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"And he that will not harden his heart, to him is given the greater portion of the word..." Alma 9:18

TRANSOCEANIC CONTACT ANOTHER EXAMPLE OF CONVERGENCE

By Raymond C. Treat

The subject of transoceanic contact, which of necessity includes the subject of American Indian origins, has aroused much interest and controversy since the early 1500s when it first became evident that the land discovered by Columbus was not the eastern edge of the Old World, but was in fact a New World.

Although the subject of transoceanic contact is still controversial, a significant change in the way in which it is viewed has taken place among American archaeologists. It will be shown that this new view is a step closer to the position held by the Book of Mormon.

This is the fourth in a series of articles designed to show that the pattern of Mesoamerican archaeology is gradually converging with the pattern presented by the Book of Mormon.

Book of Mormon Migrations

The Book of Mormon in 1830 told about three transoceanic migrations. The oceans are not mentioned but available evidence indicates: 1) the Jaredites crossed the Pacific Ocean circa 2500-2350 B.C. (see *Peoples, Places and Prophecies* by Verneil Simmons, pp 28-33); 2) Lehi's group crossed the Pacific Ocean c. 600 B.C. (*ibid.* pp. 74-79); and 3) the Mulekite group crossed the Atlantic Ocean c. 587 B.C. (*ibid.* pp. 97-99).

What does New World archaeology have to say about transoceanic contact? Let's review what has been written about this subject beginning with the accounts of those who first viewed the ruins after the Spanish Conquest and continue up to some present-day theories held by New World archaeologists.

Early Accounts

Willey and Sabloff (1974) in their book on the history of American archaeology list several theories extant during the period from 1492-1840. One of the leading theories was that the Indians descended from the lost tribes of Israel. The Aztec legends of vast migrations helped the friars working in Mexico to accept this theory. Fray Diego

Duran supported this theory prior to 1580 based on several Indian traditions which were, in his view, parallel to Israelite traditions. Later writers, such as James Adair, an influential 18th century American author, and Lord Kingsborough, who published his famous *Antiquities of Mexico* in 1831-48, also accepted the lost tribes theory.

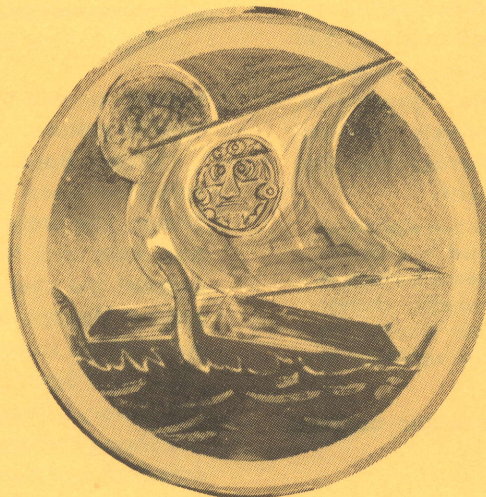
This was not the only theory available, however. Competing theories included the lost worlds of Atlantis and Mu, as well as Scandinavia, Central Asia, China, Korea and India as possible sources for the American Indians.

The first book to deal exclusively with the subject of American Indian origins was published in 1607 (*Origen de los indios de el nuevo mundo*) by Father Gregoria Garcia. He favored the lost tribes of Israel as the

source and migrations across the Atlantic as the route of travel. A little earlier, another book, Joseph de Acosta's *Historia natural y moral de las Indias* of 1589-1590 contained speculations on Indian origins. Acosta's position is "marked by skepticism with regard to cultural comparisons, considerable restraint in constructing theories and a great reliance on geographical and faunal considerations (Huddleston 1967:13)." Acosta also suggested the possibility of a land bridge between the Old and New Worlds. Clearly, the essence of these two early books still forms the basis of the controversy today, even though the arguments have become increasingly sophisticated both in regard to theory and in evidence available.

Anthropology in general accepts the basic position of Acosta in favoring a land bridge (the Bering Strait theory) and in being skeptical about transoceanic migrations. As late as 1948, A. L. Kroeber, the leading American anthropologist of his day, was able to say that

when we follow the prehistories of Mexico and Peru back as far as they are traceable, the earliest discovered forms there do not specifically resemble any particular ancient culture of Asia. And equally lacking is any evidence of turning points within this continuous prehistory of Mexico and Peru that are marked by the injection of Asiatic or Oceanic traits, or even of sudden acceleration of growth which might reasonably be attributed to



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CONTACT (Continued from page 1)

transpacific stimuli. No specialist in American archaeology at present sees any place where there is room for a significant Old World influence in the unfolding of his story. The various theories "explaining" the culture of Mexico and Peru as derived from China, India, Farther India, or Oceania are all views of non-Americanistic scholars or the speculations of amateurs (1948:785, emphasis in the original).

Current Views

The following year, however, saw the beginning of a change in the intellectual climate surrounding this issue. Riley et al (1971:xiv) calls it a drastic change. It was in September, 1949 that Robert Heine-Geldern, a German anthropologist and Gordon Ekholm, a leading American archaeologist, first presented their paper listing a number of culture traits which they believed showed a link between Asia and Precolumbian America during historical times (Heine-Geldern and Ekholm 1951). This paper saw the beginning of a renewed interest in transoceanic contact in the 1950s and 1960s culminating in a symposium on the subject at the 1968 annual meeting of the Society for American Archaeology. The symposium papers were published under the title, *Man Across the Sea* with Riley et al (1971) as editors. This book contains 552 pages with articles by 25 authors including archaeologists, cultural anthropologists, linguists, geneticists, botanists, geographers and social scientists. Anthropologist Watson Smith reviewed *Man Across the Sea* (1971) and made the following assessment:

The controversy happily now seems to have reached a plane of rationality on which everyone may stand prepared to accept at least the plausibility if not the certainty of transoceanic contacts. It is recognized that the basic question is not whether ancient mariners actually made New World landfalls but whether the resultant influences were sufficiently sustained and significant to effect a clear modification of the local scene.

Smith is clearly saying then that transoceanic contacts were made.

Examples of Contact

Gordon and Marguerite Ekholm (1974) of the American Museum of Natural History, see evidence of transpacific contact in the scroll-wing motif found in both Shang civilization of China (1700-1100 B.C.) and the Olmec civilization of Mesoamerica (1200-600 B.C.). Betty Meggers (1975), of the Smithsonian Institution, also sees the scroll-wing motif along with several other traits as evidence of contact.

The scroll-wing motif (fig. 1) is apparently a stylized bird's wing. The motif does not conform to any natural bird wing design whether it be an anatomical, feather or color design. The scroll is also found on other animals and may be supposed that the scroll attained a symbolism separate from the bird. The actual meaning of the motif remains open to speculation.

The scroll-wing motif is found only in areas of the Old World outside of China where Chinese influence has been demonstrated.

Since the scroll-wing has no real basis in nature, we cannot argue that the design was independently invented by more than one culture as a result of copying nature. Also, because the Old World distribution is limited to areas with demonstrated Chinese influence, we are led to believe there was only one culture that originated this design, the Shang civilization, which began about 500

years before and slightly overlapped the Olmec civilization (seen by Book of Mormon scholars as representing part of the Jaredite culture). Their conclusion then is since the scroll-wing was an important motif in both Shang and Olmec there was historical contact between these

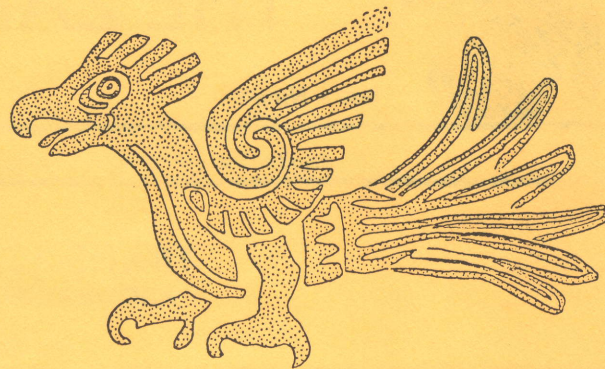


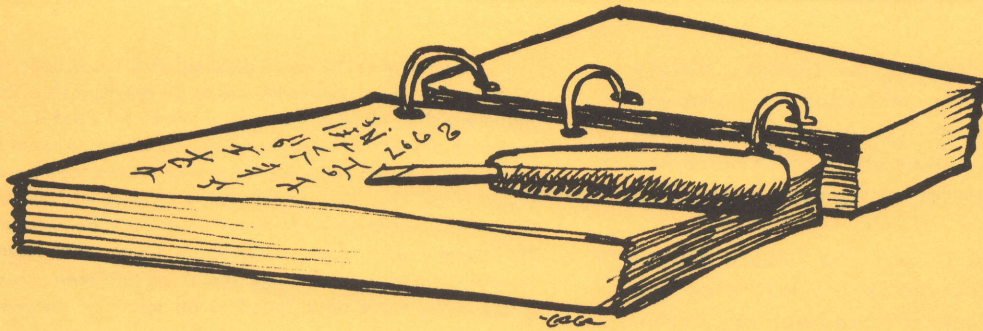
Fig. 1 Two examples of the scroll-wing motif

cultures or that these cultures developed from the same mother culture.

Current Book of Mormon scholarship holds that the Jaredites were the mother culture for both Shang and Olmec. The archaeological evidence from the Middle East and Asia and the brief account in the Book of Ether support the theory that the Jaredites left the Sumerian area of Mesopotamia 2500-2350 B.C. and traveled across Asia before undertaking their ocean voyage (See Nibley, 1952, and Simmons, 1977, for an excellent discussion of this theory). They could well have become ancestors to the Shang civilization physically as well as culturally. The Jaredites had their ups and downs after settling in what is believed to be Mesoamerica. They eventually reached a cultural high point. In the days of Lib we read that "never could be a people more blessed than were they, and more prospered by the hand of the Lord (Ether 4:78)." A good description of their material well being precedes this account (Ether 4:70-77). We do not know the exact dates but from the genealogy given in Ether 1:6 it may have begun around 1400 B.C. It is about this time that traces of the Olmec culture begin to be identified in the archaeological record. The highpoint of the Jaredite culture, therefore is identified by Mesoamerican archaeologists as the beginning of the Olmec civilization (see the discussion of Jaredite highpoint in the Zarahemla Record, Issue #2, page 1). It is easy to see if the Jaredites are indeed the mother culture for both Shang and Olmec that some similar traits would be found such as the scroll-wing motif and the other traits discussed by Meggers below.

Betty Meggers, a leading New World archaeologist, authored an article in the *American Anthropologist*, the official publication of the American Anthropological Association, titled, "The Transpacific Origin of Mesoamerican Civilization: A Preliminary Review of the Evidence and its Theoretical Implication." She describes and compares several culture traits that are a part of the Olmec civilization with similar traits found earlier in the Shang civilization. The traits listed are writing (fig. 2), jade,

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Readers' Research

Lehi in the North Pacific An Alternative to the Equatorial Route

By Ralph F. Lesh

The Book of Mormon states that after Lehi's group left the shores of the Red Sea, they "did travel nearly eastward, from that time forth."¹ It also records that "the place of their fathers' first inheritance" was "by the sea-shore, and on the west, in the land of Nephi."² Because of these two references, Book of Mormon scholars agree that Lehi must have reached the New World by sailing across the Pacific Ocean from west to east.

Even though God provided them with navigational guidance in the form of the Liahona ball, they still had to follow existing winds and currents. As Nephi said, they "were driven forth before the wind."³ According to the record, God changed the natural course of the winds only once during the voyage, when He miraculously dissipated a violent storm. During the remainder of the voyage, winds and currents were probably operating very much the same as they do today.

Our present-day conception of Lehi's route across the Pacific was first formulated by the Committee on American Archaeology, which was appointed by the 1894 R.L.D.S. World Conference. Their report, which was published by Herald House in 1898 and 1910, depicted Lehi's group crossing near the equator, apparently following the Equatorial Counter Current.⁴ On their Mercator projection base map, the equator appeared to be the shortest distance to America. This is because on a Mercator projection world map the polar regions are distorted, and appear larger than they really are.

Unfortunately, an equatorial route for Lehi's migration does not appear to be the best possible choice. By traveling north of about 30 degrees latitude, Lehi's ship could have moved eastward across the Pacific Ocean to Mesoamerica in much less time via the Kuroshio (Japan) Current (fig. 1). Unlike propeller driven vessels, a sailing ship has certain limitations. If its shape enables it to skim over the water lightly, it can sail against a current by tacking into a strong head-wind. However, if it is becalmed, it will be pushed back by the current and lose whatever progress it has made. Since winds are variable, this happens quite often. Sometimes sailing captains have to sail for days in a direction they don't want to go, in order to find winds they can tack into. Problems similar to these would be encountered by anyone sailing on the Equatorial Counter Current.

Concerning the winds near the equator, oceanographer F.G. Walton Smith has stated:

"In the Northern Hemisphere the . . . wind belts are the polar easterlies, the westerlies of the mid-latitudes, and the north-east trades of the tropics. The intermediate belts of calm air air the doldrums at the equator and the horse latitudes at about 30 degrees north, where in the days of sailing ships there always existed the danger of being becalmed."⁵

Thor Heyerdahl agrees:

"The so-called Equatorial Counter Current which figures so prominently on many maps as running in an eastward direction between the two wide westbound currents is no more than a narrow belt of eddies and upwellings occurring within the latitudes of calms and confusing winds, the doldrums, dreaded in the days of sailing vessels."⁶



Fig. 1 Proposed migration route for Lehi's group

LEHI (Continued from page 3)

This appraisal has been verified by history. History books tell us that all during the 500 years of European imperialism, ships followed the "Caravel Route", which utilized the Kuroshio Current, taking ships north of Hawaii when moving eastward. It was technologically impractical for them to do otherwise.⁷

All modern attempts to prove the feasibility of Pre-Columbian transoceanic contacts by means of the elusive Equatorial Counter Current have been unsuccessful. For example, there was the ill-fated "Project Pazifik":

"Certainly the most elaborate attempt to cross the Pacific from the Asiatic side by primitive vessel was the so-called 'Project Pazifik', which was realized in 1974 after six years of preparation . . . The object of the experiment was to sail this Asiatic vessel from the China Sea to Ecuador in South America. The faithfully copied experimental junk, named 'Tai Ki', confirmed what we knew from five centuries of early European sailing, primitive navigation from Asia into the Pacific must follow the Caravel Route. 'Tai Ki' could not resist the force of the contrary tropic winds and currents and was dragged helplessly northward. On reaching 40° N, closer to the Aleutians than to Hawaii, the crew of the originally seaworthy but quickly worm-eaten and gradually collapsing junk sent out an SOS and were picked up by aircraft, while the wreck of their vessel was subsequently observed drifting along the coast of Alaska. When the sinking junk was abandoned, the crew had been on board for 114 days and there were still 2,000 nautical miles left to the Northwest Coast of North America."⁸

At least three other groups have tried to navigate the Equatorial Counter Current in primitive crafts and failed. The "La Cantuta I" had to be rescued. The "Pacifica" gave up after traveling in circles for 143 days.⁹ And veteran sailor Eric De Bisschop wrestled with the Counter Current for **three years** without getting farther east than the Gilbert and Marshall Islands. Tiring of that, he headed for Honolulu by sailing north of 33 degrees latitude, to find winds coming from the west.¹⁰

Based on all the available evidence, the Equatorial Counter Current does not appear to be a feasible route for Lehi's voyage. Fortunately, a better route exists. If, after passing the East Indies, Lehi had gone north past the Philippines, he would have been caught in the powerful eastward moving Kuroshio Current (Japan Current). On this current, they could have easily sailed all the way to Mesoamerica, by passing north of Hawaii. The northern extreme of this current was probably the route followed by the Jaredites.

Upon nearing the coast of southern Mexico, the current begins to flow at right angles to their path. However, the Liahona ball would have enabled them to steer across it. While sailing against both wind and current is very difficult, sailing at right angles to wind and current can be done by compensating for current drift. This would have allowed them to land somewhere along the southwest coast of Guatemala or El Salvador, in keeping with the Tehuantepec Theory of the Book of Mormon geography.

The same historical date which condemns the equatorial route, supports the North Pacific route. It is so easy to make the North Pacific passage that various items from Japan are continually being washed ashore in North America. Sailor and sea historian Charles A. Borden writes:

" . . . for the past 250 years disabled craft have been picked up adrift in the great clockwise circle of the Kuroshio Current or found wrecked along the shores of the North Pacific. . . . Of one hundred disabled Japanese junks, in which several hundred sailors were found still alive, forty-four were encountered at sea and fifty-six, after floating helplessly for months, were stranded or wrecked on islands and coastal areas from the Aleutians to the Northwest Pacific Coast . . . Japanese junks have been carried toward America at an average rate of ten to fifteen miles or more a day. Some have been found as far south as Mexico."¹¹

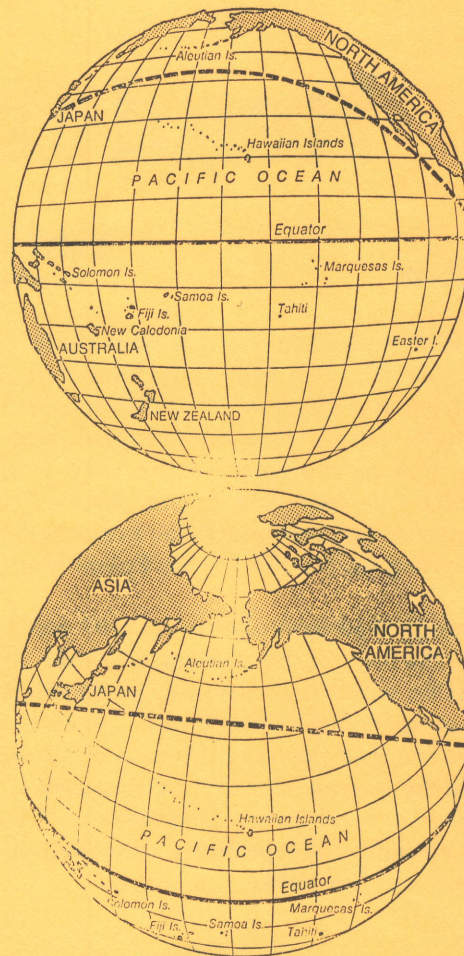


Fig. 2 Two views of the globe showing that the Kuroshio route as well as the equatorial route is a straight line (after Heyerdahl 1979)

At a speed of fifteen miles per day, it would have taken the Jaredite barges 600 days to cross the 9,000 miles from China to Mesoamerica. If you allow an extra 11 miles per day to compensate for the "furious wind"¹² which God provided to help propel them toward the promised land, the crossing would have taken 346 days. This is very close to the "three hundred and forty and four days" given in Ether.¹³ Lehi's ship, being a sailing vessel, could have made the crossing in about four-and-a-half months.¹⁴ On the Equatorial Counter Current, those months could have stretched into years.

It has been suggested that the equatorial route would have kept Lehi's people, a desert people unaccustomed to extreme cold, in a more temperate climate. However, the Kuroshio Current is a warm current.¹⁵ Without its warming influence, Alaska would be virtually uninhabitable. Also, it is a very wide current encompassing about 15 degrees in width (900 miles).¹⁶ This means that Lehi's

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A BOOK OF MORMON

TOUR GUIDE

Part 1

TEOTIHUACAN - City of the Gods

By Raymond C. Treat

It is very enjoyable to view pictures of ruins or to visit them as tourists, but most people wish they were better prepared to appreciate what they are seeing. Descriptions of most ruins are not available until you reach the country of designation and then little time is available to study the information. It is even more difficult to find any information correlating the sites with the Book of Mormon history. For this reason, this series of articles will present the major archaeological sites in Mesoamerica with their possible Book of Mormon correlation and significance.

It is fitting to begin this series with the most famous archaeological site in Mexico - Teotihuacan (pronounced Tayoh-tee-wah-KAN). It is the largest Precolumbian city in the New World and rivals the National Museum of Anthropology in Mexico City as the top tourist attraction in Mexico.

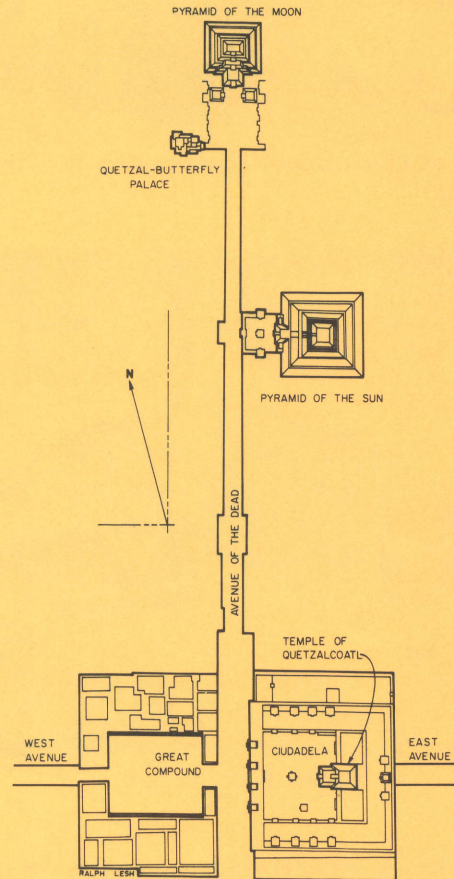
ARCHAEOLOGICAL WORK

The history of archaeological work at the site understandably goes back to the beginning of professional archaeology in Mesoamerica. The first major work at Teotihuacan, aside from the reconstruction of the Pyramid of the Sun in 1910, was under the direction of Manuel Gamio and included a study of the surrounding valley (Gamio 1922). A number of smaller studies were conducted throughout the years.

Most of our information about Teotihuacan comes from the 10-year mapping project which started in 1962 under the direction of Rene Millon. Work on publishing the results still continues. Volume 1 of a several-volume series has been completed so far (Millon 1973). Teotihuacan is situated in a valley of the same name which is an extension of the Valley of Mexico. A survey of the Teotihuacan Valley was made in conjunction with the mapping project (Sanders 1965). Other surveys were made of parts of the Valley of Mexico (Blanton 1972, Parsons 1971). One of the goals of these studies was to determine the relationship of the surrounding area with this gigantic city. It was found that ninety percent of the total population of the Teotihuacan Valley lived in the city during its zenith.

LOCATION AND SETTING

The site is an easy 25 miles northeast of Mexico City via a toll road built especially to it. The name, Teotihuacan, is Nahuatl (the language spoken by the Aztecs) for "city of the gods" or "the place where (men) become gods." The original name of the city is unknown. Most people simply refer to the site as "Teo" or if you are in Mexico City, "the pyramids."



Simplified map of "downtown" Teotihuacan

SITE DESCRIPTION

The nucleus of the city was divided into quadrants which were determined by the north-south axis of the Street of the Dead and by the east-west axis, now called East and West Avenues. Today's entrance to the site, where the museum, shops and restaurant are located, was in former days the Great Compound or marketplace. It was here that both local and exotic goods were available. Merchants specializing in long-distance trade brought in goods from all over Mesoamerica in exchange for obsidian tools and other items produced at Teotihuacan. Directly east of the marketplace was the Ciudadela (Citadel). Midway between the Compound and the Citadel you stand in the geographic center of the city. Together the Citadel and the Great Compound probably comprised the commercial, bureaucratic and religious center of this 8-square-mile city of 125,000.

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TEO (Continued from page 5)



Sculpture of Quetzacoatl decorating the Temple of Quetzacoatl



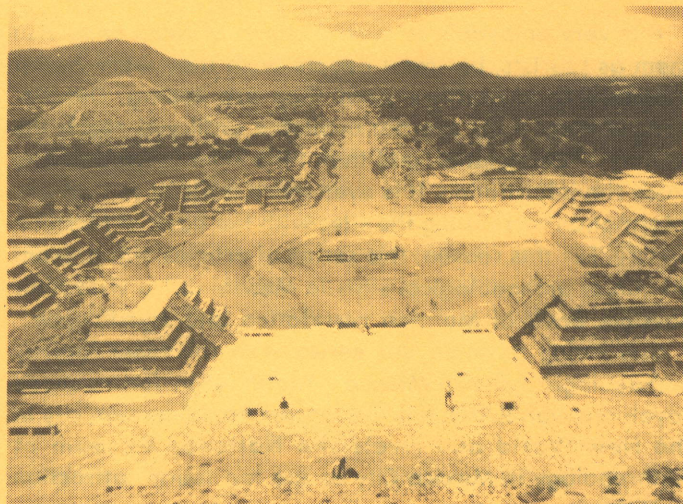
Pyramid of the Sun

The best-known structure in the Citadel is the Temple of Quetzacoatl. The original structure was elaborately decorated with alternating sculpture of Quetzacoatl (a feathered serpent) and a goggle-eyed figure most authors call Tlaloc, the rain god. The main god of Teotihuacan is generally thought to be Tlaloc; however, it also could have been Quetzacoatl. At any rate, the original Temple of Quetzacoatl was later covered by a pyramid undecorated with sculpture. There is a reconstruction of a portion of the Temple of Quetzacoatl in the original colors in the National Museum of Anthropology in Mexico City. Some of the colors can be seen on patches of stucco still remaining on the original structure.

Looking north on the Street of the Dead from the center of the city, the major attraction is the Pyramid of the Sun on the east side of the street. It is 700 feet long on a side and is a little over 200 feet high. The estimated date of construction is A.D. 100. Tunneling by archaeologists has demonstrated that the Pyramid of the Sun was constructed over a smaller pyramid that was probably constructed before the time of Christ. There is an ancient tunnel under the pyramid leading to a cave that once had water. The

Pyramid of the Sun was built in stages which will be discussed in the culture history section.

The Pyramid of the Moon, somewhat smaller than the Pyramid of the Sun, marks the northern end of the Street of the Dead. On the west side of the street near the Pyramid of the Moon is an elite residence called the Quetzal-Butterfly Palace. A central courtyard is bordered by an arcade and three large rooms which were probably used for conducting business. Connected to these is the living area.



Looking south down the Street of the Dead from the top of the Pyramid of the Moon. Pyramid of the Sun on the left.

The Street of the Dead was a broad, paved avenue 55 meters wide and originally lined with more than 100 pyramids, temples and residences. The street extended south well beyond the center of the city as well.

Teotihuacan was divided into **barrios** or neighborhoods. Different **barrios** would specialize in the production of certain craft items such as pottery, stone work and obsidian tools. There was at least one foreign **barrio** made up of residents from Oaxaca. Another **barrio** which Millon has called the Merchants Barrio contains a large amount of pottery from the Gulf Coast area, Yucatan and Guatemala.

Economically, Teotihuacan was best-known for the production of obsidian tools. In addition to the utilization of nearby sources, there was extensive importation of unworked obsidian (volcanic glass). Not only did certain neighborhoods specialize in working obsidian but they further specialized in making certain types of obsidian tools such as blades. More than 500 workshops of all kinds have been identified and an estimated 25 percent of the population of the city worked in craft production. However, farmers no doubt comprised the largest percentage of the urban population.

There were over 2600 buildings at Teotihuacan, including over 2000 apartment compounds. The compounds were variable in size with estimates of 20-100 inhabitants per compound. Also of interest to the tourist in these compounds are the murals. Some of these murals have been reproduced at the National Museum of

Anthropology. Studies of the murals have shown changes in cultural values throughout the history of the city from the rain god and butterfly (thought to be a symbol for the soul), to war symbols of owls, arrows and shields, and finally to cult objects.

CULTURE HISTORY

It will be interesting to trace the pattern of growth through time of this greatest of all Mesoamerican cities. We will do this by phases. The history of Teotihuacan, like all archaeological sites, is divided into time periods called phases. The dates for the phases are based on carbon-14 and on cross-ties with the lowland Maya. It should be remembered that the phase dates are estimates and are subject to future reinterpretation.

The Patlachique Phase (ca. 150 B.C.-A.D. 1)

Teotihuacan grew beyond village status during this period and occupied an area of more than 6 square kilometers (2.37 square miles). It is possible that the building found inside the Pyramid of the Sun was built during this phase. Millon (1973) believes that the growth of the obsidian workshops was mainly responsible for the early growth of Teotihuacan. There would be nothing for the tourist to see today that remains from this phase.

The Tzacualli Phase (ca. A.D. 1-150)

Teotihuacan reached its maximum size of 8 square miles and the "Street of the Dead" was laid out during this period. Along both sides of the Street of the Dead are a number of three-temple complexes. More than twenty of these were built during the Tzacualli Phase. The Pyramid of the sun was built and probably enlarged twice during this phase, and was very close to its present height by the end of the Tzacualli Phase. The innermost Moon Pyramid was also constructed at this time. This period experienced a major expansion of the manufacturing of obsidian tools for which Teotihuacan is famous. The phenomenal growth of Teotihuacan from A.D. 1-150 along with its establishment as a leading religious center fits in well with what we might expect during the Nephite Golden Age (A.D. 34-231).

The Miccaotli Phase (ca. A.D. 150-200)

The Ciudadela compound - the religious and political center of the city and residence of its rulers - was built during this phase. Also the second-to-last layer of the Moon Pyramid was added and the very uppermost part of the Sun Pyramid was added. There was probably major building activity along the Street of the Dead. The platform in front of the sun Pyramid may date to this time. By the end of this phase, the Street of the Dead was the most impressive architectural site in the Western Hemisphere.

The Tlamimilolpa Phase (ca. A.D. 200-450)

The Pyramid of the Moon was finished and the Moon Plaza was built. More significant than this, however, was the construction of the residential compounds that can still be seen today. These were made of stone and cement,

more permanent in construction than the earlier residences, and were surrounded by high stone walls. This was not the case earlier. Millon (1973) points out that these compounds represented a major change in the way people lived in the city and implied ". . . at the very least a major reorganization of Teotihuacan society (Millon 1973:63)." Whatever the reason for this great change in how the people in Teotihuacan lived, it occurred during the same time period that great changes were occurring in the lives of the Book of Mormon peoples. The high stone walls may have had a defensive function. In addition to the walls around each compound, there were walls around several parts of the city which also could have been built for defense.

During this time there is an enormous increase in the working of obsidian along with the spread of Teotihuacan influence to many parts of Mesoamerica. The timing of this spread of influence is important to the understanding of how it fits into Book of Mormon history. Millon (1973:58) states: "By the latter part of the Tlamimilolpa phase, Teotihuacan's influence had spread to many parts of Middle America." It is not clear whether this influence began before the destruction of the Nephite nation in 384 A.D. or afterwards. At any rate, Teotihuacan influence continued into the next phase.

Xolalpan Phase (ca. A.D. 450-650)

It is during the early part of this phase that Teotihuacan's influence reached its maximum level. Millon believes that the obsidian trade and the attraction of the city as a religious center were the main factors behind the spread of its influence.

Metepec Phase (ca. A.D. 650-750)

This is the final phase for the city. There are many questions yet to be answered about the end of this great city. We do know that many buildings in the central part of the city were burned, collapsed and never rebuilt. Also, the evidence indicates that there was no gradual decline in the life of the city, but that there was activity and a measure of prosperity until the end.

BOOK OF MORMON CORRELATIONS

How does the greatest of all New World cities fit into Book of Mormon history? Teotihuacan is located near the northern border of Mesoamerica and in the area that the Book of Mormon calls simply the land northward. As a result, we are told very little about this area, but what we are told does fit into the pattern revealed by Mesoamerican archaeology.

We read that from 54 B.C. (Alma 30:5) to 46 B.C. (Helaman 2:3) many people went into the land northward. In 54 B.C., 5400 men with their wives and children (a conservatively estimated 20,000 people) made this journey. In 46 B.C. "there were an exceeding great many who departed out of the land of Zarahemla, and went forth into the land northward to inherit the land (Hel. 2:3)." It should be pointed out that the land northward includes the valleys of Oaxaca, Puebla, Tehuacan and adjacent areas, as well as the Valley of Mexico where Teotihuacan is located.

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However, Helaman 2:4 does suggest an area similar to the Valley of Mexico: "And they did travel to an exceeding great distance, insomuch that they came to large bodies of water, and many rivers." We know that when Cortez arrived, a large part of the Valley of Mexico was covered by water. The Spaniards later drained most of this water out of the valley.

Nevertheless, we must be careful about specific geographic correlations dealing with the land northward prior to the great upheaval at the time of the crucifixion of Christ since . . . "there was a more great and terrible destruction in the land northward; for behold, the whole face of the land was changed . . ." (3 Nephi 4:10). However, the distribution of archaeological sites does uphold the idea that there was a large body of water in the Valley of Mexico before the upheaval.

Regardless of arguments about specific geography, we do know there were migrations of Book of Mormon people into the land northward just prior to the time of Christ and we know this was the period when Teotihuacan began its rise as a city.

Following the upheaval comes a time of peace, prosperity and growth which the Book of Mormon calls the Golden Age. The time of growth and prosperity of Teotihuacan fits this pattern. Even more significantly, however, there is a major shift in the way of life at Teotihuacan during the same period when the Golden Age is ending in the Book of Mormon.

SUMMARY

There is much more information available yet that can be learned about this site. However, enough of the outline has emerged to enable us to say that the culture history of this great city does not contradict the culture history of the Book of Mormon. It begins at a time when many went into the land northward. It flourished during the Golden Age. Its way of life changed during the time when the Book of Mormon said there were great changes. The city continued to flourish after the Nephite downfall. It was apparently too far north of the final battle of 384 A.D. to be directly affected.

We read from Helaman (2:11, 12): "And it came to pass that there were many of the people of Ammon who were Lamanites by birth, did also go forth into this land. And now there are many records kept of the proceedings of this people, by many of this people, which are particular and very large, concerning them."

We know from these verses that records were kept by those who lived in the land northward. We are confident that those records will shed additional light on the great city of Teotihuacan.

We look forward to their coming forth!

References Cited

Blanton, Richard E.

1972 *Prehispanic Settlement Patterns of the Ixtapalapa Region, Mexico*. Pennsylvania State University Occasional Papers in Anthropology, no. 6

Gamio, Manuel

1922 *La poblacion del Valle de Teotihuacan*, 3 vols. Secretaria de Agricultura y Fomento. Mexico City.

Millon, Rene

1973 *Urbanization at Teotihuacan, Mexico*. Vol. 1. The Teotihuacan Map, Part One: Text. Univ. of Texas Press.

Parsons, Jeffrey R.

1971 *Pre-Hispanic Settlement Patterns in the Texcoco Region Mexico*. Memoirs of the University of Michigan Museum of Anthropology. no. 3.

Sanders, William T.

1965 *Cultural Ecology of the Teotihuacan Valley: A Preliminary Report of the Results of the Teotihuacan Valley Project*. Department of Sociology and Anthropology. Pennsylvania State University.

AGRONOMISTS NEEDED

Jim Christenson, president of the La Buena Fe Association, has provided the following information.

The La Buena Fe Association has need for an agronomist or person with a professional background in agriculture. We have been negotiating with the Government of Honduras regarding the release of farm lands at the mission, and it appears that 100 acres will be made available soon. If this happens we need to be ready to start an active program of utilizing the land as soon as possible. The main crops will be sugar cane, rice and soybeans. The farming operation will involve an extensive agricultural education program, that is teaching local farmers better methods of farming on a small scale—5 to 10 acre plots—increasing the yields, and providing for more protein production. It will be coupled with a consumer education program for encouraging increased use of soybeans and high-protein corn in the diet.

There will be considerable experimentation with new varieties of seeds, and adaption of modern farming methods to the time-honored, simple methods of farming traditionally used in Central America. The agronomist will also have opportunity to assist with church services in rural villages around La Buena Fe. The volunteer must have a knowledge of the Spanish language, or be able to attend five weeks of special language training. Anyone interested in serving as a volunteer in this field should contact Jim at the Association address, P.O. Box 2, Independence, MO 64051 (tel. 816-461-6900).

There is also an opening for an agronomist in Guatemala. La Buena Fe Association is planning on opening a health/agricultural/evangelistic program in the area of Chimaltenango this fall. Here the main crops are wheat, corn, and beans. The elevation is much higher than Honduras, and the farming methods are considerably different. The program will be administered first among the Cakchiquel Indians, under the auspices of a local community development cooperative. A degree in agriculture is required, as well as a knowledge of the Spanish language. For the volunteer that does not speak Spanish, an intensive five-week course can be taken in Antigua, Guatemala. It is expected that the agricultural workers in Guatemala will also visit Honduras, and vice versa, so there will be exchange of ideas and mutual support for both projects. It is also expected that the health and agricultural teams will work in the same areas of Guatemala. Subsistence financial support is available for the volunteer workers. Anyone interested in this project is also urged to contact Jim.

Marijuana and the Book of Mormon

By Neil Simmons

"So why not smoke marijuana?" The girl asking the question was obviously sincere and the camp counselor was just as obviously non-plussed. (You have heard this kind of argument before).

Her counselor answered that drugs are bad and marijuana is a bad drug. The girl disputed his observation. "There is no conclusive scientific evidence that marijuana is harmful to the body," she stoutly defended.

He then argued that marijuana was addictive and her own church's policy was strongly against the use of addictive substances or practices. She said that she smoked as much or as little as she liked and that she was not addicted.

He said it was illegal and that we are under scriptural injunction to be obedient to the laws of the land. She asked him if he drove "fifty-five miles an hour or less all the way to camp."

In the ensuing silence, the frustration of both individuals was apparent. The teenager was frustrated because she wanted to continue a practice she enjoyed. The adult was annoyed because he realized a major question of right and wrong was before him and he could not find a way to deal with it effectively.

The argument went on, including drinking, drug pushing and other related activities. Each presented the standard defense and argument and each failed to answer the real question at issue. A more meaningful discussion might have explored how drugs affect man's relationship with God, especially in regard to his ability to reason and think.

AS A MAN THINKETH

The Reorganized Church of Jesus Christ of Latter Day Saints teaches that intelligence is the glory of God. Human reason, the love of truth, and mental acuity are gifts from God kindled in men by Divine power. We believe that God gives men reason and the power to determine truth. We believe that this is caused by the impress of Divine nature. "Christ is the light" and he lights everyone who comes into the world. Truth and intelligence, knowledge and wisdom, light and glory interwoven in men evidence the presence of God. To the extent that mankind honors, cherishes and rightly uses these gifts, he dwells in the presence of the glory of God.

When Adam and Eve lived in the presence of God, they made a deliberate choice to partake of a substance which would separate them from God. After eating the forbidden fruit, Adam hid from God. We know that mankind was no longer able to live in the presence of God. Although Christ is in all things and through all things, nonetheless, our daily life is one wherein we perceive the Lord's presence dimly or not at all.

How pleased Satan must be to have men so bound and snared that they are blind to God even while surrounded

by His glory. Clearly, anything which limits, distorts or destroys the light and glory of God is a weapon for the adversary.

Marijuana, along with a host of other drugs, including alcohol, is an effective Satanic snare. All these drugs have one terrible function in common: they reduce or eliminate the capacity to reason or think intelligently. Anyone who willingly uses drugs which impair his or her ability to think and reason is re-enacting the ancient rebellion of Adam. Drug users drive the glory of God from their immediate consciousness. The teenager who gets "stoned," like Adam, "hides in the Garden" from the Lord's presence.

THE SYMBOLISM FITS

It is interesting that the Book of Mormon refers to devilish snares and traps. II Nephi 12:23-29 suggests several means of binding men in "awful chains and strong cords" and leading them carefully down to hell.

Yea, and he (Satan) leadeth them by the neck with a flaxen cord, until he bindeth them with his strong cords for ever.

(2 Nephi 11:94 emphasis added)

We can be certain that Nephi carefully chose his words when he engraved the imperishable metal of his record. The considerable labor of smelting ore, making the metal plates and engraving them assures us that his choice of words was both studied and exact. To Nephi, *flax* and a *flaxen* cord are illustrative of a terrible Satanic snare. While today we know of no awful evil associated with flax, the ancient world did.

Herodotus (Book IV:74) in the fifth century before Christ, wrote of the fabrication of a kind of cloth so like linen it could not be distinguished from linen except by the most expert. Instead of flax, they used a plant, *Cannabis sativa*, for fiber both to weave and to make cordage. It is generally accepted that ancient New World peoples did not have flax. But since both flax and linen are mentioned in the Book of Mormon, we must suppose that they knew of a plant which was a close equivalent to flax. In fact, the ancient people of Mesoamerica, according to European contact sources, did cultivate a plant which they used to make both a linen-like cloth and rope (Encyclopedia Americana, 58th edition). The plant was *Cannabis sativa*. It is more commonly called marijuana.

Why would the Book of Mormon writer characterize a flaxen cord as a devilish snare? Perhaps the Book of Mormon people knew that the use of mind-altering drugs separates us from God's glory and ensnares us ever more deeply, thus making us captive to Satan. Let us learn from the hint of the scripture not to be led by any "flaxen cords" into captivity. We must be jealous of the divine gift of our mind and protect and enhance our intelligence, wisdom and acuity of reason as careful stewards of God's gift of glory.

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### MAILING ADDRESS CHANGED

Please note that the mailing address for the Zarahemla Research Foundation has been changed. The new address is P.O. Box 1727, Independence, MO 64055.



LEHI (Continued from page 4)

ship could have passed very close to the warm climate of the Hawaiian Islands on the southern extreme of the current, while the Jaredites probably traveled the northern extreme.

On a Mercator projection world map, the route I am proposing looks like a great meandering curve. It is in truth, however, a straight line. To understand this fact, you must view our planet as it really is, by looking at a world globe. On a globe, the vast extent of the Pacific Ocean becomes apparent. With an area nearly equal to all the other oceans combined, it is an entire hemisphere unto itself.<sup>17</sup> Indonesia and Mesoamerica form antipodes, or opposite parts of the earth, on that hemisphere. If you turn the globe so that the Pacific Ocean is facing you, and then tilt the north pole towards you around the imaginary axis formed by the antipodes, you will see that the North Pacific route has become a straight line and the equator now appears to be a great curve (fig. 2). This principle is known as the "Great Circle Route" and is used by airplane navigators every day.

Because of the great circle principle, it can be seen that the equatorial and North Pacific routes are practically the same distance "as the crow flies". But, "as a fish swims" the North Pacific route is actually a much more efficient route. That is because the Kuroshio Current is much more powerful than the Equatorial Counter Current and flows through the ocean much more rapidly. It therefore acts like a giant conveyor belt, and (as the Jaredite drift voyage demonstrated) would continue to hurry you along towards your destination even if you never unfurled a single sail. This massive displacement of ocean water effectively reduces the distance which would have to be covered through wind power alone.

Based on these facts, I believe the Kuroshio Current is a much better choice for a migration route than the Equatorial Counter Current. Both currents satisfy the scriptural requirements of the Book of Mormon. However, the Kuroshio Current fulfills the historical and oceanographic requirements to a greater degree than the Equatorial Counter Current. Hopefully, future research will be able to determine whether these conclusions are correct.

**References Cited**

- 1 | Nephi 5:55.
- 2 Alma 13:71.
- 3 | Nephi 5:181.
- 4 **Report of the Committee on American Archaeology**, pp. 46-47, Herald Publishing House, Lamoni, Iowa, 1910.
- 5 Smith, F.G. Walton  
1973 *Rivers in the Sea. The Seas In Motion*, pp. 192, Thomas Y. Crowell Company, New York.
- 6 Heyerdahl, Thor  
1979 *Paths Across the Oceans, Early Man and the Ocean*, pp. 54-55, Doubleday & Company, Inc., Garden City, New York.
- 7 *ibid.*, pp. 41 & 54.
- 8 *ibid.*, pp. 41 & 44.
- 9 *ibid.*, pp. 39-40.
- 10 Borden, Charles A.  
1967 *Ocean-Cruising Junks. Sea Quest*, pp. 229-230, Macrae Smith Company, Philadelphia.
- 11 *ibid.*, pp. 226 & 228.
- 12 Ether 3:6.
- 13 Ether 3:13.

- 14 Borden Charles A.  
1967 *Ocean-Cruising Junks. Sea Quest*, pp. 234-238, Macrae Smith Company, Philadelphia.
- 15 Ricketson, Jr., Oliver G.  
1940 *An Outline of Basic Physical Factors Affecting Middle America. The Maya and Their Neighbors*, pp. 20-21, University of Utah Press.
- 16 Map Supplement to *National Geographic*, December 1970, Vol. 138, No. 6 - *The World*.
- 17 Freuchen, Peter  
1957 *The Magic Figure. Book of the Seven Seas*, pp. 43. Julian Messner, Inc., New York.



**YOUR RESEARCH IS NEEDED**

Beginning with this issue we are inviting our readers to share their Book of Mormon research with us. We are interested in any topic related to the Book of Mormon. Topics may deal with internal or external evidences or doctrinal issues.

Papers will be reviewed by a committee for clarity of expression, suitability of topic and quality of research. Proper documentation is essential.

We also invite your letters commenting on the research presented in this column. Letters should be addressed to the Foundation and will be forwarded to the authors.

We believe that this column will offer an opportunity to increase our understanding and use of the Book of Mormon which is also the goal of the Zarahemla Research Foundation.



**Notice of Meeting**

The annual meeting of the Zarahemla Research Foundation will be held on Sunday, August 26, 1979 at 2:00 P.M. at 1111 W. 36th Terrace, Independence, Missouri.

The meeting is open to regular and associate members. Regular members are accorded voting rights and are those who have contributed at least \$25 annually. Associate members are those who make any contribution to the Foundation less than \$25 annually. Associate members do not have voting rights.

Have you made your 1979 contribution to the Zarahemla Research Foundation? Your tax-deductible contribution will be used to publish the Zarahemla Record and other Book of Mormon related materials.

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## A Cherokee Sacred Symbol

By George Knotts

Sacred symbols from the Cherokee nation and Mesoamerica show an apparent relationship. An example of one of the most sacred symbols from both cultures is a cross with a circle around it. This is sometimes depicted by five dots indicating where the cross touches the circle and the center (fig. 1).

Once you become aware that this is a special symbol you will notice it in the symbolism of many tribes. It is very prominent among the old Cherokee. Their eternal fire depicts the symbol which is made up of four logs coming together from the four directions. They dance around the fire forming the circle. Often, in old times, the symbol was on sea shells. You also see it on baskets, on the bottom of pottery, on round shields and on spindle whorls that are spun like tops to make thread out of cotton.

The Cherokee old timers seldom speak of the meaning of this symbol and the young Indians do not appear to have any interest.

In doing some research on Jewish sacred symbolism I found some interesting parallels with Cherokee symbolism. I took these symbols to Red Bird Smith, who was at that time the sacred leader of the Cherokee nation. As I shared my findings with him and explained the meanings, I found that he kept nodding in the affirmative which implied that the Cherokee had the same meanings. I wondered if he was nodding just to be agreeable with me so I interchanged the meaning of the last two points I was showing him. He corrected me, however. Later his son, Croslen Smith, who was working on his masters degree in Indian religion contacted me at Oklahoma State University about this.

The Cherokee have the tradition that they originally came up from the south. The cross and the circle symbol found in both cultures certainly supports the validity of this tradition. This symbol has a sacred meaning to the Cherokee. However, as with many of the sacred teachings of the American Indian, only a portion of the meaning is shared outside of their own people. The center of this symbol represents deity. The four arms of the cross represent the four directions. Each North American Indian tribe has a different color for each of the four directions. Each direction and color has meaning. For the Cherokee the east is red, south is blue, west is black and north is white. The four arms have an additional meaning which is very sacred to the Cherokee and is not shared outside the tribe.

Sejourne (1976:89-94) discusses this same symbol as it is found in Mesoamerica. Some of the symbolic meanings of this five-pointed figure, called a quincunx, are the point where heaven and earth meet, the precious jewel symbolizing the heart, the meeting place of opposed principles, emblem of the sun and the symbol for Venus and for Quetzacoatl.

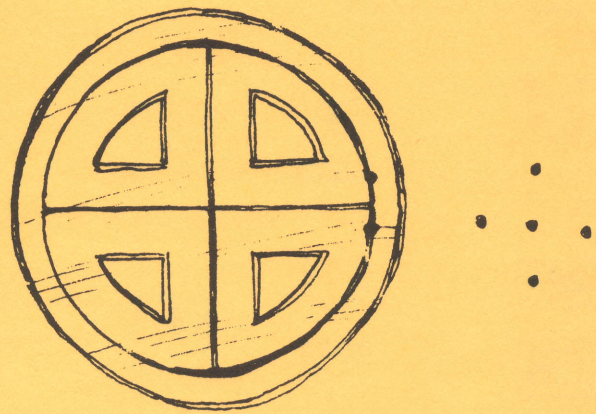


Fig. 1 Variations of a symbol common to many Indian tribes, known as the quincunx.

The four cardinal points of the compass were also associated with colors in Mesoamerica. As with the tribes in North America, the colors were not always the same (Nicholson 1967:21-22).

These brief comments are offered in the hope that some will be stimulated to study symbols or to share any information they may have on the subject.

### References Cited

- Nicholson, Irene  
1967 *Mexican and Central American Mythology*. Paul Hamlyn. London.
- Sejourne, Laurette  
1976 *Burning Water*. Thought and Religion in Ancient Mexico. Shambhala Publications. Berkeley.

### THE FOUNDATION FOR RESEARCH ON ANCIENT AMERICA

We would like to call your attention to another non-church sponsored Book of Mormon research group - The Foundation for Research on Ancient America. This group sponsors lectures locally on various Book of Mormon research topics and also publishes a newsletter. Thelona Stevens serves as President of this foundation. Membership categories are: regular membership \$2, family membership \$5, working membership \$50 or whatever additional you would like to contribute. Send your remittance to: Foundation for Research on Ancient America, 202 S. Pendleton St., Independence, Missouri 64050.

### What is a Witness?

A witness is one who tells what he has seen and heard. A witness does not have to defend or criticize. He is not called upon to make judgment. His task is simply to bear testimony of his own personal experience.

Moroni promises us an individual witness of the Book of Mormon (Moroni 10:3-5). If we are to bear personal witness to God's dealings with the ancient peoples on this continent, the Holy Spirit must give us this witness. Then we may bear testimony of the Book of Mormon.

Pray for this witness.



CONTACT (Continued from page 2)

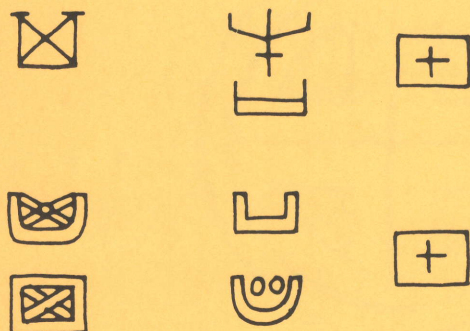


Fig. 2 Comparison of Shang writing (upper) with Olmec symbols (lower)

batons as symbols of rank, settlement pattern and architecture, long range acquisition of luxury goods, feline deity, worship of mountains and cranial deformation. She then explores the possibility that transpacific contact from the Shang civilization was responsible for the development of Olmec civilization.

**Conclusions**

Let us restate the Book of Mormon position on transoceanic contact. The Book of Mormon claims that a contact, a *single* contact was made on three separate occasions. We have already made the point that archaeologists have shifted their position from one of no contact to one admitting some contact. Therefore, we are able to say that the present position of New World archaeology on the subject of transoceanic contact has converged and is in harmony with the Book of Mormon claim of limited contact.

In addition, the idea that transoceanic contact had a significant impact on the New World has been bolstered by the papers given by the Ekholms and by Meggers. The Book of Mormon, of course, makes the claim that the impact was significant. This position of significant impact has certainly not been accepted by most New World

archaeologists but these two papers do represent the beginning of another step in the on-going process of convergence between the ever changing positions of Mesoamerican archaeology and the unchanging position of the Book of Mormon. It is with a great deal of interest and a sense of excitement that we watch for developments in archaeological data that will point to the significance of transoceanic contact.

**References Cited**

Heine-Geldern, R. and G. F. Ekholm  
 1951 Significant parallels in the symbolic arts of southern Asia and Middle America. In *The Civilizations of Ancient America*. ed. by S. Tax, 1:299-309. Chicago.

Huddleston, L.E.  
 1967 *Origins of the American Indians: European Concepts, 1492-1729*. Univ. of Texas Press. Austin.

Kroeber, A. L.  
 1948 *Anthropology*. Harcourt, Brace and World. New York.

Meggers, B.J.  
 1975 The Transpacific Origin of Mesoamerican Civilization: A Preliminary Review of the Evidence and Its Theoretical Implications. *American Anthropologist* 77:1-27.

Nibley, H.  
 1952 *Lehi in the Desert and The World of the Jaredites*. Bookcraft. Salt Lake City.

Riley, CL., Kelley, J.C., Pennington, C.W. and R. L. Rands  
 1971 *Man Across the Sea*. Univ. of Texas Press. Austin.

Simmons, V.W.  
 1977 *Peoples, Places and Prophecies*. Available from Herald House. Independence.

Smith, W.  
 1971 Review of *Man Across the Sea*. *Science* 174:484.

Willey, G.R. and J.A. Sabloff  
 1974 *A History of American Archaeology*. W. H. Freeman. San Francisco.

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