overseas land was simply known as "Greenland Province."

Peninsulas on the Norveca continent are shown west of Norway and northwest of England — revealing that they were positioned on the globe in accordance with geographic as opposed to magnetic coordinates. This is precisely what we would expect from a survey by an astronomer who had accurately determined the position of the Magnetic North Pole at 66°N near St. Charles Island in Foxe Basin north of Hudson Bay. It also explains why the friar claimed to have visited temperate lands even though his assignment was to map the "Polar Regions." Relative to Europe (and the Geographic North Pole) all the lands of the Western Hemisphere that Nicholas surveyed were situated above 54° in the Arctic Circle; this included Florida and Brazil. DeVirga simply followed the tradition of cartographers since the Early Middle Ages by placing these overseas lands north of Europe and Asia — which is where "Gothia Orientalis," "Albania," "Thule," and "Wineland" typically appear on maps from 500 AD to 1500 AD.

It is clear that the friar realized the true geographic location of the places he visited from the testimony of Ferdinand Colon and Bertholomew Las Casas who stated that the *Inventio* reported lands southwest of the Cape Verde Isles — which indicates the region of Venezuela and northern Brazil. The friar's claim to have visited

a forested land that was the source of brasilwood also indicates that he traveled as far as Brazil.

Even the title of the friar's manuscript — *Inventio Fortunatae* — implies visits to lands which Classical writers said were situated across the Atlantic Ocean. Among Romans, a popular designation for the western paradise was *Insula Fortunata*, or "The Fortunate Isles." According to ancient philosophers, these isles were located "in the farthest recesses of the Atlantic Ocean."

When Portuguese sailors found the Canary Isles west of Africa during the 1420's, many European geographers assumed these were the Fortunate Isles of antiquity. They are so indicated on most Medieval and early Renaissance charts, although some scholars of Classical history protested that the real Fortunate Isles lay farther west across the Atlantic. Friar Nicholas not only agreed with Classical writers, he identified the real location of the missing isles in his *Inventio Fortunatae*.

### Legacy of the English Friar

Most scholars have assumed that Friar Nicholas contributed nothing to our geographical heritage; some characterize his travels and book as "fantasies." However, examination of subsequent charts reveals that Nicholas was an instrumental figure during the earliest years of scientific mapping in the North Atlantic.

Headlands on the Norveca continent (the northern section of DeVirga's map) have the same pattern as headlands on 16th-century Danish maps of the North Atlantic. Greenland and Baffinland are shown



west of Norway in accordance with geographical mapping; they are connected to Norway via a long wasteland of ice and land; and they are separated from lands farther west (that is, Labrador, Markland, and Winland) by a large gulf — the Ginnungagap of Norse tradition. The fourth headland beyond Norway on maps by Sigurdur Steffanson (1570 or 1590) and Christian Fresio (a.k.a., Hans Resen) is called "Promontorium Winlandia," and it represents Newfoundland (Chapman, 1981). Likewise, the fourth headland on DeVirga's map is an island — indeed the only island on this section of the map.

DeVirga's map has the first identifiable representation of Florida — even though it is situated near the North Pole. Since the friar indicated in the *Inventio* that isles were to be found in the western Atlantic across from Europe, it is apparent that the placement of this land near the North Pole was simply an archaic convention which the cartographer followed; it was the best solution he could devise for lands represented by geographical coordinates based on the Magnetic North Pole of the Western Hemisphere.

Regardless of the rationale for placing the Norveca peninsula (Florida) near the North Pole, DeVirga's map seems to be the origin of placing a "horn" or "horn-shaped" peninsula of land on the east coast of Asia (Figure 6). For the next century, explorers and cartographers wrestled with the problem of where to place this peninsula, the great gulf below it, and the continent farther south. Over the course of passing decades, the

location of this peninsula on maps moved steadily southward and eastward until it was shown very near the actual location of Florida — just north of the Tropic of Cancer about 4,000 miles west of Europe. On Martin Behaim's globe of 1492, a large island (Cipangu or Japan) is situated about 1,500 miles east of the peninsula in accordance with the distance that Marco Polo indicated for Japan. This placed an isle precisely where Columbus expected to find Japan in 1492.

The presence of a large isle on European maps close to the expected location was no accident. Cartographers of the maps showing the Horn of Asia (that is, Florida) — Toscanelli, Frau Mauro, Martellus, and Behaim — were all closely associated with Portuguese royalty. They were also privy to the latest navigational charts brought back by Portuguese explorers. And they had access to the *Inventio Fortunatae* by virtue of their association with Prince Henry The Navigator. Indeed, he was the great grandson of King Edward III who sent Friar Nicholas to survey the Polar Regions.

Although few details of trans-Atlantic voyages were ever released to the public (due to a policy of secrecy), many Portuguese expeditions are known to have sailed west during the 15th century. In 1427, Diogo de Sevil sailed west to scout the Azores; Goncalo Cabral sailed west in 1431; Joao Fernandes sailed frequently between 1431-1486; Vincent Dias sailed in 1445; and Diego de Tieve sailed in 1454. Some of these expeditions reported lands and gold across the Atlantic (Thompson, 1994). Diego was sent west to look for gold, but his storm-pressed ship wound up in

Ireland. In 1471, Jao Vaz Corte-Real sailed with a joint Norse-Danish expedition under command of Didrik Pining and Johannes Pothorst. According to a letter written in 1551, the expedition charted continental land across the Atlantic. The king of Portugal awarded Joao with the post of Governor of Terceira in the Azores for his discovery of "Stockfish Land" — i.e., Newfoundland (Hermann, 1954, 291). Corte-Real sailed west again in 1473; his trip to Newfoundland in 1485 ended in disaster. (Note: Some writers place Corte-Real at Newfoundland by 1464 — Nansen, 1911, 359). A letter to King Christian III of Denmark referred to another 1471 Luso-Norwegian expedition under command of Pining and Pothorst who sailed with several ships to "islands and continents in the north." The expedition was jointly sponsored by the kings of Portugal and Denmark.

### Ophir-Land of Gold

The last "fantasy land" on DeVirga's map is the southeastern continent called Caparu sive Java Magna. There was and has always been only one Java in Indonesia. "Java Magna" (or Greater Java) stood for a land which Indonesian sailors named on their travels across the Pacific. The land they sailed to was Peru. European cartographers sometimes confused Java Magna with New Guinea or Australia (also called "Java La Grand.")

By comparing the coastline of the northwestern bulge of South America as portrayed in a modern atlas to the western coastline of DeVirga's mysterious continent, the close



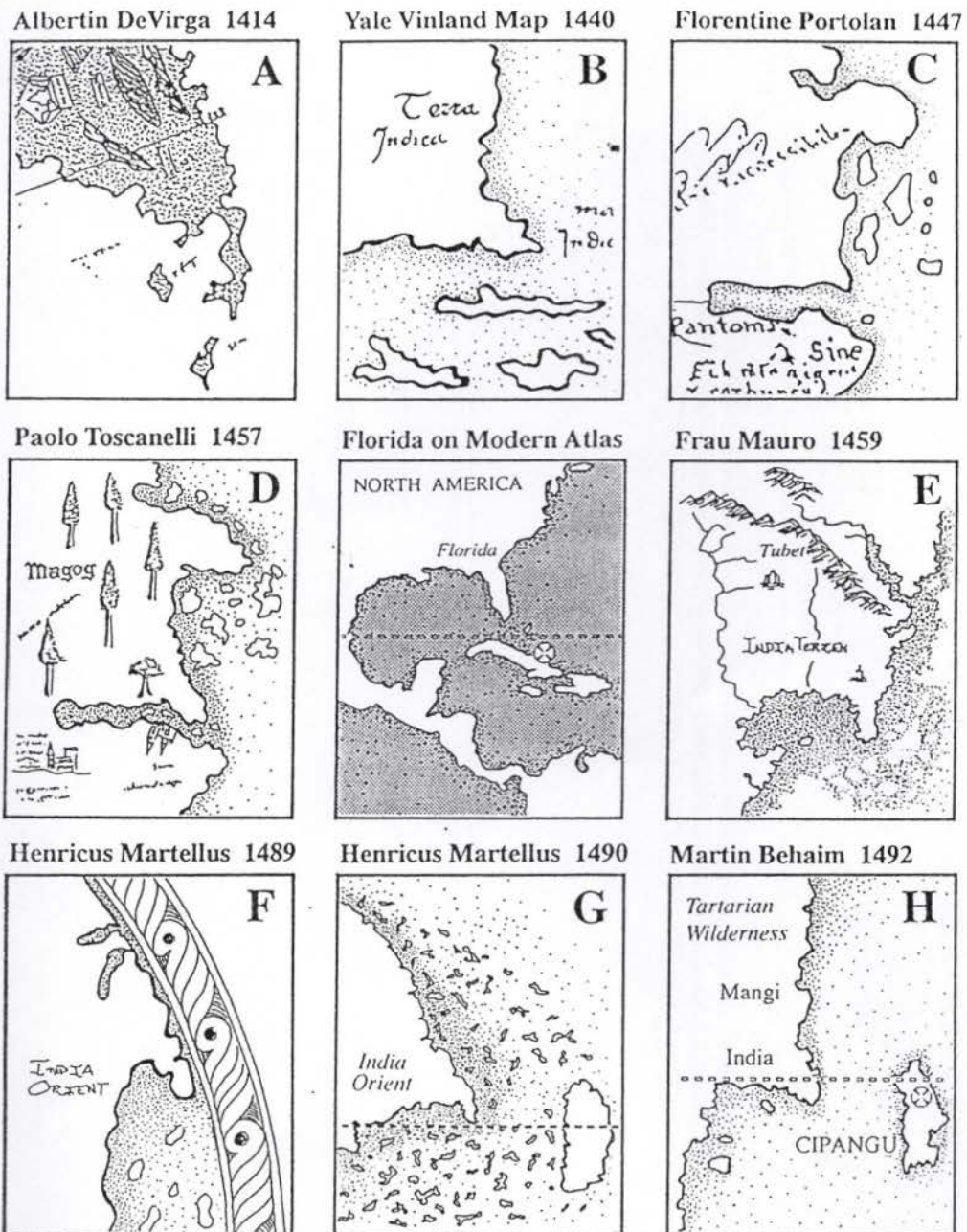
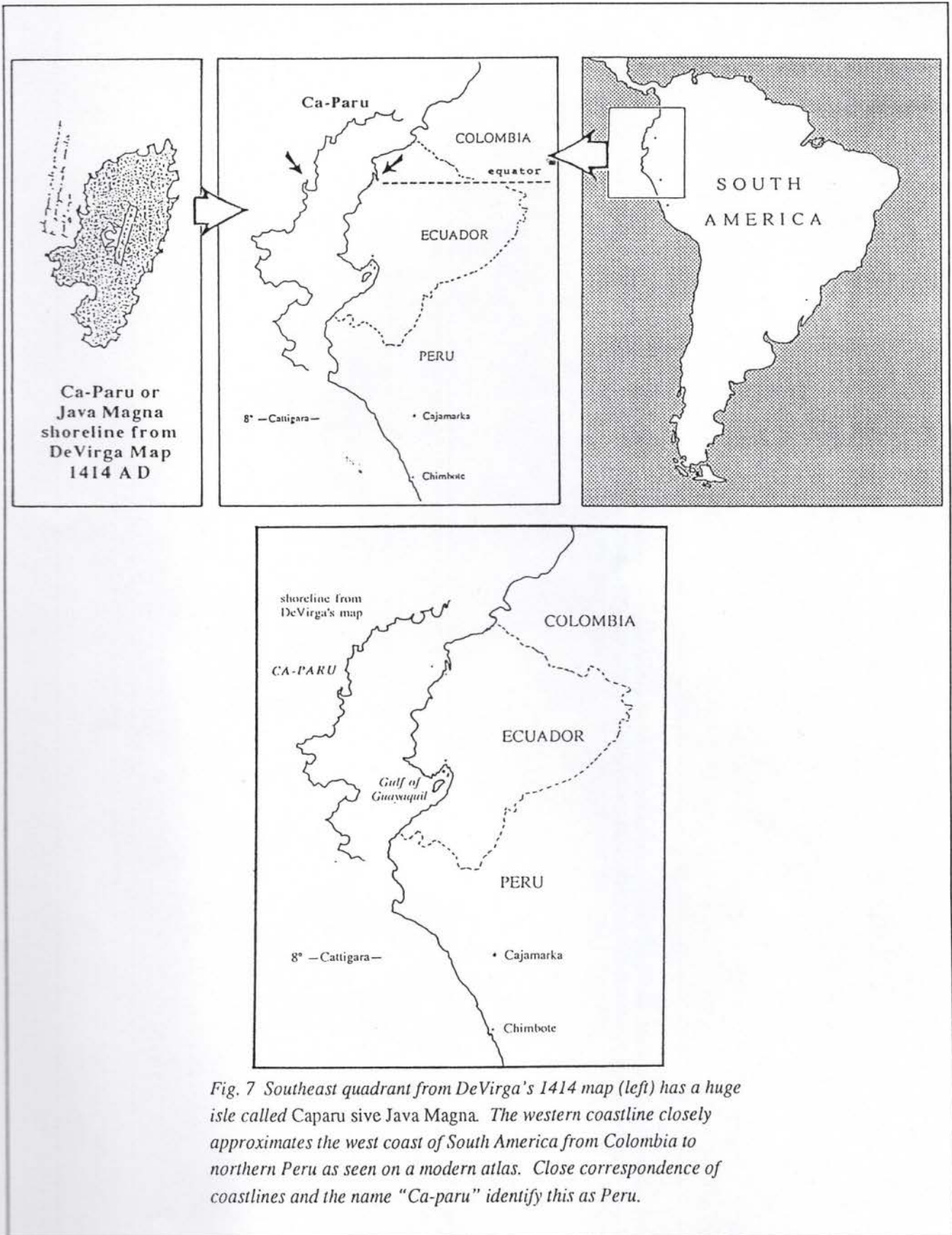


Fig. 6 Asian peninsula reveals accuracy of English and Portuguese surveys. This so-called "Horn of Asia" moves over time from the North Pole of DeVirga's 1414 map to the Tropic of Cancer on maps by Henricus Martellus Germanus (1489, 1490) and Martin Behaim (1492). Cipangu (Japan or Antilia) on these later maps is precisely where Columbus expected to find Japan. A planisphere which some authors attribute to Paolo Toscanelli (D) shows the northern territory as the forest of Magog; Behaim also portrays this region as a wilderness, whereas Martellus identifies it as the location of Cathay (China).





similarity reveals that they represent the same territory-South America (Figure 7). It is not surprising that DeVirga's map includes this portion of South America-for it is found on Arabic maps as "Waq-Waq" and on Roman maps as "Cattigara." Hindu maps and some Renaissance maps refer to the region as "India Patalis"-that is, "India on the Far Side of The Indian Ocean." The Indian Ocean in this case included the Pacific; India Patala represented South America. The rubric "India Patalis" can be seen on Behaim's globe in a similar position. A 1571 map by the Benedictine Arias Montanus identified this region (Peru) as the site of King Solomon's gold mines. Chinese, Roman, or Arabic sources may have provided DeVirga with information about this distant and ancient continent.

### Retrospect

Albert Figdor's hope for financial gain and his desire for recognition were dashed by the prejudices of orthodox scholarship. As we have seen, it was also the rigors of that scholarship that led Von Wieser to acquire a professional photograph of the map-thereby preserving an exact copy for use by future historians. If the original document still exists-in some unknown vault in Austria or Switzerland-its owner stands to gain a sizeable fortune. As the earliest map to show recognizable territories of North and South America, DeVirga's masterpiece deserves a hallowed place in the Library of Congress.

Historians have gained a great prize and an enormous challenge. Discov-

ery of this map and its revelations concerning the early years of North Atlantic exploration will have an unprecedented impact on the study of American history. Over the course of the past century, mainstream historians have discounted claims of early voyages to America by Europeans, Africans, and Asians-simply on the basis that such voyages were deemed "impossible." Some scholars insisted that had such voyages actually occurred, there would have been maps left as testimonials. Now we have the map; it remains for historians to implement the standards of scientific practice and bring the history of New World discovery out of the Dark Ages.

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### Acknowledgements

Numerous people have aided the research of ancient maps. Ross Togashi, map librarian at Hamilton Library, has assisted with e-mail announcements and the location of ancient archeological sites on modern maps. Thor Heyerdahl reviewed the manuscript; Afifi Durr of Arabic Language Services and Fazi Khoury at the University of Washington Department of Far Eastern Languages

assisted with Arabic and Persian translations. Dick Iberra Grasso provided copies of ancient Roman maps.

### Author's sketch

Gunnar Thompson is a pioneer in multicultural policy studies. An assistant professor in counselor education at the University of Hawaii, he is Director of the Multicultural Discovery Project. He has written three books on multicultural discovery: *The Friar's Map of Ancient America—1360 A.D.* (Seattle: Argonauts, August 1996); *American Discovery — The Real Story* (1994); and *Nu Sun — Asian Voyages to America* (1989). He graduated Magna Cum Laude with

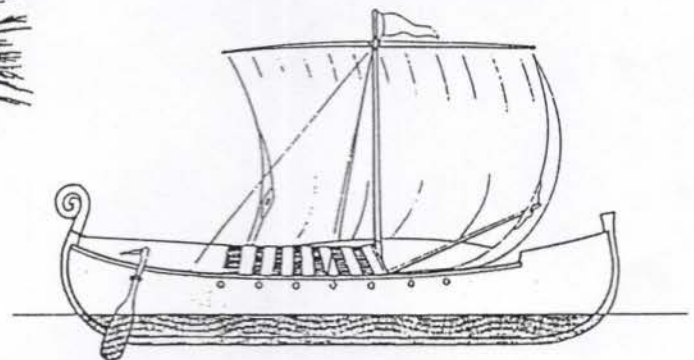
High Distinction in Anthropology from the University of Illinois-Urbana in 1968. He earned a Masters Degree in Anthropology (1969) at the University of Wisconsin-Madison and a Doctorate in Counseling Psychology (1979). It is Thompson's thesis that culturally-inspired myths regarding American discovery have severely impacted racial relations in the United States.

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(808) 956-4386 or 7904  
FAX: (808) 956-3814



*English cog in the 15th-century merchant trade with Iceland as portrayed in the Beauchamp Pageant.*



*Scandinavian knorr or merchant vessel of the 10th-14th centuries.*

Gunnar Thompson, Ph.D.  
University Station #513  
2440 Campus Road  
Honolulu, HI 96822

February 10, 1997

*Joseph Gill*

~~PO Box SR Box N~~  
PO Box SR Box N  
Captain Cook, HI 96704

*Joseph*  
Dear John.

re.: The Friar's Map of Ancient America—1360 AD (October 1996)  
American Discovery—Our Multicultural Heritage (1994, 2nd ed.)

My most recent book, "The Friar's Map," is about an old map of the New World that predates the Columbus voyage by nearly a century. The map was found in what is now Croatia in 1911. It was authenticated by the Austrian scholar Franz Von Wieser—but relegated to the attic of defunct historical documents because it was out of the mainstream of Ptolemaic or "scientific" cartography.

I identified the East Coast of North America and part of the West Coast of South America on a copy of the map which I found at the University of Hawaii in November of 1994. Since that time, my discovery has been corroborated by Argentine historian Dick Edgar Ibarra Grasso; and it has become the most controversial topic of Harvard's internet service: "Maphist." Thor Heyerdahl has called my discovery "extremely important." Articles about my research have appeared in several journals and newspapers; and it was featured in an October broadcast on Norwegian Educational Television.

This discovery has great importance for higher education in the United States. In the past, the subject of American Discovery has been dominated by an antiquated paradigm that features Columbus in a rather mythological role; and this has polarized the public and exposed the academic community to accusations of elitism and ethnic bias. The real story of New World discovery was a gradual process—not a cathartic event—and it was achieved by the efforts of many people from diverse ethnic and religious backgrounds. I see a new paradigm of discovery featuring multicultural achievements as a way to revitalize the study of history, ethnic studies, and other subjects at the foundation of the American educational system. The motive for a new paradigm is not "political correctness" but simple honesty.

Sincerely,



Gunnar Thompson, Ph.D., CRC  
(808) 956-4386; 956-7904; 957-3035; fax 956-3814;  
e-mail [gunnart@hawaii.edu](mailto:gunnart@hawaii.edu)

enc.: The Friar's Map; American Discovery; reprints



## Did English Friar's Map The New World?

by Gunnar Thompson

A 15th-century Venetian map by Albertin DeVirga adds new evidence to claims of ancient explorations in the New World. The parchment map has three unusual land areas: 1) a huge continent extending out from the northwest coast of Norway; 2) a huge gulf and mainland fused into the north coast of Europe; and 3) a continent in the Pacific Ocean west of Asia called Ca-paru sivi Java Magna or India Mazor. These land areas have been identified as: 1) North America; 2) the Gulf of Mexico from the coast of Florida to Venezuela and Brazil; and 3) Peru. A key feature of the northwestern continent, called "Norveca Europa," is a peninsula with islands which represent Florida and the Antilles.

The map first came to light in 1911 when the Austrian collector Albert Figdor stopped by an antique store in Sebenico--now Sebnic, Croatia. He purchased what he thought was an extraordinary document and brought it home to Vienna for examination at the hands of one of Austria's leading historians--Franz Von Wieser. The historian virtually condemned the antique to oblivion by his assessment that it was a Medieval artifact and presumably outside the mainstream of Ptolemaic or "scientific" cartography. Fortunately, Von Wieser had the map photographed; and it was a copy of this photograph in the Dutch journal Imago Mundi (Supplement IV, 1964) that attracted the attention of the Multicultural Discovery Project at the University of Hawaii.

With the assistance of scholars from Argentina, Japan, Norway, Great Britain, Switzerland, and the United States, project staff have identified the peculiar land areas on the map along with their possible sources. The Norveca Continent and lands north of Europe might be the legacy of a mapping effort first proposed by Roger Bacon in 1266. In his Opus Majus, Bacon proposed making a scientific map of the world. His inspiration led Oxford University to train cadres of friar-astronomers in the early 14th century. Among the more renowned graduates were the Franciscan Nicholas of Lynn and Geoffrey Chaucer--both of whom wrote books on the use of astrolabes.

Most of the friar-astronomers assisted in the coastal survey of England--which appears in fairly accurate maps by Majorcan and Catalan cartographers. According to the 16th-century English historian Richard Hakluyt, friar Nicholas was responsible for conducting a survey of "Polar Regions" north and west of Iceland. These "Polar Regions" are featured on DeVirga's map northwest of Norway and north of Europe. The friars' gazetteers of New World lands from the Arctic to Brazil were reported in a manuscript called the Inventio Fortunatae--which was presumed lost by the early 16th century.

It now seems likely that the friar's gazetteers were incorporated into the top of DeVirga's map and also featured as the west coast of lands across the Atlantic on maps by Fra Mauro (1459), Paolo Toscanelli (1474), Henricus Martellus (1489), and Martin Behaim (1492). In other words, there is a cartographical heritage stemming from DeVirga's map to the time of the Columbus voyage. As friar Nicholas was a confidant of John of Gaunt (Grandfather of Portugal's Prince Henry The Navigator), we have reason to suspect that the friars' travelog and gazetteers may have played a role in Portuguese explorations in the western Atlantic. Nor is it coincidental that Columbus referred to the Inventio Fortunatae during the planning for his great "Enterprise of The Indies," and he again sought the manuscript prior to his 1497 voyage to Venezuela.

The Peruvian coast shown on this map as continental land east of Asia is most likely a Phoenician or Roman heritage; although Arabian or Chinese mariners are also under consideration. Phoenicians sailed to a far-away land called "Ophir" where they sought gold for King Solomon in the 10th-century BC. In the 16th century, Spanish historians speculated that the name "O-phir" had been derived from "Per" or "O-Per" for Peru. This section of the DeVirga map suggests that the identification of Peru with the Phoenician Ophir is accurate.

For further details on this topic refer to: The Friar's Map, Gunnar Thompson, 1996, ISBN: 0-9621990-8-7; or write the author c/o University of Hawaii, 1776 University Avenue; WA2-221 CE, Honolulu, HI 96822; e-mail <gunnart@hawaii.edu>.



## BOOK SPECIFICATIONS & RETAIL

### The Friar's Map

(October 1996)

by Gunnar Thompson

ISBN 0-9621990-8-7

PB; 312pp; 8-1/2 x 11; illustrated; index  
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### American Discovery

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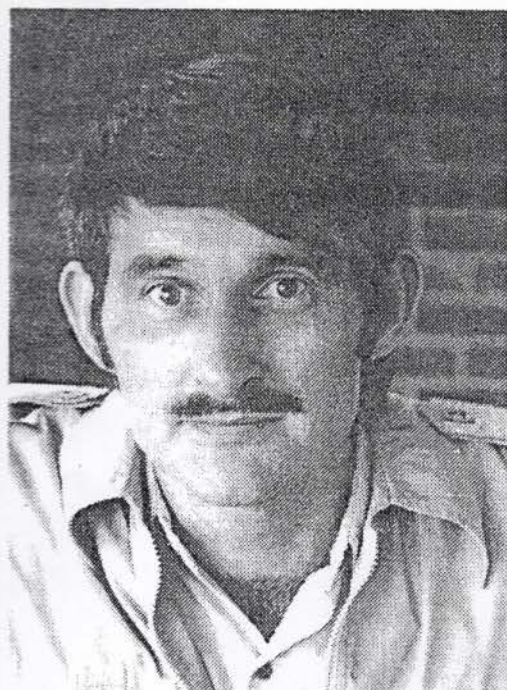
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# Current Perspectives

Number Eleven

Winter 1996



This Fall, Associate Professor Gunnar Thompson of Counselor Education appeared in a special broadcast of "Scientific Discoveries" on Norwegian Educational Television to speak about his discovery of the oldest map of America. The map, produced circa 1360, shows North America along the East Coast from

## Faculty Accolades

Labrador to the Gulf of Mexico. On this map, North America is identified as a Norwegian territory—"Norveca Europa"—in accordance with the proclamation of Norse King Haakon who declared sovereignty over all lands from Norway to the Magnetic North Pole of Hudson's Bay.

The idea of making a scientific map was first conceived by Roger Bacon and encouraged by Pope Clement IV. Oxford University provided a cadre of Franciscan friars with the necessary training and instrumentation. King Edward III ordered the friars to complete the project in his effort to protect merchants from piracy and to satisfy his curiosity about the location of Arthurian settlements in Avalon. Friar Nicholas of Lynn led the field expeditions across the Atlantic Ocean—sailing as far as Brazil.

Thompson, who heads a multinational project on the origins of American culture, has traced the heritage of Franciscan cartographers on eight maps which show the location of Florida prior to the voyages of Columbus. His book, *"The Friar's Map of Ancient America,"* will be released in October. An earlier book, *"American Discovery—Our Multicultural Heritage"* (1994), is an encyclopedia of evidence attesting to Asian, African, Hindu and Mediterranean voyages to ancient America. The author hopes these publications and television specials will increase public awareness of multiethnic contributions to the foundation of American culture.

*Current Perspectives* is published by the Office of the Dean of the College of Education, University of Hawai'i at Manoa, and distributed to faculty, staff, students, alumni and friends of the College.

Charles T Araki  
*Interim Dean*

Alexander L Pickens  
*Professor of Education and Co-Editor*

Marcia H Little  
*Co-Editor*





Tenerife 14th August, 1995  
from: 34.22.510 128

Dear Gunnar,

Only on my recent return from South and Central America did I find in the pile of mail today your letter of June 20th with your manuscript on America's Oldest Map.

Only by reading your letter and skimming through the map illustrations I see that you have produced an extremely important piece of work. Thank you and congratulations!

I am barely home to catch up with incoming faxes and letters, and am off for a 2-week reconnaissance trip to Morocco tomorrow, so this dictated letter will be typed and signed in my absence.

I trust you keep in good contact with Per Lillieström. He will be exceedingly interested in learning about this forthcoming book, and is involved in the research on Columbus and the North Pole himself, so you may have much information to exchange. I shall try to reach him on telephone before I leave and let him see my copy unless you have sent another to him.

There has been quite a newspaper stir in several continents over the fact that a Norwegian newspaper brought up the evidence that Columbus reached the area of the magnetic North Pole in 1476. There should thus be an explosion if you get the right launching of your coming book.

With all best wishes.

Sincerely,

Thor Heyerdahl

From: Andrew.Gow@UAlberta.CA Wed Jan 8 09:15:13 1997  
Date: Mon, Jan 1997 08:17:34 - 1000  
From: Andrew Gow <Andrew.Gow@UAlberta.CA>  
To: Gunnar Thompson <gunnart@hawaii.edu>  
Subject: Gog and Magog

Dear Gunnar,

I am sending my article as an e-mail attachment. I look forward to your comments.

Andrew

---

*The following text is an excerpt from a manuscript draft not for publication without consent from the author.*

---

Albertin de Virga's mapamundi of c. 1411-15 was made at Venice. In Northern Europe are the names Ogama and Goga, corresponding to Magog and Gog, but in a very unusual location. The Mediterranean is drawn after the manner of contemporary nautical maps; this map is a kind of compromise between a medieval mappamundi and a portolan chart, according to Franz von Wieser, which might explain the dislocation of conventional figures. The possibility that this map depicts the Americas is currently a topic of **considerable discussion in the academic community**. The unusual nature of the map suggests that the cartographer was not so closely bound by tradition as most others were.

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# UH prof says he has evidence that Columbus wasn't first

By HELEN ALTONN  
Star-Bulletin

A University of Hawaii faculty member says his research team has discovered that multicultural voyagers explored America long before Columbus discovered it in 1492.

"All the history books will have to be rewritten," says Gunnar Thompson, an assistant professor and counselor in education and director of the Multicultural Discovery Project.

His colleagues include John Jones, on a photography assignment in India; Carl Johannessen, University of Oregon geographer; and Jaweed Ashraf, historian at Nehru University in New Delhi.

Their findings include:

■ A 1414 map in the UH Hamilton Library by Venetian cartographer Albertin De Virga showing a large continent northwest of Europe that Thompson believes is North America.

■ Evidence that India had maize, or corn, a native American plant, in 500 B.C. Historians say maize crossed the ocean when Columbus returned from his New World voyage in 1493.

That's "a lot of baloney," says Thompson. He contends that the discovery of ancient maize agriculture in India establishes the importance of trans-Pacific voyages centuries before Columbus.

He acknowledges the issue is controversial, saying he was "declared persona non grata" at the University of Wisconsin because of his theories.

His book "American Discovery", about the discovery of America as a "multi-ethnic achievement," was published last year. He said he had little or no response to copies sent to UH ethnic studies, history and anthropology departments.

Norwegian explorer Thor Heyerdahl, famed for his Kon-Tiki balsa raft voyage across the Pacific from Peru in 1947, commended Thompson for "sticking your neck out."

In a February letter to Thompson, Heyerdahl said: "I go a long way agreeing with you that America has been discovered time and again, not only by migrants through the icy Arctic, but also by voyagers with the Japan current, the Canary current and by voyagers in the extreme north Atlantic."

Thompson's career is in rehabilitation counseling, but all his spare time is devoted to pre-Columbian research.

During a 1986 vacation here to visit his brother, Rudy Thompson, a teacher at Kamehameha Schools, he went to Hamilton Library to look into pre-Columbian voyages. He said he became excited to find evidence of Asian influences in North America and began looking for other clues to what happened before Columbus.

After joining the UH two years ago, he found DeVirga's map in a Dutch book of ancient circular maps in the Hamilton collection.

He said he could have "shouted for joy" because he's been looking for such a map for more than 10 years. "It's the oldest map showing North America on it," he said.

Cedric Cowing, UH history professor, said early maps are "so inaccurate about everything, but it could well be true. He could have discovered such a map."

As a counselor, Thompson said, he's concerned that history shows America's discovery as a "white-western achievement."

"Most plants are attributed to Columbus, but there were stories of plants having come from other places, like pineapples in India, long before Columbus."

He said his team has uncovered evidence of maize in India dating to the eighth century or earlier.

Johannessen has published photographs of maize ears on Hindu deities sculptured in stone. The ears have all the characteristics of maize, Thompson said.

"However, orthodox scholars insisted that the statues were merely holding stacks of beads or candy." They also dismissed a radiocarbon date of 500 B.C. for maize pollen in India, he said.

He said Ashraf, translating ancient Hindu and Sanskrit texts, learned that the Portuguese navy relied on Hindu peasants to provide stores of maize in 1503.

"He reasoned that maize agriculture must have been established decades earlier in order to account for Portuguese dependence on Hindu supplies."

He said Ashraf also traced the names for maize back in time to medicinal, religious manuscripts and Sanskrit lexicons. The oldest name, Markataka, is found in a lexicon dating to the fifth century B.C., Thompson said.

"I don't know whether maize can be attributed to somebody other than the native Americans," Cowing said. However, a lot of people claim to have discovered America, he said, noting Leif Erickson and the Vikings are usually mentioned.

The Welsh make similar claims and it's said that Portuguese-Spanish fishermen discovered the American coast well before Columbus but didn't tell anybody, Cowing said.

Star-Bulletin

A-4 □ Wednesday, May 31, 1995



# Die Weltkarte von Albertin de Virga von 1411 oder 1415

Arthur Dürst

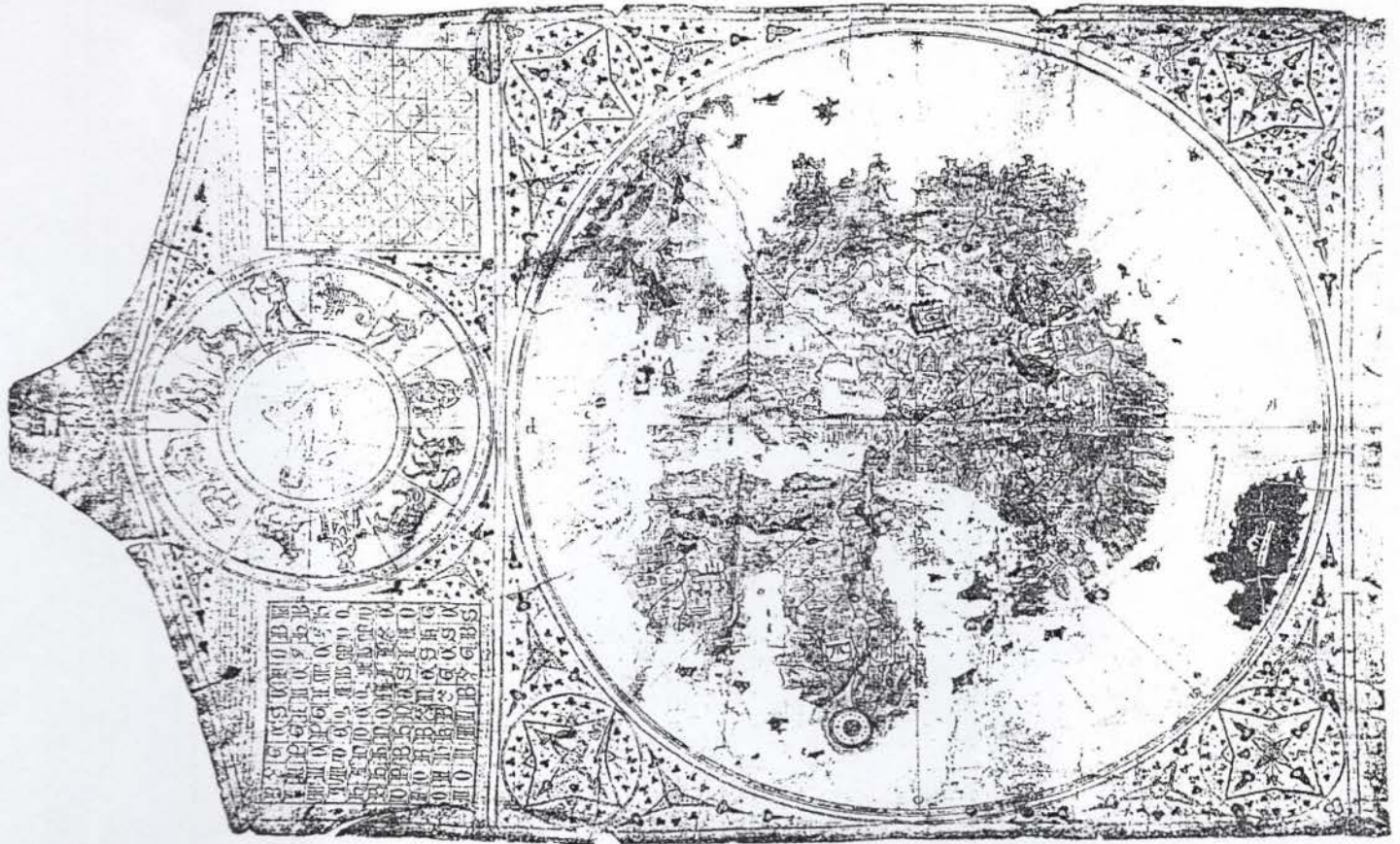


Abb. 1: Albertin de Virga: Weltkarte von 1411 oder 1415. Gesamtansicht mit dem Kalenderteil (links) und der Weltkarte (rechts). Der Kalenderteil gliedert sich (von oben nach unten) in die «Mondtafel», den kreisförmigen Zo-

diakal-Kalender und die Tafel zur Bestimmung der Osterdaten. Pergament, 69,6 x 44 cm. Kolorierte Federzeichnung. Reproduziert nach der Abbildung im Versteigerungskatalog von Gilhofer und Ranschburg, Luzern 1932.

In letzter Zeit ist eine alte Weltkarte ins Zentrum des Interesses gerückt, die noch vor kurzem nur wenigen Kartenhistorikern auf Anhieb präsent war: die Weltkarte des Albertin de Virga von 1411 oder 1415.

Ausgelöst wurde diese plötzliche Aktualität durch Gunnar Thompson, Ph.D. und Leiter eines Multicultural Discovery Projects an der Universität von Hawaii in Honolulu, der in der Karte de Virgas die früheste Darstellung Amerikas zu erkennen glaubt<sup>1</sup> (Abb. 3).

Der Grund dieser Veröffentlichung ist ein doppelter:

1. Die erwähnte Karte de Virgas soll in einer bestmöglichen Abbildung zugänglich gemacht werden.<sup>2</sup>
2. Vielleicht ist es möglich, durch eine weitere Verbreitung der Abbildung der seit 1932 verschollenen Karte diese wieder ausfindig zu machen, wie es in den letzten Jahren mit der Heiligland-Karte von Lucas Cranach d. Ä. geschah.<sup>3</sup> Neben der Reproduktion des Kartenblattes als Ganzem und der eigentlichen Weltkarte (vergrössert) sollen die bis jetzt bekannten und als gesichert geltenden Fakten zusammenfassend mitgeteilt werden.<sup>4</sup>

## Weltkarte und Kalender

Das ganze Pergament-Blatt (Abb. 1) misst 69,6 cm in der Länge und 44 cm in der Breite und ist 1411 oder 1415 in Venedig mit Feder und Pinsel in Farben gezeichnet worden. Das Pergament-Blatt, dessen «Hals» – gemäss heutiger Weltbild-Vorstellung – nach links gewendet ist, wird von einer Doppel-Linie eingefasst und besteht deutlich aus zwei getrennten Teilen: einem Kalenderteil und der eigentlichen, kreisrunden Weltkarte mit orientalisches anmutenden rosetten- und sternförmigen Verzierungen in den Ecken zwischen dem Erdkreis und der quadratischen Umfassung.

Der Kalender enthält einen kreisförmigen, sich gegen den Uhrzeiger bewegenden – das heisst rückläufigen – Zodiakal-Kalender. Von aussen nach innen finden wir die Namen der Monate mit der jeweiligen Anzahl der Tage; dann folgen im breitesten Ring die Abbildungen der Sternkreiszeichen. Der innerste Ring ist für jeden Monat in zwei Hälften geteilt, wobei der rechte Abschnitt den Namen des Tierkreissymbols trägt, der linke hingegen den Namen des menschlichen Körperteils, der von diesem Sternzeichen beeinflusst sein soll. Gerade

beziehungsweise gebrochene Linien verbinden diese Angaben jeweils mit dem entsprechenden Körperteil des im zentralen Kreis knienden Knaben, der eine Art Aderlassmännchen darstellt.

Rechts davon (oben in der Abbildung) befindet sich die «Mondtafel», ein schachbrettartiges Muster mit 144 Feldern, *tola di Salamun* (Tafel des Salamun) genannt, die zur Berechnung der Mondörter<sup>5</sup> diente. Links (unten) ist eine quadratische Tafel, deren 10 x 10 Felder mit schwarzen und roten Buchstaben belegt sind und die Festlegung des Osterdatums zwischen dem 2. April 1301 und dem 18. April 1400 möglich machen. Da diese Daten ausserhalb der Entstehungszeit der Weltkarte liegen, ist anzunehmen, dass der Zeichner der Karte diese Tabellen ohne Kenntnis ihrer Bedeutung aus früheren Quellen entnommen beziehungsweise kopiert hat.

Das schmale Band zwischen dem Kalenderteil und der Weltkarte trägt die Angabe des Autors, das Datum und den Ort der Entstehung:

*A. 141? : Albertin di virga me fecit in uinexia.* (Albertin de Virga hat mich im Jahre 141? in Venedig hergestellt.) Da die letzte Ziffer des Entstehungsjahres in einen Falz des Per-



# Munk så Amerika længe før Columbus

*Forsker har fundet det berømte – men forsvundne – Amerika-kort The Friar's Map indtegnet i venetiansk kort fra 1414*

## ■ GEOGRAFI

Af Kaare Skovmand

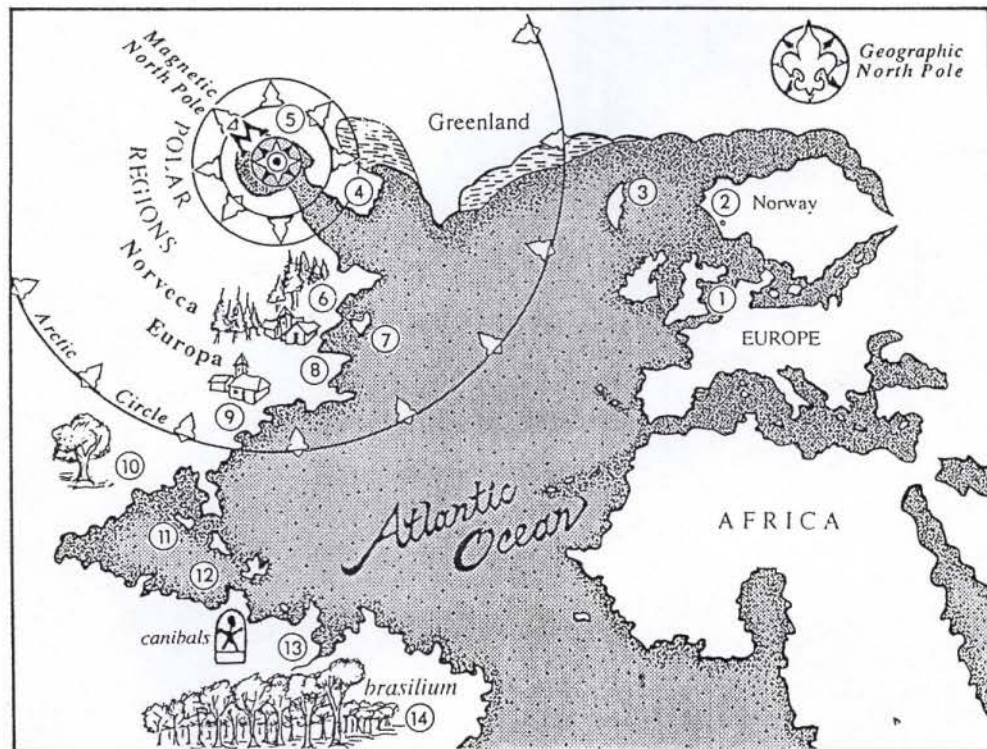
Et højt usædvanligt kort kaster nyt lys over Amerikas historie. Kortet opriksler, blandt meget andet, det nordamerikanske fastlands kyster – længe før Columbus gjorde sin entré på de breddegrader. Faktisk kan kortet udmærket have ledsaget Columbus på hans rejser.

The Lost Friar's Map of North America har sin helt egen historie, og den er temmeligt nøje forbundet med verdenshistorien. Det mener i hvert fald den amerikanske forsker Gunnar Thompson fra University of Hawaii i Honolulu.

### Norveca Europa

Kortet, der er lavet af venetianeren Albertin De Virga i 1414, viser et helt nyt kontinent på 'den nordvestlige side af Norge', benævnt 'Norveca Europa'. De Virgas kort er imidlertid ikke identisk med The Friar's Map. Men den gamle munks unikke – og forsvundne – rids over Amerika, har ifølge Gunnar Thompson overlevet som en del af De Virgas kort. Næmlig den del, der viser Norveca Europa.

'Jeg var med det samme klar over, at kontinentet forestillede Nordamerika, for-



Sådan mente man omkring år 1400, at Verden så ud. Kortet er lavet af den amerikanske historiker Gunnar Thompson og er baseret på den venetianske kartograf Albertin De Virgas kort fra 1414. Det er området 'Norveca Europa' (bevidst forstørret i forhold til De Virgas kort), som Thompson mener stammer fra den engelske munk Nicholas of Lynns forsvundne og angiveligt første kort over Amerika (The Friar's Map).

di det har den samme kystlinje som den amerikanske østkyst har på danske kort fra det 16. århundrede. Det viser også Florida og Den Mexicanske Golf,' skriver Gunnar Thompson i en re-

degørelse om sin opdagelse. Referencen til Danmark gælder ikke blot danske kort fra 1500-tallet, det går også på den danske kartograf Claudius Clavus Swart og hans optegnelser i

det såkaldte Nancy Manuskrift fra 1424. Men historien begynder længe før, nemlig med den engelske franciskanermunk Nicholas of Lynn.

Historikere har siden



# Verwirrspiel um Karten

Warum Kolumbus nicht der Entdecker Amerikas sein kann

Auf der Reproduktion einer in der Schweiz verschollenen Weltkarte aus vorkolumbischer Zeit glaubt Gunnar Thompson die Ostküste Nordamerikas zu erkennen.

■ VON SUSANNE WEGMANN

Er habe die Karte von Bruder Nicholas of Lynn wiedergefunden, schreibt der amerikanische Anthropologe und Psychologe Gunnar Thompson in einem enthusiastischen Brief an den TA. Der englische Franziskanermönch ist angeblich zwischen 1330 und 1380 mindestens sechs Mal via Island und Grönland über den Nordatlantik gesegelt und sogar bis Florida und Brasilien gereist.

Zwar hat Thompson nicht das Original der Reiseaufzeichnungen gefunden. Diese gelten seit dem 15. Jahrhundert als verloren. Die nordamerikanische Ostküste mit Florida und dem Golf von Mexiko seien aber eindeutig auf der Weltkarte aus den 1410er Jahren des Venezianers Albertin DeVirga wiederzufinden. Dieser soll die Aufzeichnungen des Franziskaners in sein Werk integriert haben.

Neue Karten aus Kopien älterer Werke zusammensetzen war früher üblich. So könnte es sich erklären, dass auf mindestens acht Weltkarten aus der Zeit vor Kolumbus Teile Nordamerikas zu erkennen sind. So jedenfalls sieht es Thompson nach eingehendem Studium der Küstenlinien. Sogar auf dem berühmten Globus von Martin Behaim von 1492 macht der Professor der Universität Hawaii die Landzunge von Florida und den Golf von Mexiko aus. Allerdings nicht auf dem Original, sondern einer von Historikern sel-

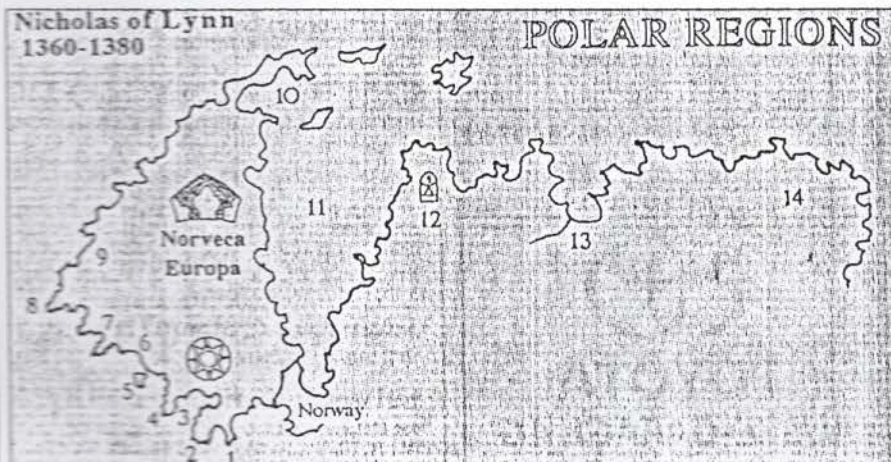
ten konsultierten Reproduktion von 1730.

Kolumbus habe gewusst, dass ihn über dem Atlantik nicht Asien erwarte, glaubt Thompson beweisen zu können. Schreibe der erfahrene Seefahrer doch, die Landung sei genau an der zuvor berechneten Stelle erfolgt. DeVirgas Karte respektive die Aufzeichnungen des englischen Mönchs seien den Seereisenden damals sehr wohl bekannt gewesen, begründet Thompson weiter. Politische Gründe führt Thompson für die Vertuschung des spanischen Wissens über die Existenz der unerforschten Landmassen im Westen an. Schliesslich hatte das spanische Königshaus grosses Interesse daran, die Entdeckung der «Neuen Welt» für sich allein in Anspruch nehmen zu können.

## Neue Geschichtsschreibung?

Tatsache bleibt für den passionierten Historiker Thompson, dass die älteste Karte Amerikas von Nicholas von Lynn stammt, auf der DeVirgas Karte wiedergegeben ist – und dass Kolumbus keineswegs der wirkliche Entdecker des Doppelkontinents gewesen ist. Die amerikanische Geschichte müsste seiner Meinung nach neu geschrieben werden. Allerdings ist auch das Kernstück seiner Beweisführung, die DeVirga-Karte, verschollen. Ihre Spuren verlieren sich 1932, als der letzte bekannte Besitzer, der Wiener Sammler Albert Figdor, sie an einer Auktion in Luzern präsentierte, aber offenbar wieder zurückzog.

Zur Karte von DeVirga enthält die Zeitschrift «Cartographica Helvetica» (Nr. 13, Jan. 96) einen Aufsatz des Kartenhistorikers Arthur Dürst.



Zeigen diese alten Aufzeichnungen die Küstenlinien rund um den Nordatlantik?





# Ka Leo O

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## Hawai'i

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Friday, March 15, 1996

### Columbus a distant second to America, professor finds

by Todd H.M. Ozawa  
Ka Leo Staff Writer

**Gunnar Thompson**, the director of the Multicultural Discovery Project, has found proof that the Irish beat Columbus to America.

On Feb. 19, Thompson found a map made by the 15th-century cartographer Mecia Viladestes in 1413, which documents two Irelands called Irlanda and Ibernia. Both were located west of England, with one west of Greenland.

Comparing the locations of the two isles, he discovered that they were also described by a Spanish Franciscan friar in a travelogue from around 1350.

The Franciscan described Ibernia as a land of forests with fat game birds. He also said the birds were delicious either roasted or boiled.

"The only place west of Greenland that could possibly be this 'land of forests and fat birds' is the mainland of North America," Thompson said.

He also said the friar's reference to "fat birds" is the first historical note of the American turkey.

The travelogue — "The Book of Knowledge," was written at about 1350, about 150 years

before Columbus made his voyage to the New World.

"The Book of Knowledge" was meant to identify all the nations of the world and the religions of the nations a traveler might visit.

From the evidence, Thompson

September of last year. This map, by Albertin De Virga in 1414, contains the earliest survey of North America.

All evidence serves to prove the Irish established a settlement near the Gulf of St. Lawrence before

**The only place west of Greenland that could possibly be this 'land of forests and fat birds' is the mainland of North America.**

— Gunnar Thompson,  
*director of the Multicultural Discovery Project*

said the Irish had established a settlement in North America.

Thompson also points to Al-Idrisi, an Arabian cartographer who noted a "Irlandah-al-Kabriah," or "Great Ireland" in an 1154 atlas.

Still another account from Norse sagas tells of an Irish territory called "Vitramanland," or "Ireland the Great" in the 11th century, Thompson said.

Both the recently found map and the friar's description, Thompson said, tally with another map he reported on in

1350.

Later maps produced in the 16th century identified settlements in North America as "Estotiland."

The name was also that of a Gaelic tribe from Northern Ireland — historians assumed the name was an attempt to deprive Columbus of his discovery.

Thompson's discovery will be announced today at the College of Education Colloquium at the Student Center, room 307. Students and faculty are welcome to attend.

CARTOGRAPHICA  
HELVETICA

Zürich, den 29. Oktober 1995

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Dear Colleague,

thank You very much for the material on "The Lost Friar's Map of North America-1380 AD" as well as for Your very interesting book "American Discovery", which I will study in November, together with Dr. Susanne Wegmann.

I am sorry You do not let me pay for the book - it would be worth it indeed!

But what I can do, is to look after material for Your Discovery Project and since I am not so far from Lucerne I will try to follow the traces of the DeVirga-Map.

\*  
HELVETICA I can inset a picture of the map in our journal - **WANTED - dead or alive!** I did know since a long time about the map, but never asked the antiquarian in Lucerne about it, having other research-work.

in the near future!

You certainly will hear from me

Thanking You again I remain  
sincerely yours

*Arthur Dürst*  
(Arthur Dürst)

P.S. I have nearly all the books and facsimiles You have mentioned in Your Technical Report in my private library.

\* CARTOGRAPHICA HELVETICA is one of three leading journals on the history of cartography and the only in German language.



# United States Senate

WASHINGTON, DC 20510-4704

April 26, 1993

Gunnar Thompson, Ph.D.  
20635 6th Ave. SW  
Seattle, WA 98166

Dear Dr. Thompson:

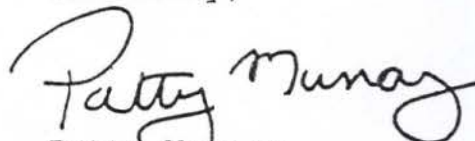
Thank you for sharing your proposal to establish "Discovery Day." I appreciate hearing from you, and apologize for the delay in responding.

Your book, *American Discovery*, sounds fascinating. When people of my generation and my parents' generation were in school, Indians were portrayed as primitive, war-like inhabitants of the land, and all major historical milestones were attributed to the white man. Although history lessons have changed significantly since when I was in school, I am concerned that the American education system continues to fall far short in promoting cultural literacy to our nation's children. As I read your letter, it really hit home that the impact of historical misconceptions extends far beyond the classroom, forming the fabric of divisive issues our society grapples with every day: prejudice, religion, race, politics.

As you noted, the holiday deemed "Columbus Day" adds salt to wounds incurred by Native Americans over two centuries. I also believe that a more inclusive name and focus could make this a meaningful holiday for all Americans. I plan to share this proposal with the Judiciary Committee which handles commemorative resolutions.

Again, thank you for sharing this idea with me. If you have further questions or comments, please feel free to let me know.

Sincerely,



Patty Murray  
United States Senator

PM/lch