

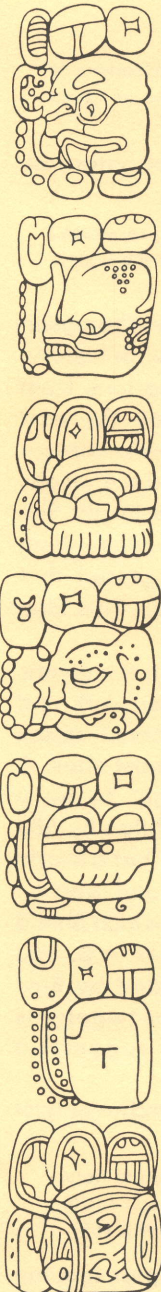


THE ZARAHEMLA RECORD

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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



MAYA HIEROGLYPHS POINT TO THE BOOK OF MORMON

by Neil Simmons and Raymond C. Treat

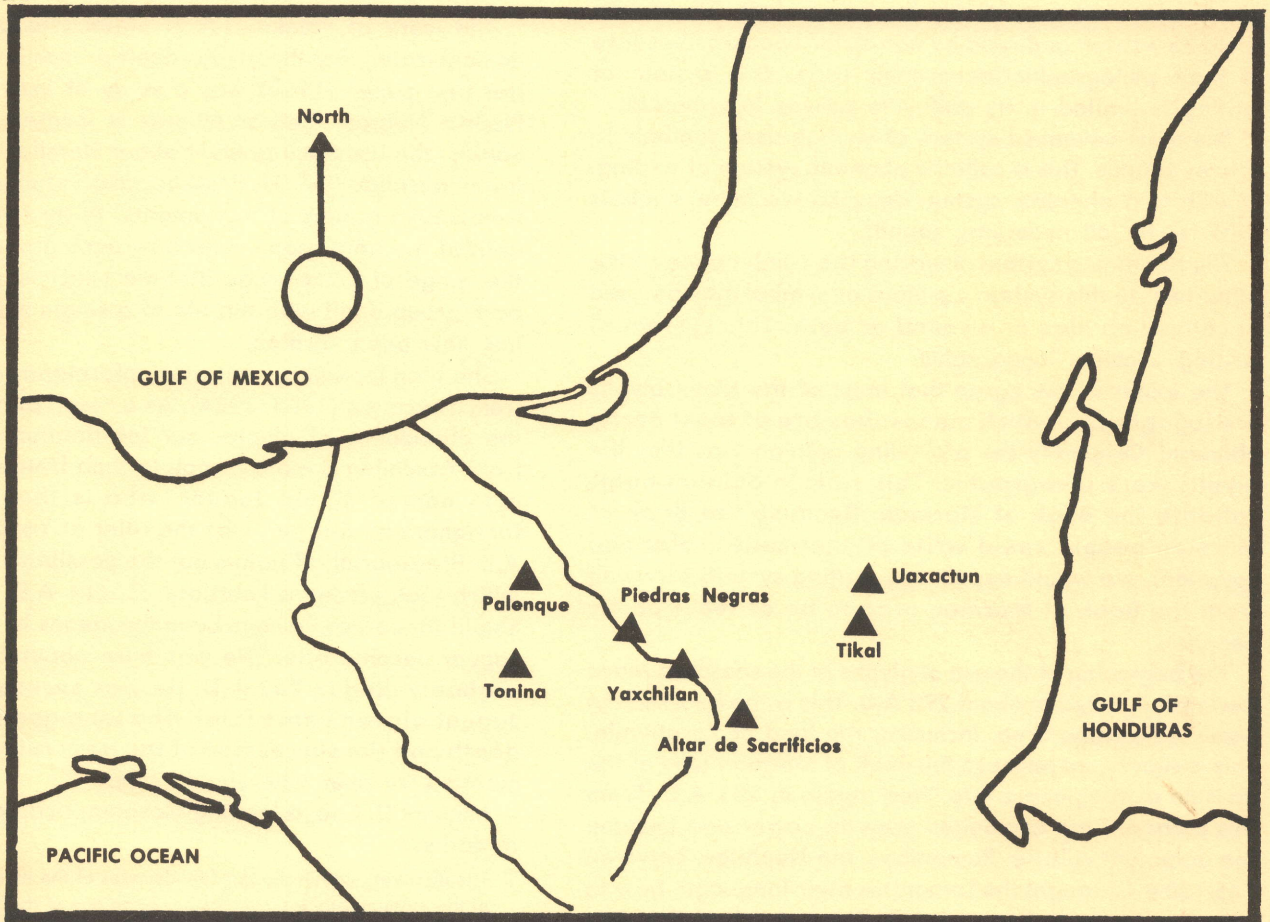


Fig. 1—Southern Mesoamerica showing the location of Yaxchilan, Piedras Negras, Palenque and other Early Classic (200-600 A.D.) centers (after Henderson 1981).

The Book of Mormon is being validated through many lines of evidence. One of the more exciting of these is Maya hieroglyphs.

The Maya glyphs have long attracted the attention of scholars. Sylvanus Morley, considered the father of Maya archaeology, was planning a career in Egyptian archaeology so he could study the Egyptian glyphs but when told about the Maya glyphs, switched to Maya archaeology. Morley, who did not care at all for the rigors

of jungle life, spent a great deal of his time in the jungles of Guatemala and Mexico searching for Maya glyphs. His motivation can be easily understood. The collection and decipherment of the glyphs promised to be the best way to learn about the ancient Maya.

More glyphs continue to be discovered since Morley's death in 1948. The systematic recovery and publication of all the Maya glyphs has been the goal of Ian Graham of the Peabody Museum for many years. Because of his

(Continued on page 2)

diligence he was awarded a grant which allowed him to devote full time to this project for a period of five years. It is most assuredly a part of the Lord's plan that these glyphs be discovered and published so their decipherment can be accelerated. Two important developments in the field of Maya glyphs are of special interest to Book of Mormon believers: 1) the recognition that the glyphs are partly phonetic, and 2) the understanding that the glyphs deal mainly with history.

Maya Glyphs Partly Phonetic

To understand what is meant by partly phonetic we must be aware of the different types of writing systems. There are three basic systems: pictographic/ideographic, logographic, and phonetic. The first system uses pictures or symbols to convey ideas. A modern example is the system of international symbols used for traveling. The symbol conveys the meaning without words. Anyone can understand the meaning of the symbols regardless of the language spoken. An ancient example is Aztec writing which was used extensively for tribute lists. These lists could be written and read by non-Aztec speakers because of their pictographic/ideographic form. This system of writing is limited in its ability to convey information.

The most advanced system of writing uses symbols to convey sounds. This is called a phonetic system of writing. English is a phonetic system because we have symbols (letters) for all necessary sounds.

The remaining system of writing is a combination of the other two. In this system a picture or symbol may be used to convey an idea or a sound or both. This system of writing is called logographic.

The experts now agree that most of the Maya glyphs are logographic which means they are at least partly phonetic. Originally the prevailing opinion was that the glyphs were ideographic. This shift in opinion helps validate the Book of Mormon. Because the Book of Mormon people could write phonetically (reformed Egyptian), we would expect any writing system surviving from the Book of Mormon area to be at least partly phonetic.

The beginning of the use of glyphs in the southern Maya lowlands is dated at about 293 A.D. This is the heart of the Book of Mormon area, including the land of Zarahemla. This is significant because the Book of Mormon tells of the division of the people into "ites" again in 231 A.D. From this point on, the Lamanites grew in power and became the dominant culture. Remember, the Nephites, between 145-123 B.C., taught the Lamanites their language, how to write, and how to keep records (Mosiah 11:49-51). The Mulekites were also taught the Nephite language. Thus the glyphs represent the writing system of a spiritually declining culture—the Lamanites and Mulekites.

Kelley believes the Maya "could have written any word in their language in a completely phonetic fashion (1976:8)". It should be emphasized that even if the glyphs are only partly phonetic, it is still possible to express anything desired using the glyphs. The realization that the Maya glyphs are capable of expressing anything has great significance for the Book of Mormon especially because the glyphs deal mainly with history.

Maya Glyphs as History

The Maya glyphs were not always thought to contain historical information. For many years the prevailing opinion was that the glyphs dealt mainly with the calendar, astronomy and ritual. This opinion is clearly stated in the following quote from J. Eric S. Thompson, who became the leading Maya archaeologist after the death of Morley:

It has been held by some that Maya dates recorded on stelae may refer to historical events or even recount the deeds of individuals; to me such a possibility is well-nigh inconceivable (1950:155).

Then Thompson's opinion began to shift:

It may well be that they (Proskouriakoff's papers) will lead me to revise my views on the impersonality of the texts on Maya monuments (1966:v).

Finally Thompson fully accepted the historical nature of the Maya glyphs:

... work has shown that the generally held view, to which I subscribed (pp. 64-65), regarding the impersonality of the texts is completely mistaken (1971:v).

The work of Proskouriakoff alluded to by Thompson demonstrated that the glyphs dealt primarily with history. Her first paper (1960) was a study of inscriptions from Piedras Negras. Piedras Negras is located on the east bank of the Usumacinta River about 30 miles downstream from Yaxchilan (Fig. 1). Proskouriakoff studied the glyphs from seven groups of monuments, thirty five in all. She noticed the time span covered by each group was within the range of an average lifetime which suggested that each group dealt with the life of a single ruler. This idea has now been verified.

She then looked for historical information in the glyphs from Yaxchilan (1963, 1964). As a result of her work and the abundance of glyphs, our information about rulers from Yaxchilan is more complete than from most sites. A man named Shield Jaguar, who is thought to be a foreigner and usurper, was the ruler at Yaxchilan by 682 A.D. Proskouriakoff points out the possibility that a battle which took place on February 23, 681 A.D. and won by Shield Jaguar, could have been the means by which Shield Jaguar became ruler. He was born about 647 A.D. and probably died in 742 A.D. He was succeeded by Bird Jaguar eleven years later. The long gap between his death and the succession of the next ruler suggests a controversy over who should rule.

Michael D. Coe, a leading Mesoamerican archaeologist remarks:

The discovery within the last few decades of the historical nature of the monumental inscriptions has been one of the most exciting chapters in the story of New World archaeology (1980:165).

This also promises to be a very exciting chapter leading toward a more complete validation of the Book of Mormon because the glyphs begin in the Book of Mormon area within the Book of Mormon time period. Therefore, it is highly likely the glyphs contain some information directly related to Book of Mormon history. Coe also points out that:

So far, no Champollion has appeared who could read the Maya inscriptions *in toto*. But it should be remembered that it was the identification of personal names and titles in the Egyptian script that enabled that great scholar to do what he did. Indeed, the

recognition of the real subject matter of the Maya monumental texts has opened the way to their eventual decipherment (1980:165).

Place Names (Emblem Glyphs)

Another study responsible for the shift in opinion about the historicity of the Maya glyphs was a paper by Heinrich Berlin (1958). He noticed certain glyphs, which he called Emblem Glyphs, were associated with certain sites. He called these glyphs Emblem Glyphs because he did not know if they were place names, names of local dynasties (ruling families) or local deities. Kelley, who believes the Emblem Glyphs (EGs) are place names, points out

No EG can be read or recognized as a definite, known deity name, a fact which seems to me to be strong evidence against that hypothesis (1976:215).

After giving evidence why he thinks Emblem Glyphs do not refer to dynastic names he says:

There is a final reason for regarding the EGs as place names, which I personally find very convincing. We now know a great deal more about the glyphs than we did even a few years ago, and, if the EGs are not place names, then there seems to be no possibility that there is a major unexplored category of glyphs which could be place names. The later Mayas put a considerable emphasis on place names in migration legends and in other types of historical references. The Mixtec codices nearly always identify people in terms of their place of origin. Finally, otherwise comparable inscriptions from all over the world do contain place names. Other categories of glyphs strongly suggest that they are patronymic or dynastic names, and there are glyphs which may refer to local deities, so that these subjects may be treated in the inscriptions even if the EGs are not interpreted as referring to them. On a priori grounds, there ought to be place names in the inscriptions, the EGs function as if they were place names, and there is no other known body of glyphs which could furnish place names; hence, I regard the EGs as place names (Kelley 1976:215).

Kelley is one of the leading authorities on Maya glyphs. His book, **Deciphering the Maya Script** (1976) is the latest general review of the field of Maya glyphs.

The experts are still divided on what the Emblem Glyphs represent. Kelley, as stated, believes they are place names. Proskouriakoff thinks they are dynastic names and Berlin is undecided. The Book of Mormon provides a solution to this problem:

... it was the custom of the people of Nephi, to call their lands, and their cities, and their villages, yea, even all their small villages, after the name of him who first possessed them . . . Alma 6:8

In view of this scripture, it appears both ideas are correct. We must assume that the man who first possessed a city was the leader. If his descendents continued to rule, the name of the city and the name of the dynasty would be the same (2 Nephi 4:12, 13).

It should be noted that as long as Emblem Glyphs are designating something local, that is, something connected to specific sites, and there does not seem to be any disagreement about this, then Emblem Glyphs can probably be used to locate Book of Mormon cities. Emblem Glyphs have been identified for at least fifteen sites. Marcus's study (1976) of the distribution of Emblem Glyphs has demonstrated that they do refer to specific sites (Fig. 2).

Because Emblem Glyphs represent site names given during or close to Book of Mormon times, there is a possibility there are some clues from these glyphs about

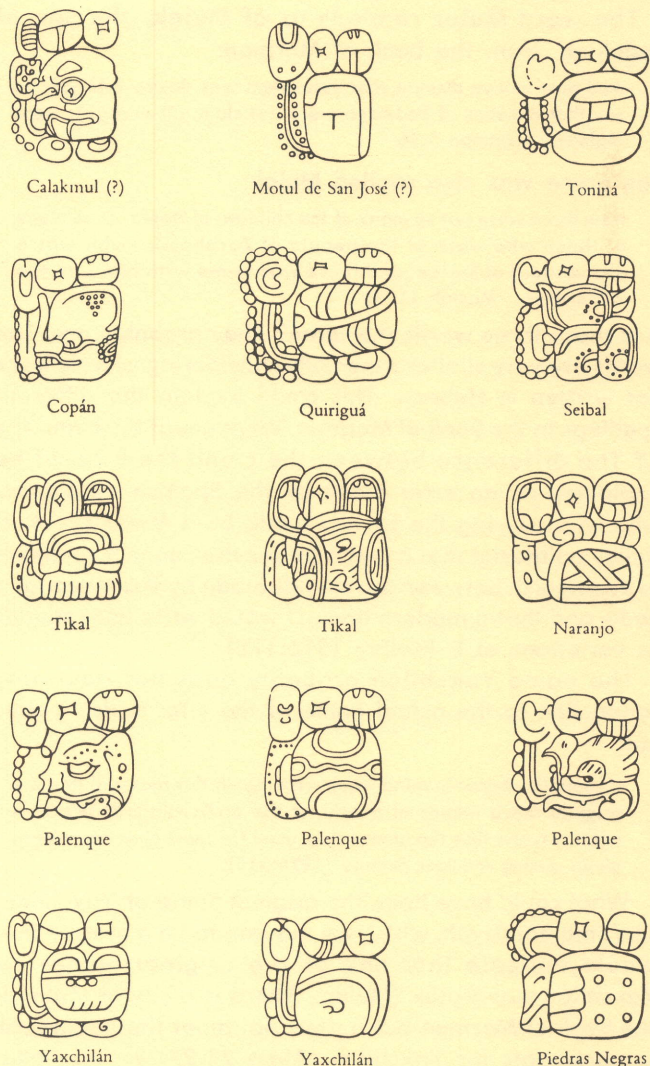


Fig. 2—Emblem Glyphs from various sites (after Marcus 1976).

the specific location of some Book of Mormon cities. For example, a Yaxchilan Emblem Glyph may contain such a clue.

The Yaxchilan Emblem Glyphs

Yaxchilan was a major Mesoamerican city and the capital of the Usumacinta River region (Marcus 1976:74). A few sites have two or more Emblem Glyphs including Yaxchilan. Yaxchilan has two Emblem Glyphs and possibly a third. Assuming that Yaxchilan is Zarahemla we could speculate that the three Emblem Glyphs might reflect the three groups that at one time or another controlled Zarahemla—the Mulekites, Nephites and Lamanites. The two primary Yaxchilan Emblem Glyphs usually occur together (Fig. 3). The main sign (the large symbol in the center) of the Emblem Glyph on the left has been given the number T-511 in Thompson's **A Catalog of Maya Hieroglyphs** (1962:110-111). The Maya name for this main sign is **Muluc**. The translation of this main sign was given by the Maya to the Spanish at the time of the Conquest. There has never been any doubt about the correctness of the translation. The glyph on the right (T-562) is called Cleft-Sky which Kelley calls a dubious but not impossible interpretation (1976:218). The **Muluc** version of the

Yaxchilan Emblem Glyphs sometimes occurs alone as in the two examples in Figure 4.

The word **Muluc** reminds us of **Mulek**, the son of Zedekiah, from the Book of Mormon:

And now will ye dispute that Jerusalem was destroyed? Will ye say that the sons of Zedekiah were not slain, all except it were Mulek? Helaman 3:56

The name was also spelled **Mulok**:

Now there were not so many of the children of Nephi, or so many of those who were of the people of Zarahemla, who was a descendant of Mulok, and those who came with him into the wilderness. Mosiah 11:78

Are these three words the same? They probably are. The words are very similar especially considering vowels were not written in Hebrew. This could explain the different spellings in the Book of Mormon. What about the c and the k? The difference between the c and the k could be explained as an error made by the Spanish missionary who was copying the sounds made by a Maya speaker. Kelley points out that it was hard for the Spanish speakers to distinguish between the sounds made by the Maya for c and k and that a modern linguist would write both sounds as variations of k (Kelley 1976:178).

The name Yaxchilan probably does not have any connection to the actual name of the site. Kelley points out:

It should be borne in mind when working on this material that the original Maya names of nearly all the archaeological sites are unknown and that the names now used for most sites have been given during the last century (1976:315).

What could have been the original name of Yaxchilan? The Emblem Glyph, which we assume to be a place name, would indicate that one of the original names for Yaxchilan was Mulek (Muluc). There is a city of Mulek in the Book of Mormon but it does not meet the geographic requirements for Yaxchilan (Alma 24:27-29). Yaxchilan was a regional capital and was located on the west bank of a major river. The only city in the Book of Mormon that fits both of these requirements is the city of Zarahemla. Zarahemla was the capital of the Nephite lands (Helaman 1:29) and thus an important regional center. Zarahemla was also on the west side of a major river, the river Sidon. This fact is easily established by correlating the information from two sets of verses.

And now it came to pass that when Alma had made these regulations, he departed from them, yea, from the church which was in the city of Zarahemla, and went over upon the east of the river Sidon, into the valley of Gideon . . . Alma 4:7-8

And it came to pass that the people of Nephi took their tents, and departed out of the valley of Gideon towards their city, which was the city of Zarahemla. And behold, as they were crossing the river Sidon . . . Alma 1:83-84

We can see from Alma 4:7-8 that the valley of Gideon is on the east side of the river Sidon. From Alma 1:83-84 we find out that if you want to go from the valley of Gideon to the city of Zarahemla you must cross the river Sidon, therefore, the city of Zarahemla must be on the opposite side of the river or the west side. Yaxchilan is located directly on the river. What about Zarahemla? The Book of Mormon does not speak directly to this point but we can assume that a city as large and important as Zarahemla

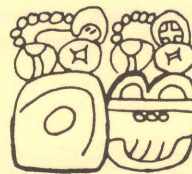


Fig. 3—The two primary Yaxchilan Emblem Glyphs (after Marcus 1976).

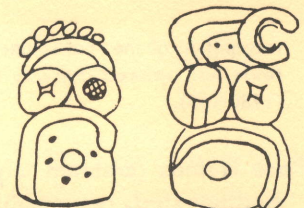


Fig. 4—Two examples of the Yaxchilan Muluc Emblem Glyph (after Marcus 1976).

would have been located on the river Sidon to take advantage of the river as a trade route.

Was then, the original name of the city of Zarahemla, Mulek? Zarahemla was the ruler of the land when Mosiah I and his people came down from the land of Nephi around 200 B.C. The land, city and people were called after the name of the ruler Zarahemla (Omni 1:23-25). In light of Alma 6:8 which tells us the Nephites named their cities, towns and lands after the first person to possess them, this could have been the name given by the Nephites to the land, city and people. Another possibility is that the Mulekites could have renamed the city and land themselves. We do know the land was also called Mulek from the following reference:

Now the land south was called Lehi, and the land north was called Mulek, which was after the son of Zedekiah; for the Lord did bring Mulek into the land north, and Lehi into the land south. Helaman 2:129

Perhaps the Yaxchilan Emblem Glyph was a product of Lamanite-Mulekite culture after the destruction of the Nephite nation.

In summary, it appears that Yaxchilan is the Book of Mormon city of Zarahemla which was the capital city of the land which was once known as the land of Mulek.

Palenque as Bountiful

Another clue from the glyphs, although more indirect than the Zarahemla clue, points to the site of Palenque as the Book of Mormon city of Bountiful. Kelley (1976:214-215) refers to Thomas Barthel, a German expert on the glyphs, who points out that 1) the highland Mexicans (e.g. Aztecs) used terms like "necklace", "jade", and "flower" for children, 2) all of these items are part of the Palenque Emblem Glyphs and 3) all of these items are found at Palenque along with representations of babies. If this information is correct then the Palenque Emblem Glyphs are strongly associated with children which reminds us of one of the outstanding experiences recorded in the entire Book of Mormon. This experience is recorded in the eighth chapter of the Third Book of Nephi. After blessing the little children Jesus said, "Behold, your little ones." The people saw angels descend from heaven "in the midst of fire" and encircle the little ones. "And they were encircled about with fire; and the angels did minister unto them . . ." (3 Nephi 8:24-27).

It is not hard to assume that a remembrance of this unforgettable experience on the part of so many people would become part of the name for the city Bountiful.

It should be noted that the Book of Mormon does not specifically say that this experience took place in the city Bountiful, only that it took place at "the temple which was in the land Bountiful" (3 Nephi 5:1). Because the city of Bountiful was the most important city in the land Bountiful it is reasonable to assume that this temple was located in

the city Bountiful.

We must next compare what the Book of Mormon says about Bountiful with what is known about Palenque. Four main facts emerge about the city Bountiful: 1) there were plains nearby (Alma 24:24), 2) it was not too far from the sea-shore (Alma 24:27), 3) it was in "the north parts of the land" (Helaman 1:25) in relation to the land of Zarahemla and 4) it was fortified and "became an exceeding stronghold ever after" (Alma 24:54-57). Let us examine each point to see whether or not Palenque satisfies these requirements.

Palenque meets the first requirement very well. Considered the most beautiful archaeological site in Mesoamerica mainly because of its setting, Palenque is located on the boundary between mountains and plains (Fig. 5).

Concerning the sea-shore, Palenque today is about 90 miles from the Gulf of Mexico or about 70 miles from the Laguna de Terminos, a very large bay connected to the Gulf of Mexico. This seems to be too far to satisfy Alma 24:27:

There he (Moroni) caused that Teancum should take a small number of men, and march down near the sea-shore (from the city Bountiful).

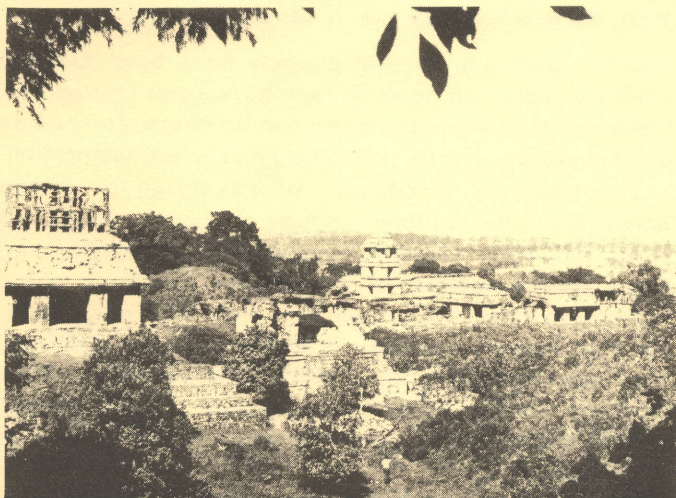


Fig. 5—Photo showing the location of Palenque on the boundary between the mountains and the plains (after Morales 1974).

However, looking at a good map, we see that about 70 of the 90 miles is marshland and water. Morales (1974:129) says there is a corridor of dry ground about 12 miles wide beginning at the foot of the mountains. There is a possibility the sea-shore could have been closer to Palenque before the time of Christ than it is now.

Palenque satisfies the third requirement without any problem. It is definitely north of the land of Zarahemla and therefore would be in "the north parts of the land" (Helaman 1:25).

The city Bountiful was fortified with a ditch:

And Teancum, by the orders of Moroni, caused that they should commence laboring in digging a ditch round about the land, or the city Bountiful. Alma 24:54

The ditch was round about the city Bountiful and not the land Bountiful. Timbers were also a part of the fortifications but they would not have survived, therefore, the only evidence we would hope to find today would be the partial remains of a ditch. While we are not aware of any such remains at Palenque, it should be noted that the

excavation of Palenque is far from complete. The part of Palenque the tourist sees, the part that has been excavated and restored, is only about one-eightieth of the estimated size of the total site. Fortification ditches are known for other Maya sites. The archaeological description of the ditch surrounding the site of Becan, located in the central part of the Yucatan peninsula, matches perfectly the Book of Mormon description of one of the fortification ditches constructed by Chief Captain Moroni (see *Zarahemla Record* #8 for a discussion of this remarkable archaeological substantiation of the Book of Mormon). Under these circumstances the lack of evidence for a fortification ditch at Palenque at the present time is not an insurmountable problem.

The Book of Mormon also tells us the city "became an exceeding stronghold ever after" (Alma 24:57). Aside from the possible ditch, Palenque occupies an excellent defensive position being located on a natural platform 200 feet above the level of the plain. This would certainly help Palenque become an "exceeding stronghold".

In summary, the three lines of evidence together—glyphs, geographic requirements and archaeology—form a fairly strong suggestion that Palenque was the city Bountiful.

Summary and Conclusions

From this brief view of the Maya glyphs we should remember:

- 1) The glyphs writers could say anything they wanted.
- 2) The glyphs deal mostly with history.
- 3) The glyphs are a writing system probably used by the Lamanites and Mulekites beginning in Book of Mormon times.
- 4) We can expect some Book of Mormon related history to be in the glyphs.
- 5) The presence of information in the glyphs pointing toward the possible identification of two Book of Mormon cities may confirm this expectation.
- 6) All of this is part of the plan of the Lord for validating the Book of Mormon and strengthening the faith of believers in these last days.

We read in 2 Nephi 13:96:

Wherefore, the things of all nations shall be made known; yea all things shall be made known unto the children of men.

Yes, the things of the nations of the Nephites, Mulekites and Lamanites shall be made known and no doubt the Maya glyphs will be one avenue through which this will be accomplished.

"... he left not himself without witness..." Acts 14:17 ●

References Cited:

- Berlin, Heinrich
1958 El glifo "emblema" en las inscripciones mayas. *Journal de la Societe des Americanistes*. n.s. tome XLVII pp. 111-119. Paris.
- Coe, Michael D.
1980 *The Maya*. Thames and Hudson. London.
- Henderson, John S.
1981 *The World of the Ancient Maya*. Cornell University Press. Ithaca.
- Kelley, David H.
1976 *Deciphering the Maya Script*. University of Texas Press. Austin.
- Marcus, Joyce
1976 *Emblem and State in the Classic Maya Lowlands*. *Dumbarton Oaks*. Trustees for Harvard University. Washington DC.

BOOK OF MORMON TOUR GUIDE-PART 4:

YAXCHILAN

by Raymond C. Treat

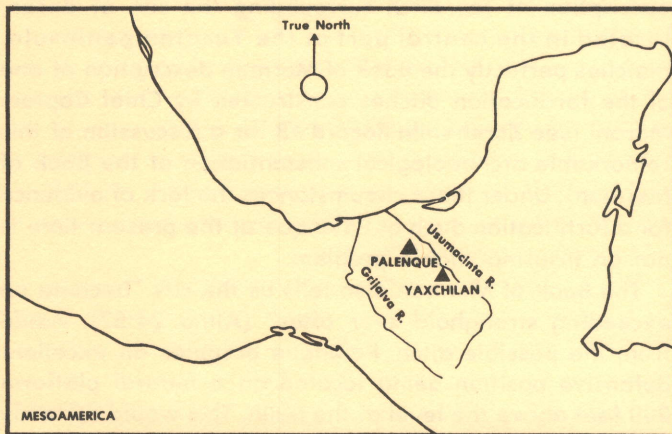


Fig. 1—Map of Mesoamerica showing location of Yaxchilan.

This is the fourth in a series of reports describing Mesoamerican archaeological sites and suggesting Book of Mormon correlations (see *Zarahemla Record* #4 Teotihuacan, #6 Monte Alban and #9 Chichen Itza).

The site of Yaxchilan was named after a nearby ravine in modern times and is pronounced yahsh-chee-lahn, which means green stones (see "Maya Hieroglyphs Point to the Book of Mormon" in this issue for a discussion of the original name of Yaxchilan).

Location and Setting

Yaxchilan is in the state of Chiapas, Mexico, and is located on the west bank of the Usumacinta River (Figs. 1 and 2). The Usumacinta is the dominant river in the area and forms part of the boundary between Mexico and Guatemala. Its headwaters are in the highlands of Guatemala and it empties into the Gulf of Mexico.

The vegetation of the Yaxchilan area is tropical rainforest which can be seen on the far side of the river (Fig. 3). The rainforest is very dense and has three or four distinct levels of vegetation. The top level is 40-70 meters high (about 130-220 feet). Two large well-known rainforest trees from this level are the giant ceiba, a sacred tree to the Maya and the mahogany tree (Fig. 4). Below the top level are trees in the 25-50 meter range (about 82-144 feet), 15-25 meters (about 49-82 feet) and 5-10 meters (about 6-13 feet). The annual rainfall is 60 inches or more and the average annual temperature is about 80 degrees.

Yaxchilan has a grass airstrip. Light planes can be chartered from Palenque, Villahermosa or San Cristobal de las Casas. For the more adventurous, Yaxchilan can also be reached by dugout canoe from upstream or overland through Guatemala. The main advantage of these methods is that you can spend more time at the site. Flying in allows for a 2-3 hour visit which is satisfactory for most visitors.

History of the Archaeology

There have been no major excavations at Yaxchilan.

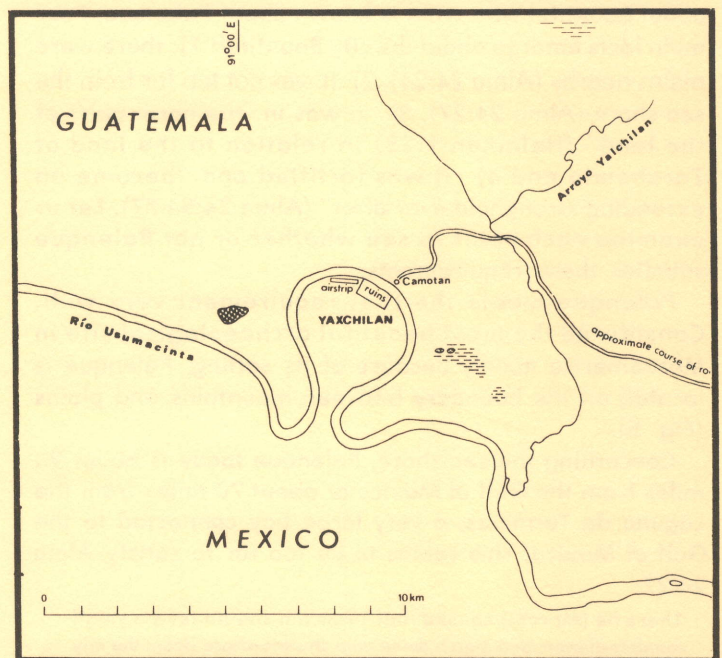


Fig. 2—Yaxchilan and the Usumacinta River (after Graham and Von Euv 1977). The river flows from right to left (north to south).

This is significant. Several projects have been planned over the years, but none of them have been carried out. The work that has been done can be characterized as early explorers, hieroglyphic study and recent restoration.

The modern "discovery" of Yaxchilan by Edwin Rockstroh of the National College of Guatemala did not occur until 1881. Alfred P. Maudslay, an Englishman and famous early explorer of Maya ruins, found out about Yaxchilan from Rockstroh and went there in 1882. Another famous explorer, Frenchman Desire Charnay, also went to Yaxchilan in 1882. Both published their findings. Later, Teobert Maler published his findings (1901-1903) after a more thorough investigation of Yaxchilan.

The best-known study of the hieroglyphs of Yaxchilan is still that of Tatiana Proskouriakoff (see glyph article) which helped to demonstrate that the glyphs deal with actual history. The glyphs continue to be studied. A continuing program of restoration was begun by the Mexican National Institute of Anthropology and History (INAH) in 1973.



Fig. 3—Usumacinta River near Yaxchilan (after Morley 1956).

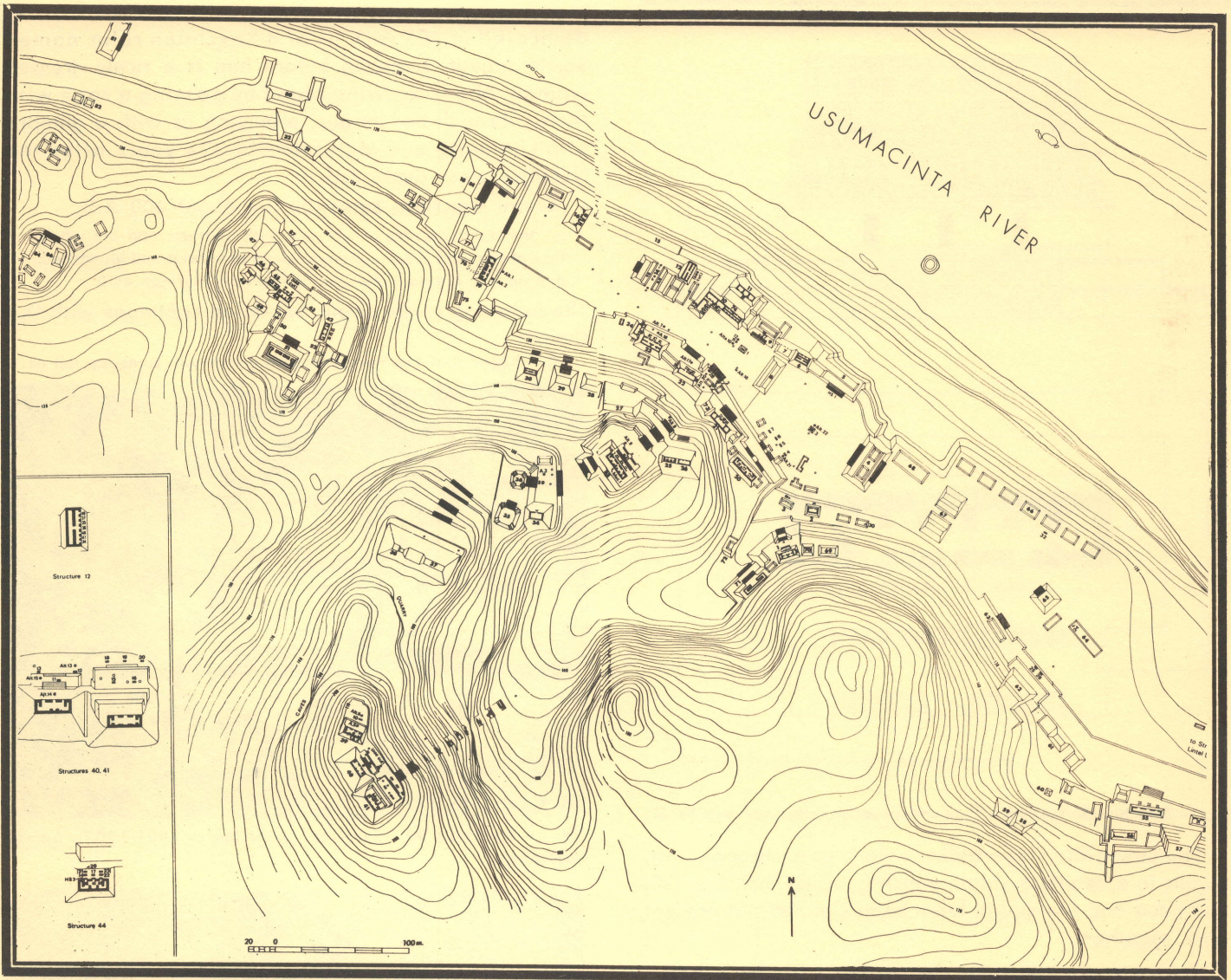


Fig. 5—Map of Yaxchilan (after Graham and Von Euw 1977).



Fig. 4—Typical rainforest near Bonampak in the Yaxchilan region (after Wagner 1964). The large tree on the right is mahogany.

Site Description

The best way to begin this description is to set the stage with the following quote:

Yaxchilan is a romantic's dream. There is a brooding quality about the site due to the luxuriant vegetation, and this, plus the exquisite architecture and sculpture, make Yaxchilan one of the most fascinating of Maya centers (Kelly 1982:206).

Yaxchilan is even more fascinating for Book of Mormon believers as we shall see.

The main part of the site is stretched out for over half a mile along a terrace of the Usumacinta River (Fig. 5). Away from the river structures are located on terraced hills. It should be strongly emphasized that the map is not complete since there has never been a thorough survey of Yaxchilan similar to that done for Tikal. Yaxchilan is no doubt larger than indicated by the map.

The temple pyramids are not as tall as those at Tikal but the temples such as Structure 33 (Fig. 6) are larger. Structure 33, the real gem of Yaxchilan (Kelly 1982:207), is also called the House of Hachakyum (Figs. 7 and 8). Hachakyum is a god of the Lacandones. The Lacandon tribe, a small Maya group numbering in the hundreds, has retained their own way of life in the rain forest for centuries. Their language, called Lacandon and one of the about 30 distinct Maya languages, is related to Yucatec, the language of northern Yucatan. (Continued on page 8)

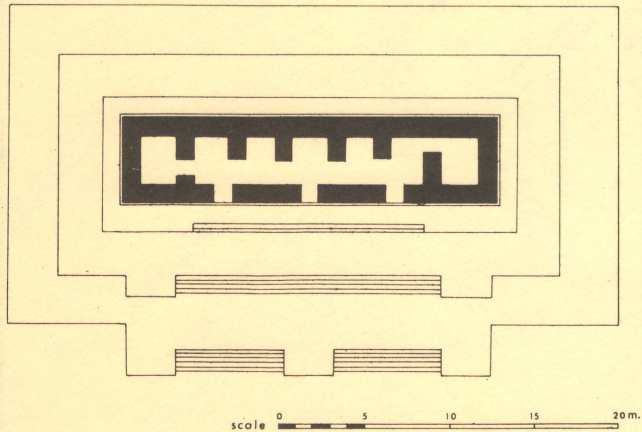
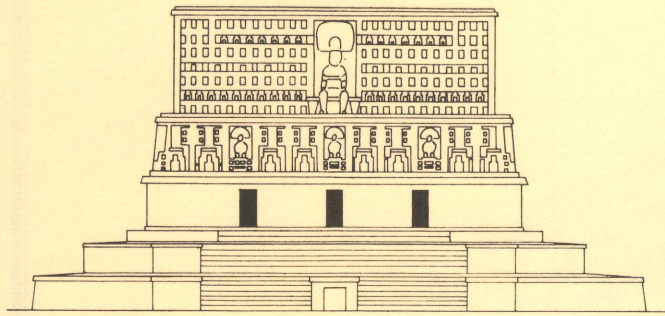


Fig. 6—Structure 33 Yaxchilan. Plan and elevation (after Andrews 1975).

The Lacandon Maya believe their god, Hachakyum, dwells in a headless statue which is inside Structure 33. The head and the statue have been cleaned but not put back together.

The Lancandonones believe that when the head is reunited with its body, the world will come to an end and jaguars will descend and devour the people. The world can be saved from destruction by the Lancandonones, who are the only ones who know how to pray to Hachakyum (Kelly 1982:207).

Yaxchilan is sacred to the Lacandon and until recently they would walk there and burn incense in Structure 33. They still come to Yaxchilan but now by plane.

Yaxchilan is famous for its well-preserved carved stone lintels, which form the upper frame for the exterior doorways. The lintels of Structure 33 tell us the building was dedicated in 756 A.D. They also portray three scenes in the life of a Yaxchilan ruler named Bird Jaguar. Inside are traces of scrolls and figures in red and blue. Some of the lintels "are among the finest examples of Maya sculpture in existence (Thompson 1954:70)". According to Morley (1956:340) the art of sculpture at Yaxchilan reached its peak with the carving of the three lintels of Structure 23, known as Lintels 24 (Figs. 9 and 10), 25 (Fig. 11) and 26 (Fig. 12). Structure 26, dedicated in 726 A.D. is only partially preserved. The three lintels have been removed. Lintels 24 and 25 are in the British Museum and Lintel 26 is in the National Museum of Anthropology, Mexico City. Lintels 24 and 26 still have traces of blue paint. Morley called Lintel 24 "the most outstanding example of sculptural art at Yaxchilan in harmony of composition, balance of design, and brilliance of execution (1956:340)". Lintel 24, 3 feet 7 inches high and

dedicated in 709 A.D., is of a Yaxchilan ruler named Shield Jaguar. Kneeling before him is a richly dressed woman. She is drawing blood by passing a rope with thorns through her tongue, providing us with a glimpse into Lamanite and Mulekite life 324 years after the Nephites were destroyed.

Moroni describes Lamanite life about 400 A.D.:

... the Lamanites are at war one with another; and the whole face of this land is one continual round of murder and bloodshed; and no one knoweth the end of the war. Mormon 4:10

The following quote about Yaxchilan continues with this theme:

It is hoped that the Yaxchilan hieroglyphs will someday tell us

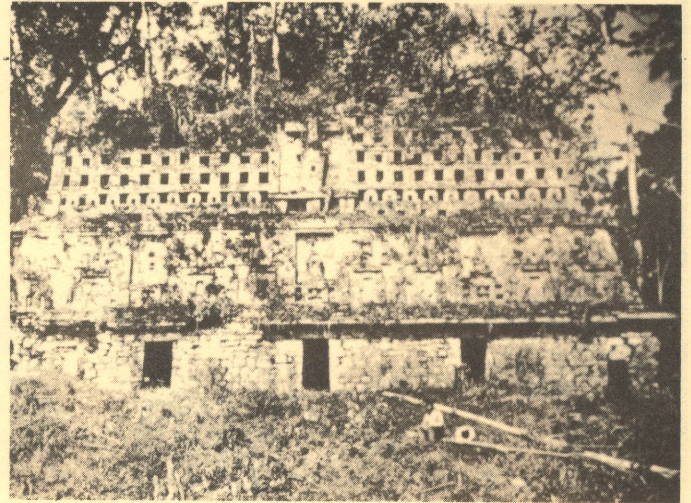


Fig. 7—Structure 33 Yaxchilan (after Maler 1901-1903). Before restoration.

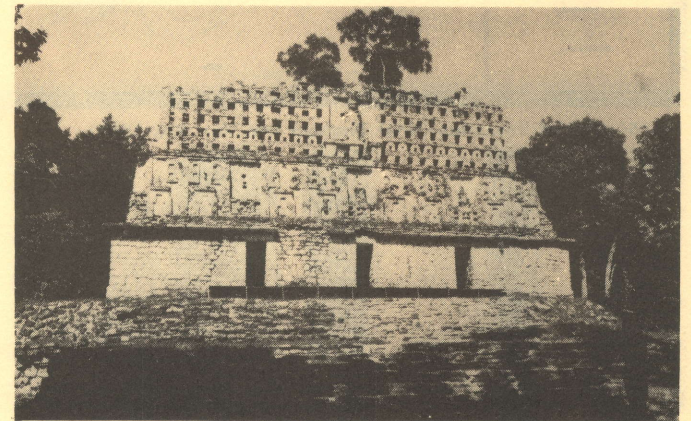


Fig. 8—Structure 33 Yaxchilan (after Kelly 1982). After restoration.

something about prevailing politics and local conflicts, as no other Maya site portrays so many militant battle scenes (Weaver 1981:182).

This characterization of Yaxchilan is in harmony with Book of Mormon history which tells us that the capital city of Zarahemla changed hands several times due to invasion. Lintel 8 from Yaxchilan is a good example of an "after the battle" scene (Fig. 13). The figure on the right is Bird Jaguar. The lintel tells about his capture of Jeweled Skull and another enemy with the help of the figure on the left. The lintel is dated 755 A.D. by the two glyphs in the upper left-hand corner. The next glyph means capture and the fourth glyph is the name of Jeweled Skull. The middle glyph in the upper right-hand corner is the name of Bird Jaguar. Below his name is the glyph for Yaxchilan. Adams



Fig. 9—Lintel 24 from Structure 23 (after Graham and Von Euw 1977).



Fig. 10—Drawing of Lintel 24 (after Graham and Von Euw 1977).



Fig. 11—Lintel 25 from Structure 23 (after Graham and Von Euw 1977).



Fig. 12—Top of Lintel 26 from Structure 23 (after Thompson 1954).

comments that:

Certain rulers are quite prominently referred to as "conqueror of so-and-so"; for example the ruler "Bird-Jaguar" of Yaxchilan is known as "Conqueror of Jeweled-Skull," Jeweled-Skull being the name or title of another ruler (1977:153).

Quite a bit of detail is known about Lamanite and Mulekite life after 400 A.D. from the glyphs. Yaxchilan is also known for its stelae, Stela 11 (Fig. 14) being an example. Now that we know that these stelae contain historical information about rulers we can say that the timing of their appearance (after the beginning of the Lamanites in 231 A.D.) and subject matter fits well a pattern of Lamanite kings erecting monuments to glorify themselves.

We will close this short glimpse of Yaxchilan with a look at an interesting building labeled Structure 19 and called YAXCHILAN—continued on Page 20

APPROACHES TO STUDYING THE BOOK OF MORMON

by Raymond C. Treat

From the beginning God planned for us to have a written record of his word to read and study. Even the Book of Mormon was part of the plan of God from the beginning. It is no coincidence that the Book of Mormon came forth in 1830 and that we have it available for study today. The Book of Mormon is our most closely controlled scriptural record. What is in the Book of Mormon is there for a purpose. We know this because the writers tell us that they were directed as to what to put in and what to leave out. For example, Mormon tells us:

... I shall take these plates, which contain these prophesyings and revelations, and put them with the remainder of my record, for they are choice unto me; and I know they will be choice unto my brethren. And I do this for a wise purpose; for thus it whispereth me, according to the workings of the Spirit of the Lord which is in me. And now, I do not know all things; but the Lord knoweth all things which are to come; wherefore, he worketh in me to do according to his will. Words of Mormon 1:9-11

Mormon is referring here to the small plates of Nephi (see *Zarahemla Record* #11 for more on the small plates of Nephi) which the Spirit of the Lord had just directed him to include with his abridgement of the large plates of Nephi. Here is a prime example of a Book of Mormon writer being directed as to what to put in the Book of Mormon. Mormon was also directed as to what to leave out:

Behold I was about to write them all which were engraven upon the plates of Nephi, but the Lord forbid it, saying I will try the faith of my people; therefore I, Mormon, do write the things which have been commanded me of the Lord. 3 Nephi 12:5

This verse refers to those teachings of Jesus which are not part of the Book of Mormon but which are recorded on the large plates of Nephi. Nephi was also directed as to what to leave out:

But the things which thou shalt see hereafter, thou shalt not write ... 1 Nephi 3:248

Knowing that what is in the Book of Mormon is there for a purpose is an important principle to always keep in mind when studying the Book of Mormon.

The constant asking of the question, "Why is this in here?", will sooner or later lead to additional revelation and understanding. A good example of this principle was the discovery of the "no erasers" (*Zarahemla Record* #13/14). There are more than 40 examples in the Book of Mormon where the words "or" or "or rather" are used when the ideas presented after these words are either a clarification or a direct contradiction of what came before. The answer to the question as to why this type of writing is in the Book of Mormon is now obvious: when you are writing on metal plates and make a mistake there is no way to erase so you insert a connecting word and correct the error. This simple discovery tells us at least two

things: 1) the Book of Mormon was actually written on metal plates and 2) Joseph Smith was given the actual words to be written otherwise these "no eraser" errors would not have been preserved.

One other principle should be mentioned before we examine various methods of Book of Mormon study. This principle is that we learn from the Book of Mormon through the enlightenment of the Holy Spirit as we spend time with the book. Therefore, we should not approach the Book of Mormon as a school textbook and expect to learn in the same way as we do for a school test. Our study should always be accompanied with prayer and frequent fasting.

The Straight Through Method

Reading the Book of Mormon straight through from cover to cover is, of course, the most obvious and probably most common method of Book of Mormon study. This method of study is recommended as a beginning. It would be helpful in keeping the chronology of the story straight to start with the earlier Jaredite history as found in the Book of Ether and then progress to the First Book of Nephi. One very helpful thing to do as you are reading straight through the entire book is to keep a list of questions as they occur. Some of these questions may lead to important topics for further study. Another helpful suggestion is to use the Book of Mormon map, *Ancient Mesoamerica*, to follow the story line. Following the story line on the map makes it easier to understand and remember the history. In order to fully comprehend the spiritual truths in the book, it is essential to know the people and events of the book.

It is a good practice to re-read the Book of Mormon straight through at least once a year, making a list of questions. Each time you read it, you will be able to see things you could not see before. However, there are other methods of study which should also be utilized.

Reading the Research of Others

After reading straight through the Book of Mormon it would be helpful to read some of the books written about the Book of Mormon. Many of the questions written down in the straight through reading will probably be answered as you study these books. These studies can also lead to other questions. It is better to read what others have written on various topics before starting your own topical study to avoid repeating the work of others. Although out of print, you may be interested in reading Paul M. Hanson's *Jesus Christ Among the Ancient Americans*, for New World external evidences related to the Book of

Mormon. **Lehi in the Desert and the World of the Jaredites** by Hugh Nibley has some excellent material on Old World external evidences. Nibley's book, **Since Cumorah**, is also worthwhile. Roy E. Weldon and F. Edward Butterworth have compiled a four volume collection of external evidences: **Book of Mormon Claims and Evidences**. Verneil Simmons' book, **Peoples, Places and Prophecies**, is the most current in-depth study of all aspects of the Book of Mormon available. Two good reference materials to assist in the Book of Mormon study are the **Overview of the Book of Mormon** and **Ancient Mesoamerica**, a map of Book of Mormon geography. The overview has much easily retrievable information in it including a synopsis of the entire Book of Mormon, a geography map and a summary of the records of the Book of Mormon. Thelona Stevens' **Book of Mormon Studies** has served as a good study guide for many years. The **Zarahemla Record** should not be overlooked as a source of current information on archaeology, geography, linguistics and other Book of Mormon topics. Weldon and Butterworth have also compiled three volumes of reference materials on various internal Book of Mormon topics - **Book of Mormon Deeps**. Also note **The Purpose of the Book of Mormon** by Walter Weldon.

The Topical Method

The topical method of study should occupy most of our Book of Mormon study time because this is the most productive method of study. Of course, a good Book of Mormon concordance is a necessary tool. When you concentrate on a particular topic, you obtain a depth of understanding about that topic and are in a position to receive additional enlightenment that would probably not come otherwise. It is important to choose the proper topic. Some of the questions from the straight-through reading may turn out to be excellent topics or you may want to choose a topic in which you have a special interest. Because what we know about either the physical or spiritual aspects of the Book of Mormon is only a small part of what is left to discover, the important point to remember at this time is not what we know but what are the proper questions to ask. Pray about which questions to ask.

Sometimes a topic will come through a rhema (ray-mah) experience. Rhema is Greek for "word". A rhema experience is when a word, phrase or verse becomes alive and "leaps out" at you as a result of enlightenment from the Holy Spirit. This scripture then becomes a direct revelation to you at that moment. God is speaking to you. The most famous example of a rhema experience in the Restoration Movement is, of course, the experience that Joseph Smith Jr. had with James 1:5. The experience of Joseph Smith is also a prime example of knowing which question to ask.

In the reading of Ether 1:90-91, a friend had a rhema experience which provided a topic to study.

And when the Lord had said these words, he shewed unto the Brother of Jared all the inhabitants of the earth which had been, and also all that would be; and the Lord withheld them not from his sight, even unto the ends of the earth; for the Lord had said unto him in times before that if he would believe in him, that he could shew unto him **all things** - it should be shewn unto him;

therefore the Lord could not withhold anything from him; for he knew that the Lord could shew him **all things**.

His attention was drawn to the phrase "all things". He began researching this topic and as a result, discovered some interesting information. First, note that the Brother of Jared was shown "all things". Then he wrote them down:

And the Lord said unto him, Write these things and seal them up and I will shew them in mine own due time unto the children of men. Ether 1:92

This then, is the Sealed Portion. In other words, the topic "all things" is connected with the Sealed Portion. The topic "all things" and the topic "sealed" are also brought together in 1 Nephi 3:249-250:

And also others who have been, to them hath he shown **all things**, and they have written them; and they are **sealed** up to come forth in their purity according to the truth which is in the Lamb, in the own due time of the Lord, unto the house of Israel.

In this scripture we learn that Nephi and others also saw all things which they wrote and which have been sealed.

In pursuing the topic of "all things" we notice a time element is mentioned in both references - "in the Lord's own due time". Next, our search for references to "all things" leads us to 2 Nephi 12:96-99:

Wherefore, the things of all nations shall be made known: yea, **all things** shall be made known unto the children of men. There is nothing which is secret, save it shall be made manifest in the light; and there is nothing which is sealed upon the earth, save it shall be loosed. Wherefore, **all things** which have been revealed unto the children of men, shall at that day be revealed; and Satan shall have power over the hearts of the children of men no more, for a long time.

These verses tell us when "all things", including the Sealed Portion, shall be revealed - at the beginning of the millenium, which is the time when "Satan shall have power over the hearts of the children of men no more, for a long time". The verses just before this, verses 92-95, verify that the timing is the beginning of the millenium: "And then shall the wolf dwell with the lamb ... and the young lion, and the fatling, together; and a little child shall lead them".

The topical approach to study will give you a depth of understanding not obtainable by a simple straight through reading.

Definitions

A topical study helps to properly define words or phrases. We have just seen that by properly defining the Sealed Portion as part of the phrase "all things" we have been able to determine that it will be revealed at the beginning of the millenium. Is there more to the story? In Ether 1:92 we are told that the Sealed Portion will be shown "in mine own due time unto the children of men." This same group, "the children of men" is mentioned in 2 Nephi 12:96-99, the verses which are connected with the beginning of the millenium. However, note that in 1 Nephi 3:249-250, the things which are sealed up will come forth "in the own due time of the Lord, unto the house of Israel". The proper question at this point is: do the phrases "children of men" and "house of Israel" mean the same thing or do they refer to two different groups? This is a good topic for study. Let us assume they refer to two different groups. We know that the children of men are

going to receive the Sealed Portion at the beginning of the millenium. If the house of Israel is a different group, when are they going to receive the Sealed Portion? Is it possible they might receive the Sealed Portion before the beginning of the millenium in connection with the establishment of Zion? A thorough topical study is needed to determine if this information is available. We should be careful that our definitions of these phrases or any words we may be studying are definitions derived from the scriptures themselves. The topical approach helps us arrive at the proper definitions. Let us look at the definition of a common scriptural word, deriving our definition by linking verses of scripture.

"Believe" is one of the most commonly used words in the Christian vocabulary. "Believe on the Lord Jesus Christ and you shall be saved" is frequently heard - "only believe". It seems that no other action is required according to our current use of the word "believe". However, Helaman 5:67 gives us a different definition of "believe":

And if ye believe on his name, ye will repent of all your sins, that thereby ye may have a remission of them through his merits.

According to this definition, if we do not repent of all our sins we cannot honestly say we believe. This verse adds a dimension to the word "believe" that goes far beyond the popular use of this word. A deeper study of the word "believe" is in order.

Another commonly used phrase is "born again". What does this phrase really mean? A topical study leads us to this definition by Alma:

... I have repented of my sins, and have been redeemed of the Lord; behold, I am **born of the Spirit**. And the Lord said unto me, Marvel not that all mankind, yea, men, and women, all nations, kindreds, tongues and people, must be **born again**; yea, **born of God**, changed from their carnal and fallen state, to a state of righteousness, being redeemed of God, becoming his sons and daughters; and thus they become new creatures; and unless they do this, they can in no wise inherit the kingdom of God. Mosiah 11:186-188

Here we see that to be "born again" means we have been changed from a carnal state to a state of righteousness, being redeemed of God. All three phrases - "born of the Spirit", "born again", and "born of God" - are topical studies in themselves and it would be helpful to pursue these phrases for an even better understanding of "born again". We will not go into that much depth here but we will turn to 1 John 3:9 for further insight into the meaning of "born again":

Whosoever is **born of God** doth not continue in sin; for the Spirit of God remaineth in him; and he cannot continue in sin, because he is **born of God**, having received that holy Spirit of promise.

The term used in this verse is not "born again" but "born of God". We must first be sure these terms are synonymous before using this verse to define "born again". Fortunately, Mosiah 11:186-188 provided us with that necessary information. By reading these verses we see that the three phrases - "born of the Spirit", "born again" and "born of God" are synonymous. We should note here before continuing that the identification of synonyms through such verses as these is an important key to successful topical study.

To return to 1 John 3:9, we see that if you are "born

again" you do not continue in sin and indeed cannot continue in sin. If you do continue in sin, it must mean you are not really "born again" but only say you are, not using the definition given in the scriptures. Notice also that the "born again" person has received the Holy Spirit of Promise. The study of this topic should also be fruitful as it appears the possession of the Holy Spirit of Promise gives the power to overcome sin (see also Alma 10:4-6, 2 Nephi 3:53). We can see even from this brief study of "born again" that the topical approach is an essential and fruitful form of scripture study.

Synonyms

Some further comments should be made about the importance of identifying synonyms as a key to successful topical study. Once a synonym (words having the same or nearly the same meaning) has been identified, the information about one word can be applied to its synonyms. Therefore, the information that can be obtained about a particular topic can be greatly expanded if synonyms for that topic can be identified. As already stated, verses such as Mosiah 11:186-188 where several words or phrases are used interchangeably are necessary to the identification of synonyms. The following verses are good examples:

Now they, after being **sanctified** by the Holy Ghost, having their garments made **white**, being **pure** and **spotless** before God, could not look upon sin, save it were with abhorrence. Alma 10:4

And again, if ye, by the grace of God, are **perfect** in Christ, and deny not his power, then are ye **sanctified** in Christ by the grace of God, through the shedding of the blood of Christ, which is in the covenant of the Father, unto the remission of your sins, that ye become **holy without spot**. Moroni 10:30

Each of these verses has four words which can be considered synonymous. In Alma 10:4 they are: "sanctified", "white", "pure" and "spotless". In Moroni 10:30 they are: "perfect", "sanctified", "holy" and "without spot". Because two of these words are used in both verses we end up with six synonymous words: sanctified, perfect, white, pure, spotless and holy. This list can be expanded by using other verses which have two or more synonyms. See if you can find evidence that the words "clean", "blameless" and "redeemed" belong to this list of synonyms. How many others can you find?

The identification of a large number of synonyms of a certain topic is information in itself. For example, the Eskimos are very much interested in snow. In fact, they are so interested in this topic they have at least 23 different words for the single English word "snow". The reason for this is because their very lives depend upon their ability to accurately communicate the precise condition of the snow. Therefore, if we find a topic with several synonyms, we then know this is a very important topic in the eyes of God and should be of importance to us. One example of such a topic is "humility". The following is a partial list of synonyms derived from the scriptures: submissive, sorry, patient, obedient, servant, repentant, child-like, meek, trust, teachable, plain, unassuming, yield, abased, lowly, believe, poor in spirit, surrender, modest, willing, gentle, broken heart, penitent and

contrite in spirit. Can you find the scriptural evidence that these are synonyms? The following reference is a good place to start:

But men drink damnation to their own souls, except they humble themselves, and become as little children, and believe that salvation was, and is, and is to come, in and through the atoning blood of Christ, the Lord Omnipotent: for the natural man is an enemy to God, and has been from the fall of Adam, and will be, for ever and ever; but if he yields to the enticings of the Holy Spirit, and putteth off the natural man, and becometh a saint, through the atonement of Christ, the Lord, and becometh as a child, submissive, meek, humble, patient, full of love, willing to submit to all things which the Lord seeth fit to inflict upon him, even as a child doth submit to his father. Mosiah 1:118-120

If the physical lives of the Eskimos are dependent upon their ability to communicate information about snow, it appears our spiritual lives are dependent upon our ability to understand and communicate accurately the various aspects of humility.

Do not overlook the topical study of so-called well-known subjects such as prayer. One sister did a topical study of prayer and was amazed and greatly blessed at what she found. Those persons around her were also blessed as she shared her new-found insights.

Ponder

This is a method of study which is especially suited to people with busy schedules. It is also a method which should be used by everyone with a desire to study. Pondering simply means that you take a phrase, a verse or a story and think and pray about it all day or for several days. Nephi did this:

For my soul delighteth in the scriptures, and my heart pondereth them, and writeth them for the learning and the profit of my children. Behold, my soul delighteth in the things of the Lord; and my heart pondereth continually upon the things which I have seen and heard. 2 Nephi 3:29-30

Pondering is one of the keys to receiving a rhema experience, or direct communication with the Holy Spirit as Nephi discovered:

As I sat pondering in mine heart I was caught away in the Spirit of the Lord, yea, into an exceeding high mountain, which I never had before seen, and upon which I never had before set my foot. 1 Nephi 3:38

After teaching the people, Jesus told them to ponder:

... go ye unto your homes, and ponder upon the things which I have said, and ask of the Father, in my name, that ye may understand; and prepare your minds for the morrow, and I come unto you again. 3 Nephi 8:3

Pondering provides the best opportunity for receiving the enlightenment of the Holy Spirit:

Let the word of Christ dwell in you richly... Colossians 3:16

Lehi and Nephi gave their testimony that the word of God (the rod of iron) will lead us to the fruit of the tree of life (the love of God). The writers of the Book of Mormon paid a great personal price for us to have their testimony and their enlightenment. Mormon tells us "he that hath the scriptures, let him search them..." (3 Nephi 4:69). Knowing about the various approaches to scripture study will help us to truly "search them". ●

READER'S RESEARCH

The White Man's Book of Heaven

by Faye Shaw

And Now I would prophesy somewhat more concerning the Jews and the Gentiles. For after the book of which I have spoken shall come forth, and be written unto the Gentiles . . . they shall carry them forth unto the remnant of our seed. II Nephi 12:79,80

I have been reading about the incredible 'remnant of our seed', hoping to find remains of the ancient religion and traditions. What I've discovered, even in my random selection of books from the library, has been overwhelming. Just as my belief in the authenticity of the Book of Mormon has expanded as I began to dig deeper, so my appreciation of the Native Americans has grown. Smiles have crept across my face as I read of their sensitive and poetically expressed feelings for nature, and tears came as I saw them burdened by sorrows and deprived by injustices. I thrilled at beliefs, practices and prophecies parallel to our own, and admired the spiritual lives of their holy men.

Months have passed since my first 'discovery'. I've been anxious to share my findings, but reluctant to speak as a white person relative to Indian things. Therefore I present my first incident pretty much as I found it.

I had been reading a fascinating compilation of actual Indian speeches in a book, **I Have Spoken**. One particular speech, delivered by two Nez Perce Indians in 1831¹, intrigued me, and I was drawn back to it again and again. It involved one Flathead and three Nez Perce Indians who had made a difficult journey from their homeland in the Northwest, across the Rocky Mountains and through hostile territory to St. Louis² to see the Governor of the land of Missouri. Sadly, two of them died during their stay, leaving only Hee-oh-ks-te-kin (Rabbit Skin Leggings) and H'co-a-h'co-a'h-cotes-min (No Horns on His Head).

The object of such an arduous quest is couched in controversy. Some said since they came from distant tribes, interpreters were hard to come by, therefore understanding their true meaning was difficult. However, aside from the spoken language, a fairly universal sign language was well-known by most Indians, and could

1. The Book of Mormon had been in print for about a year. In September, 1830 the church was instructed to "go unto the Lamanites, and preach my gospel unto them; and inasmuch as they receive thy teachings, thou shalt cause my church to be established among them . . ." Doctrine and Covenants 27:3a
2. Church History, under the heading "Mission among the Indians," picks up on P. P. Pratt's journal. Ironically, he is in the process of taking Books of Mormon to the Delaware Indians. "In the beginning of 1831 we renewed our journey . . . passing through St. Louis . . ." During that year our men, including Joseph Smith, Oliver Cowdery and Sidney Rigdon, would pass through there at least 7 or 8 times on their travels between Kirtland and Independence.

WHITE MAN'S BOOK OF HEAVEN—con't from Page 13 have augmented their speech. Others thought "they wanted better 'medicine' to increase their prestige and power."³ Dispelling that argument was the fact that they were not overly receptive to the ways of white men. Interestingly, enough people did heed their plea, because their speech "was unusually influential in starting a missionary movement of great importance to the development of the Pacific Northwest."⁴ A Henry Harmon Spalding was one of the first responsible for taking Christianity to the Nez Perce. Later he was accused of responding to a speech that was "the work of an old man's



Rabbit Skin Leggings

No Horns on His Head

(Spalding's) imagination."⁵ Knowing all this, I still believe the words speak for themselves. This is what the Nez Perce said to Governor William Clark:

I come over the trail of many moons from the setting sun. You were the friend of my fathers who have all gone the long way. I come with one eye partly open, for more light for my people who sit in darkness. I go back with both eyes closed. How can I go back blind to my blind people? I made my way to you with strong arms through many enemies and strange lands that I might carry back much to them. I go back with both arms broken and empty. Two fathers came with us. They were the braves of many winters and wars. We leave them to sleep by your great water and wigwams. They were tired of many moons and their moccasins wore out.

My people sent me to get the white man's Book of Heaven. You took me to where you allow your women to dance, as we do ours, and the Book was not there. You took me to where they worship the Great Spirit with candles and the Book was not there. You showed me the images of the good spirits and the pictures of the good lands beyond, but the Book was not among them to tell us the way. I am going back to the long sad trail to my people in the dark land. You make my feet heavy with gifts and my moccasins will grow old carrying them, yet the Book is not among them. When I tell my poor blind people, after one more snow, in the Big Council, that I did not bring the Book, no word will be spoken by our old men or our young braves. One by one they will rise up and go out in silence. My people will die in darkness, and they will go on the long path to the

hunting grounds. No white man will go with them and no white man's Book will make the way plain.⁶

And we sometimes wonder if people need our witness. Obviously everyone would assume they were looking for the Bible. So why didn't they find it? Didn't anyone give, or at least show them one—or were they after something else?

George Catlin, the famous artist and chronicler of the Native Americans, traveled up the Missouri with Rabbit Skin Leggings and No Horns on His Head as they began their return home on the steamship "Yellowstone." They had visited with the Sioux, who had treated them well and given them "beautiful dresses." Catlin sketched them in their newly acquired outfits. He stated later:

When I first heard the report of the object of this extraordinary mission across the mountains, I could scarcely believe it, but on conversing with General Clarke on a future occasion, I was fully convinced of the fact.⁷ ●

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3. *The Macedonian Cry* by Francis Haines, Chapter 6, *The Nez Percés*.
 4. *I Have Spoken, American History Through the Voices of the Indians* compiled by Virginia Irving Armstrong, Introduction to speech no. 116, p. 59.
 5. *Henry Harmon Spalding* by C. M. Drury, Chapter 3, *The Nez Perce Delegation*.
 6. *I Have Spoken*, Speech no. 116, p. 60.
 7. *North American Indians*, Vol. II, by George Catlin, p. 24.
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The Scholar's Corner

by Verneil Simmons

Circle ALL correct answers:

1. Sacred objects brought to the New World by Lehi's party:
 - a. Urim and Thummim
 - b. Brass plates
 - c. Liahona
 - d. The sword of Laban
2. The record of the Jews contained:
 - a. A genealogy of Joseph's tribe
 - b. The book of Abraham
 - c. The five books of Moses
 - d. Prophecies of Zedekiah
3. The Small Plates of Nephi contained:
 - a. A genealogy of Lehi
 - b. The words of Christ
 - c. Alma's record
 - d. A parable of Zenos
4. That portion of the Book of Mormon still to be translated:
 - a. The vision of the Brother of Jared
 - b. The record of John
 - c. The testimony of the 3 Nephites
 - d. The record of Alma
5. Writings added to the record by command of Christ:
 - a. Words of Malachi
 - b. Vision of the Brother of Jared
 - c. The testimony that many saints arose from the dead
 - d. Words of John

(ANSWERS ON PAGE 24)

BOOK REVIEW:

“IN SEARCH OF CUMORAH”

In Search of Cumorah. New Evidences for the Book of Mormon from Ancient Mexico by David A. Palmer, Horizon Publishers, \$9.95, 254 pages.

By Mary Lee Treat

In Search of Cumorah is a book about Book of Mormon geography and archaeology. As the title suggests, one of the author's main themes is the location of the hill Cumorah - scene of the last Nephite battle and repository of the original records of the Book of Mormon. While Dr. Palmer indicates it is not his intention to present a detailed overview of Book of Mormon geography but only enough to justify the setting for the identification of Cumorah, it is indeed the most detailed geographic proposal for Book of Mormon geography currently in print.

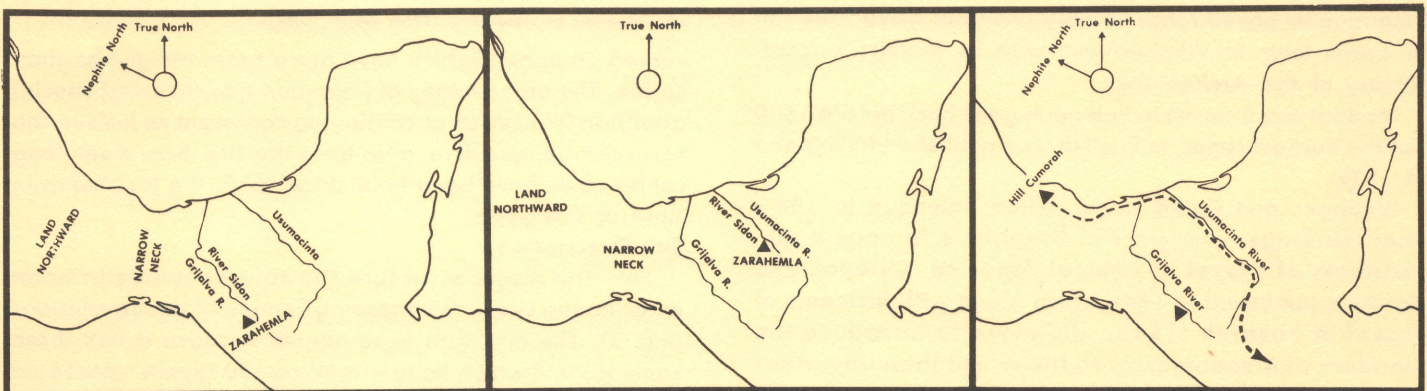
The theory which places the Book of Mormon geographically within Mesoamerica is called the Limited Tehuantepec Theory. There are two variations of this theory: the Grijalva variant and the Usumacinta variant. This book is a "fleshing out" of the Grijalva variant. The Limited Tehuantepec Theory proposes that the area of the Isthmus of Tehuantepec in Mexico is the narrow neck described by Mormon in the Book of Mormon. The word "limited" is used to indicate that the land Northward and land Southward were in the areas adjacent to the Isthmus, thus in a much smaller area than previously believed by some, i.e. North America as land Northward and South America as land Southward with Panama as the narrow neck.

Coordinate Shift

As explained by Dr. Palmer, those subscribing to the Grijalva variant of the Limited Tehuantepec Theory believe that the Nephites upon arrival in the New World adopted an Israelite tradition of determining directions: direction coordinates were related to the seas and not to the stars. Dr. Palmer quotes MacMillan Bible Atlas which indicates that in the Hebrew Bible the word for forward was "east", behind "west", right "south", and left "north". Thus he postulates that Lehi stood with his back to the ocean upon arrival and called forward "east" which in reality was north-north-east. He therefore proposes that all directions given in the Book of Mormon have been shifted accordingly to accommodate this basic shift in direction. Thus Book of Mormon north would have been west-north-west in our coordinate system.

With this basic framework outlined, the city of Zarahemla, which the Book of Mormon describes on the west bank of the river Sidon, could either be Santa Cruz or Santa Rosa according to Palmer. He favors Santa Rosa, the largest site on the upper Grijalva. These sites, however, are presently under water due to the Angostura Canyon Dam project. They were investigated by the Mexican government and the New World Archaeological Foundation before flooding.

Other chapters in the book are also devoted to locating the areas of the Jaredites and Mulekites with this re-definition of directions.



Limited Tehuantepec Theory: GRIJALVA VARIANT

Limited Tehuantepec Theory: USUMACINTA VARIANT

Limhi's Proposed Expedition Route

Grijalva Variant

The Grijalva variant of the Limited Tehuantepec Theory simply means that the Grijalva River has been identified as the river Sidon, and thus Zarahemla, city and land, are located in the Central Depression of Chiapas.

Usumacinta Variant

The opposing proposal for the river Sidon of the Book of Mormon, but not discussed by Palmer, is the Usumacinta variant. As the name suggests, the Usumacinta River is believed to be the river Sidon. This river forms part of the boundary between Guatemala and Mexico. Both the Grijalva and the Usumacinta flow from the highlands (land of Nephi) to the Gulf of Mexico through the lowlands (land of Zarahemla). In the Usumacinta variant, Zarahemla, city and land, would be in the Maya lowlands

It should be noted that both variations of the Limited Tehuantepec Theory locate the land Northward in the same general area - above the Isthmus of Tehuantepec. Because the land Northward was the area primarily occupied by Jaredites and later by Mormon's Nephites, those chapters dealing with those cultures have the most to offer people who prefer the Usumacinta variant.

Probably the weakest treatment in the geographic presentation is the Limhi expedition route. (A search party from the Nephite colony in the land of Nephi is trying to find the route to Zarahemla and end up in the land Northward where they find the remains of the Jaredite nation and the 24 gold plates. They then return to the land of Nephi.) Knowing that Zarahemla was located on a major river and in the heart of the land makes it a bit

BOOK OF MORMON TOUR GUIDE

PALENQUE PART-5

by Raymond C. Treat

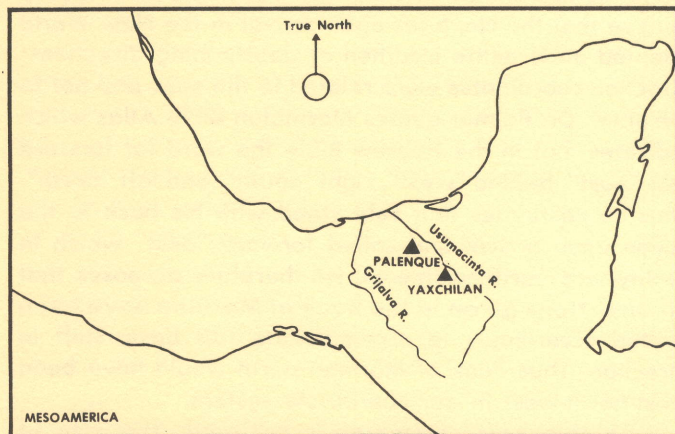


Fig. 1—Map of Mesoamerica showing location of Palenque.

Locating and Setting

Palenque is located about 200 feet above the flood plain of the Usumacinta River at the edge of the foothills of the western highlands in the state of Chiapas (Fig. 1). Palenque has been described as the most beautiful of New World archaeological sites. The main part of the site (Fig. 2) is on a natural platform with luxuriant tall rainforest providing a scenic backdrop. Also contributing to the beauty of Palenque is the arrangement of buildings in relation to the natural setting. It is easy to get to Palenque by paved road, an easy two-hour drive from the oil boom town of Villahermosa with its modern airport.

History of the Archaeology

Modern day interest in Palenque goes back before 1800 but the earliest report in English was published in England in 1822.

Stephens and Catherwood visited Palenque in 1840. Their findings were part of Stephen's famous book, *Incidents of Travel in Central America, Chiapas and Yucatan*, published in 1841 which along with *Incidents of Travel in Yucatan* (1843), did more to introduce the wonders of Mesoamerica to the world than any other accomplishment. Both books were best sellers in their day. No doubt it is significant that these two books appeared so close in time after the publication of the Book of Mormon in 1830.

The Walker-Caddy expedition also arrived in Palenque in 1840, about four months earlier than Stephens and Catherwood. Walker, a politician from Belize (then British Honduras), found out about Stephens' plans and organized his expedition to beat Stephens to Palenque.

Although more archaeological excavation has been done at Palenque than at Yaxchilan, surprisingly, the site has hardly been touched. As at Yaxchilan, most of the excavation has been in the nature of restoration. The primary interest in Palenque at the present time centers around the study of the hieroglyphs. There has been more work done on the glyphs from Palenque than from any other site. This is mainly due to an abundance of glyphs. Stelae at Palenque are rare, so most of the glyphs are

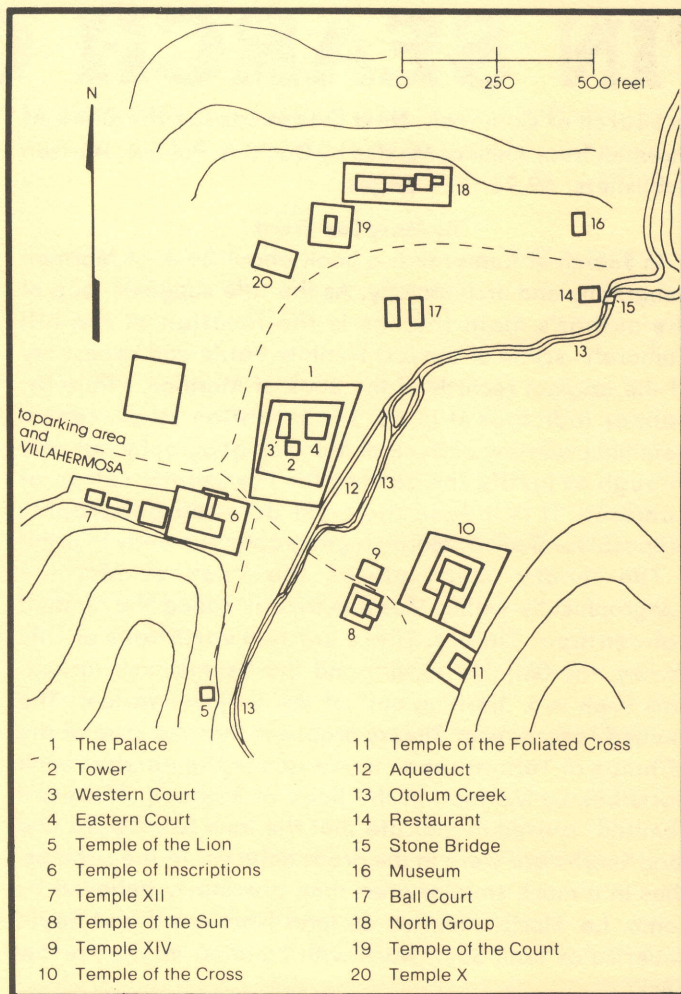


Fig. 2—map of Palenque (after Kelly 1982).

carved on panels which have more room for glyphs than stelae. The archaeology of Palenque has received special attention in a series of continuing conferences held in the town of Palenque, five miles from the site. Five week-long conferences have been held since 1973, the last being in June of this year.

Site Description

The first major structure the tourist comes to upon entering the site is the imposing Temple of the Inscriptions (Fig. 3). The structure is so named because it has three stone panels which have a total of 620 glyphs carved on them. Based on the glyphs, the pyramid is dated at 692 A.D. We now know that the temple was built by Pacal (Shield), who ruled Palenque 615-683 A.D., as a tomb for himself.



Fig. 3—Temple of the Inscriptions (after Andrews 1975).

Pacal's tomb was discovered by a leading Mexican archaeologist, Alberto Ruz Lhuillier in 1952. He noticed a stone slab in the floor of the temple with holes in it. He removed the slab and found the beginning of a stairway which had been filled with rubble. It took four field seasons to remove the rubble. The effort was well worth it. The discovery of Pacal's tomb ranks as one of the highlights of Mesoamerican archaeology. It was Berlin's study of the glyphs on the sides of the sarcophagus that led to the discovery of Emblem Glyphs.

The floor of the temple is about 75 feet above ground level and the tomb is about five feet below ground level. The tomb chamber is 13' x 30' x 23' high. The stone slab on top of the sarcophagus is 12½'x7'x10" and weighs about 5 tons. Needless to say, it was quite a job to remove the lid. Just climbing the temple and then descending into the tomb area is enough work for most tourists. The many jade and other precious artifacts found in the tomb are now in the National Museum of Anthropology in Mexico City where an exact replica of Pacal's tomb has been reconstructed.

The next structure encountered is called The Palace (Fig. 4). It is the largest structure uncovered so far at Palenque. It is built on an artificial platform 300'x240'x30' high. It was here that Stephens and Catherwood lived during their stay at Palenque on the first of their two famous trips.



Fig. 4—The Palace (after Andrews 1975).

The most distinguishing feature of The Palace is the four-story tower (Fig. 5). The tower could have been used as an observatory, a watch tower and as a means of viewing the setting sun during winter solstice, December 21.

After crossing a small creek we approach the Cross group, including the Temple of the Cross (on the north), the Temple of the Foliated Cross (on the east) and the Temple of the Sun (on the west) (Figs. 6-7). The Temple of the Sun has been called the most perfect of Maya buildings. Each of the three temples contain similar tablets giving information about Pacal and his son and successor, Chan-Bahlum, who built the Cross group and who died in 702 A.D. Each of the tablets were located in an inner sanctuary e.g. (Fig. 8), constructed as a miniature temple.

The interior of each temple was divided into three areas. This may be a later adaptation of the plan for

Solomon's Temple which was divided into three areas - Outer and Inner court and Holy of Holies. Nephi brought the idea to Mesoamerica:

And I, Nephi, did build a temple; and I did construct it after the manner of the temple of Solomon . . . 2 Nephi 4:22

As beautiful as Palenque is, it must have been even more beautiful during its occupation when the figures and buildings were painted. Most of what the tourist sees today was constructed in the two-hundred-year period from 600-800 A.D. Also, what the tourist sees is only a very small percentage of the total site. Palenque covers an estimated 16 square kilometers (6.2 square miles). It has only been recently that an adequate map of Palenque has been made. It is not known whether this map has been published yet.

(Continued on page 18)

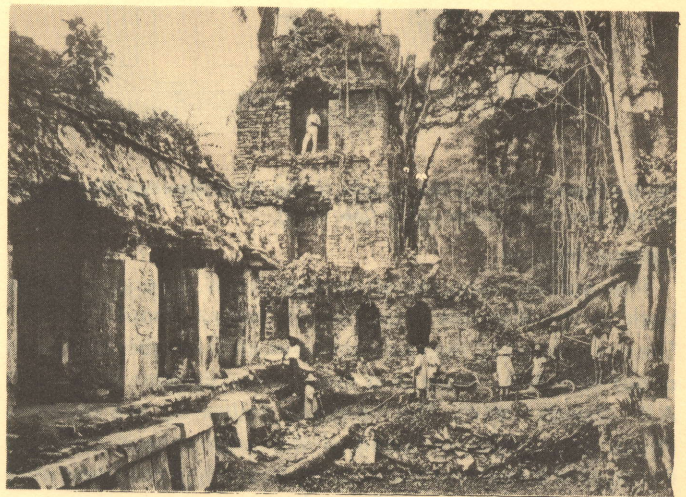


Fig. 5—The Tower of the Palace in 1891 (after Griffin 1974).

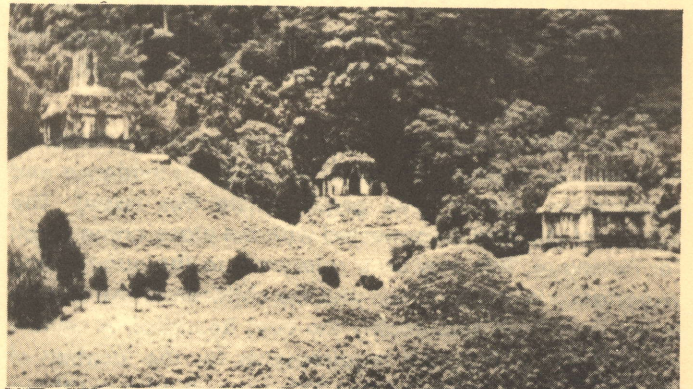


Fig. 6—Temple of the Cross, Temple of the Foliated Cross and Temple of the Sun (after Andrews 1975).

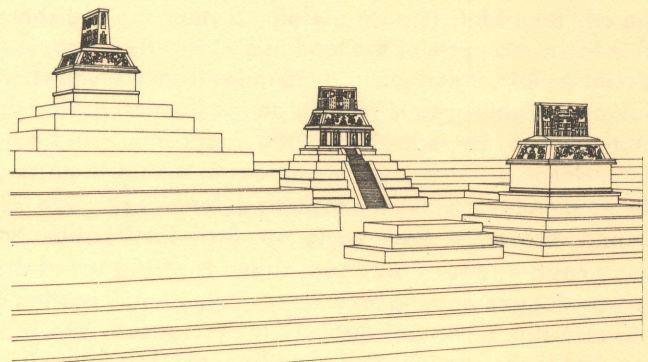


Fig. 7—Restoration drawings of the Temple of the Cross, Temple of the Foliated Cross and Temple of the Sun (after Andrews 1975).

PALENQUE—continued from Page 17

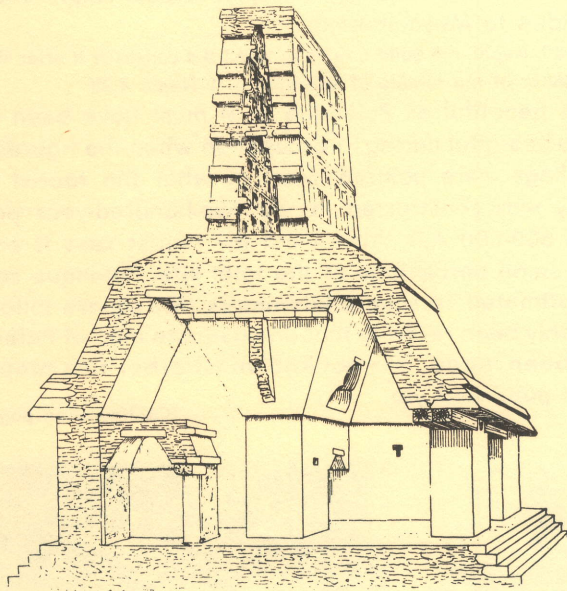


Fig. 8—Cross section of the Temple of the Cross showing the interior divided into three areas (after Coe 1980).

Culture History

The earliest occupation known from Palenque dates back to the Mamom Phase which begins about 550 B.C. The occupation of the site continues until its abandonment about 830 A.D. There is a small reoccupation after 830 A.D. (Rands 1974). The ceramics following the Mamom Phase are similar to those of the wide-spread Chicanel Phase of the lowland Maya area. There has not been very much pottery recovered from these two early phases at Palenque. The next phase, called the Picota phase, is better represented. Exact dates for the Picota phase are not given but it begins about 300 A.D. or earlier.

Book of Mormon Correlation

It has been proposed that Palenque is the Book of Mormon city Bountiful on the basis of glyph evidence and geographic location (see glyph article this issue). The subject of children is connected with the place name glyph for Palenque. This may be a reference to the outstanding experience involving Jesus and the children at the temple in the land (and presumably the city) Bountiful. A review of the Book of Mormon requirements for the location of the city Bountiful showed that Palenque could meet those requirements.

The Book of Mormon has four general requirements for the city Bountiful: 1) near a plain, 2) near the sea-shore, 3) in the north parts of the land and 4) fortified. Palenque is near a plain. Palenque is 70-90 miles from the sea-shore but most of this area is marshy and is flooded during the rainy season. The sea-shore 2000 years ago could have been closer to Palenque. Palenque is in the north parts of the land and occupies an excellent defensive position. We should remember that, while no ditch fortification has been reported for Palenque, there is still a lot of dirt archaeology remaining to be done. Only a small portion of the site has been adequately investigated. We look forward to the coming forth of additional information from the beautiful site of Palenque. ●

PALENQUE—References, see Page 20

BOOK REVIEW—continued from Page 15

difficult to believe they would find themselves on the Gulf seashore and then proceed northward. At this point they should have retraced their steps backward knowing they had missed the heart of the country. It is even more difficult to believe they would have crossed over another major river (Grijalva) and not followed it back up into the heart of the land. This proposed route is contrived and the weakest part of the entire proposed geography.

Locating Cumorah

As alluded to earlier, both variations of the Limited Tehuantepec Theory agree upon the general area of the land Northward. Proponents of both theories agree that the hill Cumorah must be above the narrow neck of land and toward the Gulf side of Mexico. Palmer has chosen a hill called Cerro Vigia in Veracruz, Mexico. His reasons for choosing this particular hill are based on the following criteria:

1. Near eastern seacoast
2. Near narrow neck of land
3. On a coastal plain, possibly near other mountains and valleys
4. One day's journey south (east-south-east) of a large body of water
5. In an area of many rivers and waters
6. Presence of fountains
7. Abundance of water should provide military advantage
8. An escape route to the land southward
9. Hill must be large enough to provide a view of hundreds of thousands of bodies
10. Hill must be a significant landmark
11. Hill should be free standing so people can camp around it
12. Temperate climate with no cold or snow
13. In a volcanic zone susceptible to earthquakes

He then states that any hill suggested must meet the test for the same criteria. While most of his criteria are Book of Mormon based (he should have given more Book of Mormon references) some points above are his interpretation: numbers 7, 8, 11, and 13.

In addition to Palmer's criteria, a major reason for choosing a hill for a final battle would also have to be based on its strategic geographic location (Mormon 3:5). In other words, the successful defense of the place chosen by Mormon would have prevented the Lamanites from overrunning the heart of the land Northward.

Of all the criteria listed by Palmer, a free-standing hill is the weakest. Palmer interprets "round about" to mean a free-standing hill.

And it came to pass that we did march forth to the land of Cumorah and we did pitch our tents round about the hill Cumorah . . . Mormon 3:5

This does not seem strategically sound from a military point of view. "Round about" could just as well mean in a semi-circle or "nearby".

Palmer believes the final battle occurred on the hill itself. "It is quite clear that the battle took place on that hill and the plain leading up to it, for the following day Mormon was able to survey the entire scene of carnage from the top of the hill." However, Mormon 3:3 states:

And I, Mormon, wrote an epistle unto the king of the Lamanites,

(Continued on Page 24)

and desired of him that he would grant unto us that we might gather together our people unto the land of Cumorah, by a hill which was called Cumorah, and there we would give them battle. The following day after the battle, the twenty-four surviving Nephites surveyed the carnage from the top of the hill:

And we having survived the dead of our people, did behold on the morrow, when the Lamanites had returned unto their camps, from the top of the hill Cumorah, the ten thousand of my people who were hewn down, being led in the front of me; . . . Mormon 3:14

It seems entirely plausible and more likely from a military point of view that the final battle was not on a free-standing hill but in front of a hill which was at least an outcropping of a range and thus more defensible. Mormon and survivors simply climbed the hill to survey the scene the following day.

As archaeologist Garth Norman has pointed out (Society for Early Historic Archaeology newsletter, June, 1982), while the theme of the location of the hill Cumorah is interesting, it is not critical to the over-all reconstruction of Book of Mormon geography and archaeology within Mesoamerica.

Perhaps what Palmer has accomplished, hopefully for all time, is to extinguish the last flames of the New York Hill Cumorah theme. From this point on, we can refer people who cling to that notion to this book. His treatment of why New York is not the scene of the last battle is excellent and should be conclusive. Our major concern now is **where** in Mesoamerica are the specific lands and cities.

Grijalva Variant Critique

The Grijalva variant of the Limited Tehuantepec Theory rests upon the coordinate shift in directions. This was first proposed by Dr. John Sorenson, head of Brigham Young University Archaeology Department. There are several problems with this theory as we see them.

After reviewing the references to the words "north" and "northward" in a Book of Mormon concordance, a consistent pattern becomes apparent. 1) The terms "north" and "south" were used to describe the relationship between the land of Nephi and the land of Zarahemla: the land of Zarahemla was **north** of the land of Nephi and the land of Nephi was **south** of the land of Zarahemla. The consistency of the terms gives a strong sense of true north and true south. 2) The word "northward" either meant the specific area above the narrow neck called the land Northward or it is used to mean a northerly direction such as north and west. Verneil Simmons states in **Peoples, Places and Prophecies**: "Neither Egyptian nor Hebrew had a word for such a direction (northward). Perhaps the Nephites had coined a term which could be expressed in English as 'northward' or 'southward.'" As she also points out, the term does not appear in the Book of Mormon until the bones of the Jaredites are discovered in the land Northward. During the first 400 years the Nephites were only knowledgeable about the area directly north and south (below the narrow neck) and hence had no need for such a word as "northward."

John A. Tvedtnes, a Hebrew scholar, reviewed Palmer's book also in the June, 1982 S.E.H.A. newsletter. He pointed out that the Hebrew coordinate system referred to in the MacMillan Bible Atlas was only one of two

directional systems used in ancient Israel. "The other, of much more common usage, termed the four directions as follows: east - mizrah (dawn), south - d^erom, north - saphon, and west - ma^carab (entering, setting). But **both systems** were oriented toward the rising sun. Had the Israelite orientation been based on the sea rather than on the sun, they probably would have faced west and called it qedem (front, forward)!" He also pointed out that the Nephites living inland would most likely have oriented their directions according to the rising sun. "From inland, the major phenomenon on which directions could be based was the daily sunrise. Palmer's argument for this reorientation is therefore not convincing." (See also the article by Ralph Lesh in this issue for more discussion of directions.)

Dr. Sorenson's **An Ancient American Setting for the Book of Mormon**, a major work in manuscript form which Palmer used for the basis of his geography, states in Chapter 1, "In fact, we don't know what Laman, Lemuel, Sam and Nephi **did** call their directions, since the first terms referring concretely to directions appear in the Book of Mormon only hundreds of years after the first landing (Mosiah 5:6, 6:17)." While it is true that the first mention of directions in the New World comes in the Book of Mosiah, there is an important clue to Nephi's knowledge of directions in 1 Nephi 5 while they are still in the Old World.

After Lehi had obtained the Brass Plates and the family of Ishmael had joined them, the Lord gave Lehi an important tool for their journey - the Liahona.

And within the ball were two spindles; and the one pointed the way whither we should go in the wilderness. 1 Nephi 5:12

The compass as we know it had not been invented yet but the Lord had prepared this unique instrument for them. We know that the instrument only pointed the way they should go when they were faithful (Alma 17:73). Directions were also given in writing on the ball (1 Nephi 5:32-35).

Nephi in verse 12 above specifically indicates that one spindle pointed the direction they should go. What was the function of the other spindle? We are given an important clue in the following verse:

And it came to pass that we traveled for the space of four days, nearly a south, south-east direction, . . . 1 Nephi 5:16

The words "south, south-east" are the only reference in the Book of Mormon to words explicitly describing one of the sixteen cardinal points on a compass other than north, south, east or west. Interestingly enough, it comes immediately following the verses where Lehi discovers the Liahona outside his tent door and Nephi describes the working of the one spindle. This is a truly significant clue that Nephi had access to true directions: the other spindle was a compass.

The Liahona was used to guide them across the ocean. Nephi mentions they had it when they separated from the Lamanites (II Nephi 4:17). It is only logical to assume that if the Liahona was capable of telling them cardinal directions in the Old World, it would also do so in the New World.

Thus we believe the Grijalva variant to be incorrect because it is based on the belief that the Nephites did not know true north.

YAXCHILAN—continued from Page 9

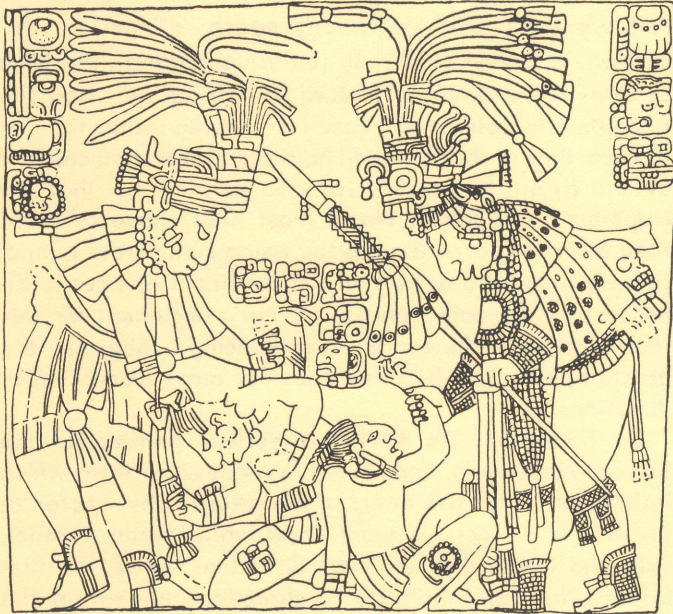


Fig. 13—Lintel 8, Yaxchilan (after Coe 1980).

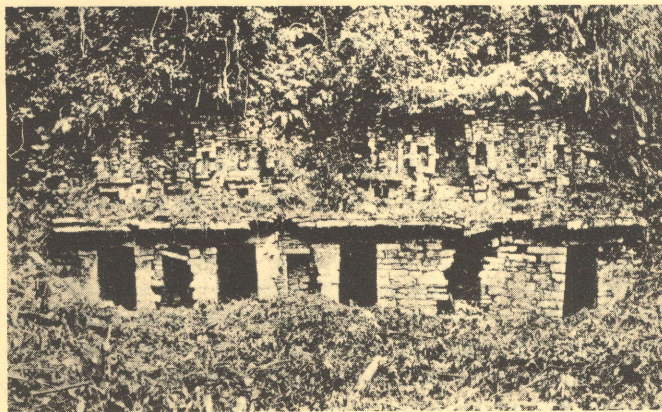


Fig. 14—Structure 19 Yaxchilan. Before restoration (after Maler 1901-1903) and after restoration.

the Labyrinth (Fig. 14). This is a two-story structure with the lower part of its roof comb still intact. The lower level has six doorways and the rooms on both levels are interconnected.

Culture History

The absence of major excavations precludes the presentation of a representative culture history. The glyph history covers a period of at least 454-810 A.D. This, of course, is only a part of the culture history. It is more than likely that Yaxchilan begins, as do most major sites in the southern Maya lowlands, at least as early as the Mamom Phase, which begins about 550 B.C.

Book of Mormon Correlation

The Mamom Phase, which represents the appearance of a new and larger population, is an excellent archaeological correlation of the arrival of the Mulekites into the southern Maya lowlands. We are told by Adams that:

The population explosion, the appearance of ceremonial buildings, however simple, and the uniformity of far-flung Mamom culture at this time all demand an explanation beyond a simple statement of their existence (1977:118).

In the article on the Maya glyphs (this issue), evidence is presented pointing to Yaxchilan as the city of Zarahemla and to the fact that the original name of Yaxchilan was Mulek, which suggests that Yaxchilan was originally founded by the Mulekites. As already mentioned, the post-Nephite (after 400 A.D.) militaristic nature of Yaxchilan history fits the Book of Mormon description of this period.

We can look forward to more information coming forth about Yaxchilan as work progresses on the glyphs and on the excavation of this regional capital. ●

References Cited:

Adams, Richard E.W.
1977 *Prehistoric Mesoamerica*. Little, Brown and Company, Boston.

Andrews, George F.
1975 *Maya Cities: Placemaking and Urbanization*. University of Oklahoma Press. Norman.

Coe, Michael D.
1980 *The Maya*. Thames and Hudson. New York.

Graham, Ian and Eric Von Euw
1977 *Corpus of Maya Hieroglyphic Inscriptions*. Vol. 3, Part 1. Peabody Museum of Archaeology and Ethnology. Harvard University. Cambridge.

Kelly, Joyce
1982 *The Complete Visitor's Guide to Mesoamerican Ruins*. University of Oklahoma Press. Norman.

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Conclusion

Palmer's book is a useful tool for analyzing Book of Mormon geography. While much of it rests upon the shift in coordinate directions, much of it is useful. It is refreshing that we are finally discussing **variations** of Book of Mormon geography within Mesoamerica. We have finally progressed to the stage where we can agree: Mesoamerica is the land of the Book of Mormon! ●

PALENQUE—continued from Page 18

References Cited:

Andrews, George F.
1975 *Maya Cities: Placemaking and Urbanization*. University of Oklahoma Press. Norman.

Coe, Michael D.
1980 *The Maya*. Thames and Hudson. New York.

Griffin, Gillett G.
1974 *Early Travelers to Palenque*. In Merle Green Robertson ed. *Primera Mesa Redonda de Palenque*. Part 1. The Robert Louis Stevenson School. Pebble Beach.

Kelly, Joyce
1982 *The Complete Visitor's Guide to Mesoamerican Ruins*. University of Oklahoma Press. Norman.

Rands, Robert L.
1974 *The Ceramic Sequence at Palenque, Chiapas*. In Norman Hammond ed. *Mesoamerican Archaeology: New Approaches*. pp. 51-75. University of Texas Press. Austin.

IS NORTH, NORTH?

by Ralph F. Lesh

In 1980, my map *Ancient Mesoamerica*, was first published.¹ It attempted to depict the internal geographical relationships of the Book of Mormon within the setting of Mesoamerica (Mexico, Guatemala, Belize, Honduras and El Salvador). The Isthmus of Tehuantepec was identified as the Narrow Neck of Land which divided the Land Northward from the Land Southward. A double north arrow was drawn in the legend. One prong pointed west-north-west and was labeled "Northward." The other prong was labeled "North" and pointed to our modern geographical north. This reflected my belief that the "north" of the Book of Mormon was the same as our modern north, while "northward" in the Book of Mormon was a less precise term which referred to the approximate direction of the Land Northward from the Land Southward.

Since that time, several authors have attempted to explain the Isthmus of Tehuantepec's east-west orientation, by suggesting that "north" to the Nephites was really west-north-west.² However, after careful and thoughtful consideration of this theory, I have concluded that my original assumption was correct and the Nephites' "north" was indeed north. This belief is based on reasoning which I will outline here.

Mapmakers living before the time of Christ would not have had magnetic compasses, telescopes, chronometers or satellite photographs available to them.³ The Liahona ball was called a "compass", but it was primarily controlled by faith rather than magnetism (Alma 17:73-76; 1 Nephi 5:34-35). Even if the Liahona had sometimes functioned as a magnetic compass, it was a unique instrument and was not reproduced (Alma 17:71-72). The Nephites (ancient Hebrews who became part of the Maya), could have determined precise directions and latitude by studying the movements of the stars and the sun.

The ancient Hebrews had a basic knowledge of astronomy. Moses was educated in the Pharaoh's court (Acts 7:22) and later received a vision in which he was told there were other planets (Doctrine and Covenants 22:21). The prophets Job and Amos spoke of "Arcturus, Orion and Pleiades." (Job 9:9 and 38:31-32. Also, Amos 5:8.) Nephi was "taught somewhat in all the learning of (his) father, . . . which consists of the learning of the Jews and the language of the Egyptians," (1 Nephi 1:1). The Nephites brought their astronomical knowledge with them to Mesoamerica. When the Star of the Nativity began to shine, the Nephites dutifully recorded that "a new star did appear" (Ill Nephi 1:24). In Helaman 4:62 we are told "it is the earth that moveth, and not the sun." This was not believed by the Nephites' Mediterranean

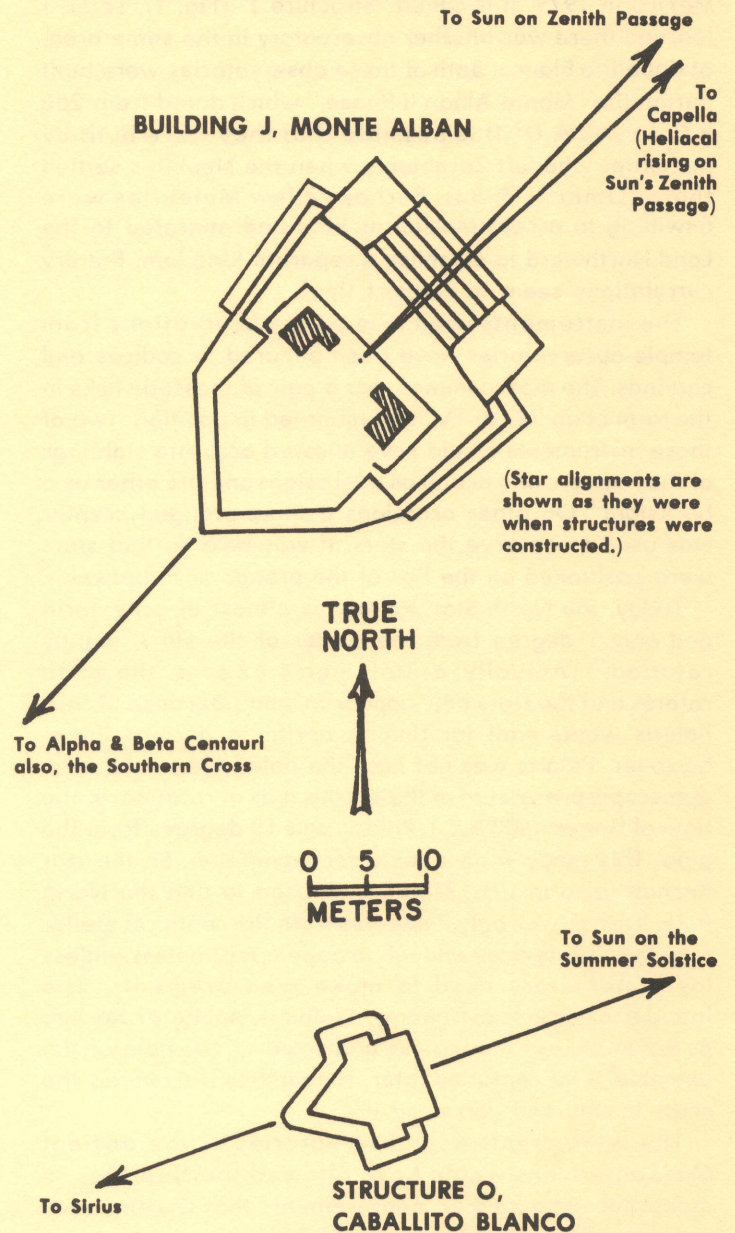


Fig. 1—Two observatories from the Oaxaca area.

contemporaries, who favored the views of Ptolemy over the earlier and more accurate views of Aristarchus.⁴

According to archaeologist Michael D. Coe, among the Maya "arithmetic and astronomy had reached a level comparable to that achieved by the ancient Babylonians and surpassing in some respects that of the Egyptians; but one should not exaggerate."⁵ Orion and the Pleiades, mentioned by Job and Amos, were also identified as constellations in ancient Mesoamerica. The Maya called the Pleiades "Tzab" (the Rattlesnake's Tail) and the Aztecs referred to Orion as "Mamalhuaztli" (the Fire Sticks). Many other Mesoamerican constellations bear no resemblance to Mediterranean constellations; but that is to be expected since the Nephite culture, once established, would have evolved along separate lines.⁶

Astronomical observatories dating to the Book of Mormon period have been uncovered in Mesoamerica. Observations were made by sighting with the naked eye through simple instruments and openings in the observatory structure itself. I saw one of these observatories when I visited Monte Alban, near Oaxaca,

Mexico in 1979. It is called "Structure J" (Fig. 1). Later, I learned there was another observatory in the same area, at Caballito Blanco. Both of these observatories were built during the "Monte Alban II Phase," which dated from 200 B.C. to 200 A.D.⁷ It is possible that they were built by Mulekites who left Zarahemla when the Nephites settled there (Omni 1:19-34). Perhaps a few Mulekites were unwilling to accept Mosiah as king and migrated to the Land Northward to establish a separate kingdom. Pottery correlations seem to support this.⁸

The instruments used in making observations from temple-observatories have been pictured in codices and carvings. The most common was a pair of crossed-sticks in the form of an "X" or "V" and mounted in position. Two of these instruments would have allowed accurate sightings of the horizon, one acting as a foresight and the other as a backsight.⁹ On other occasions a three-pronged scepter was used to observe the stars. It was held so that stars were positioned on the tips of the prongs or in-between.¹⁰

Today, the North Star, Polaris, is almost directly north and only 1 degree from the center of the stars' nightly rotation.¹¹ (Actually, as Helaman 4:62 says, the earth rotates and the stars only appear to spin.) Because of this, Polaris works well for finding north. In ancient times, however, Polaris was not near the pole, due to the slow gyroscopic precession of the earth's axis of rotation. In the time of Homer (800 B.C.), Polaris was 12 degrees from the pole. This made it unsuitable for navigation. So the star Kochab (also in Ursa Minor) was used to find the North Pole. Kochab was only 7 degrees from the center of stellar rotation. This is close enough to appear motionless, unless instruments are used to make measurements. The founder of Greek astronomy, Eudoxus, spoke of Kochab as being always motionless and fixed at the pole of the universe. Two centuries later, Hipparchus discovered the error in this and corrected it.¹²

The instruments and observatories of the ancient Mesoamericans would have allowed the Nephites to make the same kind of measurements that Greeks, such as Hipparchus, were making in the Mediterranean region. North would have been the center of the small circle traced by Kochab nightly. The three-pronged instrument might have been helpful in determining its center. By drawing a line on the ground from the base of the instrument toward the point on the horizon directly beneath the pole, a north-south base line of exceeding accuracy could have been established. Then, by projecting lines at right angles to the base line, an accurate east-west line could have been established. The Maya did employ this principle, according to this quote from **Maya Cities: Placemaking and Urbanization**, by George F. Andrews: "An examination of a large number of maps and site plans of Maya settlements, including those illustrated in this study, indicates that the Mayas consistently oriented major structures with regard to the cardinal points of the compass. . . . Since it is unlikely that the Mayas had even a crude form of magnetic compass, it is possible that orientations were established by taking sightings on the North Star. It is a fairly simple matter to lay out north-south lines using direct line-of-sight methods once the importance of the North Star is understood."¹³

In the Preclassic Period, Kochab would have been the

North Star; but by the Postclassic Period, Polaris would have moved into the North Star position. According to astronomer Anthony F. Aveni: "Polaris, called Xaman Ek by the Maya, was universally used by travelers to find their way. Merchants were supposed to burn copal incense to the North Star by a roadside altar in order to be protected."¹⁴ That the Maya used the North Star for navigation, as well as surveying, is also supported by Coe: ". . . a special group of traders travelled the perilous overland trails, guided by the North Star. . . ."¹⁵

"The elevation of the pole at any point of observation is equal to the latitude of that point, i.e., to its distance from the equator."¹⁶ Mesoamerica spans from 13 degrees to 22 degrees of latitude, so the North Star is not very high above the horizon. However, if mountains do not obstruct the view, it is clearly visible. If the celestial pole is X degrees above the horizon, then a star X degrees from the pole will trace out a circle that just touches the horizon. The Greeks determined if places were at the same latitude by seeing whether the same stars touched the horizon at each site.¹⁷ The Nephites could have done this even without their instruments and observatories. This would have provided their mapmakers with an accurate way to check north-south distances.

Besides using the stars, the ancient peoples of Mesoamerica also used the sun to determine directions and tell time. The sun rises at a slightly different spot on the horizon on each day of the year, due to the fact that the earth's axis of rotation is tilted relative to its orbital plane. (Gyroscopic precession does not affect degree of tilt, but only the orientation of the tilted axis relative to the background stars. Therefore, ancient solar orientations are basically still valid today.)¹⁸

Many of the ancient cities of Mesoamerica were laid out so that streets or buildings lined up with the point on the horizon where the sun (or stars heralding the sun) rose on an important day of the year. Quoting from **Maya Cities** again: "Another possibility is suggested by several assemblages of buildings in the Peten area, where it is clear that monuments and buildings were so arranged that line-of-sight readings could be used to determine the equinoxes (21 March, 21 September) and also the winter solstice."¹⁹ (The winter solstice is December 21, and the summer solstice is June 21. The solstices determine the beginnings of winter and summer, while the equinoxes determine the beginnings of spring and autumn.)

Some scholars have pointed out that many Mesoamerican cities were orientated along a slightly offset north-north-east line.²⁰ This, they say, proves that the Nephites considered west-north-west to be "north;" since east was more important in the minds of early Mesoamericans than north. They reason that if north-north-east was the Nephites' "east," then west-north-west would have been "north."

Actually, it is more likely that these cities' structures were aligned in such a way that the sun and stars could be used to determine important days in their calendar. The major directions were allowed to be only approximate, so that the timekeeping function could be accommodated.

Teotihuacan, which was thriving during the Nephites' Golden Age is an example of how ingenious the Mesoamericans were at laying out their cities to tell time.

The east-west base line of the city was defined by two pecked-cross petroglyphs, three kilometers apart. By using a planetarium, it has been possible to establish that back when Teotihuacan was built, the Pleiades set within 1° of the east-west base line. This was important for two reasons: First, the Pleiades underwent heliacal rising (annual reappearance of a star in the predawn sky just ahead of the sun) on the same day as the first of the two annual passages of the sun across the zenith (overhead, when no shadows were cast at noon). Also, the Pleiades constellation passed close to the zenith at Teotihuacan, two millenia ago.²¹

But there is more to the story of Teotihuacan's plan: At Teotihuacan, the Avenue of the Dead is orientated to north-north-east which is part of the city's north-south base line. The Pyramid of the Sun faces the avenue, being aligned with the city's east-west base line (west-north-west) and the sunset on August 13.²² August 13 was an important day for the Maya and their sacred calendar began on August 13, 3114 B.C.²³ This may be the date of an early Biblical event, since the Nephites, Mulekites and Jaredites all came from the Bible Lands. Since Teotihuacan was aligned with the August 13 sunset, its builders would have been measuring west and not north.

At Izapa, another site which reached its peak at the time of the Nephites, the sun appears to rise out of the volcano Tajumulco on the summer solstice. Also, on August 13 the sun passes across the zenith.²⁴ It is not likely that the placement of the site was an accident.

The Jaredites (Olmecs) also seem to have used normal directions determined by the sun. At the Olmec site of San Lorenzo, the sun sets "into" Mount Zempoaltepec on the evening of the winter solstice. And at the Olmec site of La Venta, the sun sets "into" the volcano San Martin on the evening of the summer solstice.²⁵

One thing which would have been beyond the technological capabilities of the Nephites, would have been to figure longitude (east-west distances) accurately. This is because longitude is figured by comparing local time with the time at a site (Greenwich, England) which is defined as zero longitude. It is similar in principle to Time Zones. For example, eight hours of time means the earth has rotated one-third of the way around. If the local time at city A is eight hours later than the local time at city B, then there is a difference of 120 degrees of longitude between the two cities ($360^\circ \div 3 = 120^\circ$).

People understood what was needed to figure longitude for many years before they had the capability to actually do it. The problem was not solved until 1672, when the French Royal Observatory was built near Paris. There, J. D. Cassini developed tables describing the occultations of the moons of Jupiter. (Occultations are when the moons passed behind Jupiter.) The orbits of Jupiter's moons provided people with an absolute time-piece which could be used as a reference and compared to local time. But to see the moons, a large optical telescope with lenses or mirrors was needed.²⁶

An accurate clock is also needed, to measure local time with precision, for comparison with the telescope-measured Jupiter time. The ancient Mesoamericans probably used sundials to tell time during the day. What

may be sundials are depicted in year glyphs at Xochicalco and Teotenango.²⁷ While it is conceivable that a large sundial could be made very accurate, a sundial would not work at night, when Jupiter's moons become visible. At night, priest-astronomers watched the rotation of the stars in order to know the hour. They would beat on drums to signal when the divisions of the night had passed.²⁸ These timekeeping methods would have been adequate for the needs of the Nephites, but lack the precision needed to measure longitude accurately. That requirement wasn't met for land-based observations until 1657, when Christian Huygens invented the pendulum clock.²⁹

Since the Nephites did not have telescopes or pendulum clocks, they would have been unable to measure longitude. This means that Nephite mapmakers would have had difficulty measuring east-west distances. "Days' journeys" are not very accurate unless they can be checked against something else, like longitude or triangulation. A possible consequence of this is that the Nephites may have underestimated east-west distances. If so, they would have been unaware of how far the land Northward and Land Southward were offset from one another in the east-west direction. They would have thought of the Land Northward and the Land Southward as being aligned more north-south than they actually were. This is the reason for the second prong of the north arrow labeled "Northward," on my 1980 map. It should not be confused with the Nephites' "North," which was a more precise term not dependent on the relationship of the Land Northward to the Land Southward.

There is no longer any doubt that Mesoamerica is the geographical setting of the Book of Mormon. We are beginning to move into a new era, when specific sites will begin to be identified through such means as the translation of name glyphs. The understanding that north is "north" is basic toward further progress in Book of Mormon geography. Let us continue in faith that God will gradually reveal the answers to us. ●

References Cited:

1. Lesh, Ralph F.
1980 *Map: Ancient Mesoamerica*, The Zarahemla Research Foundation, Independence, Missouri.
2. Palmer, Dr. David A.
1981 *In Search of Cumorah*, pp. 34-36, Horizon Publishers & Distributors, Bountiful, Utah.
- Sorenson, Dr. John L.
1977 *An Ancient Setting for the Book of Mormon* (unpublished manuscript).
3. Freuchen, Peter
1957 *Book of the Seven Seas*, pp. 136-138, Julian Messner, Inc., New York.
4. Huffer, Trinklein & Bunge
1967 *An Introduction to Astronomy*, p. 338, Holt, Rinehart and Winston, Inc., New York.
5. Coe, Michael D.
1966 *The Maya*, p. 148, Praeger Publishers, New York.
6. Aveni, Anthony F.
1980 *Skywatchers of Ancient Mexico*, pp. 34-36, University of Texas Press, Austin and London.
7. Paddock, John (Editor)
1966 *Ancient Oaxaca*, pp. 90, 108, 113 & 126, Stanford University Press, Stanford, California.
8. Treat, Raymond C.
Fall, 1979 "A Book of Mormon Tour Guide, Monte Alban," *The Zarahemla Record*, Issue Number 6, p. 6, Zarahemla Research Foundation, Independence, Missouri.
9. Aveni, pp. 18-20.

MAYA HIEROGLYPHS—continued from Page 5

Morales M., Moises
 1974 The "Pais de Pacal". in Robertson, M.G. ed. **Primera Mesa Redonda de Palenque Part II. The Robert Louis Stevenson School. Pebble Beach.**

Proskouriakoff, Tatiana
 1960 Historical implications of a pattern of dates at Piedras Negras, Guatemala. **American Antiquity** 25:454-475.
 1963 Historical data in the inscriptions of Yaxchilan. Part I. **Estudios de Cultura Maya** 3:149-167.
 1964 Historical data in the inscriptions of Yaxchilan. Part II. **Estudios de Cultura Maya** 4:177-201.

Thompson, J. Eric S.
 1950 Maya Hieroglyphic Writing: Introduction. **Carnegie Institution of Washington. Publication 589.** Washington.
 1962 **A Catalog of Maya Hieroglyphs.** University of Oklahoma Press. Norman.
 1966 **The Rise and Fall of Maya Civilization.** Second Edition, Enlarged. University of Oklahoma Press. Norman.
 1971 **Maya Hieroglyphic Writing: An Introduction.** Third Edition. University of Oklahoma Press. Norman.

YAXCHILAN—continued from Page 20

Maler, Teobert
 1901- Researches in the Central Portion of the Usumatsintla Valley.
 1903 **Memoirs of the Peabody Museum.** Harvard University. Vol. II, Nos. 1 and 2. Cambridge.

Morley, Sylvanus G.
 1956 **The Ancient Maya.** Third edition. Revised by George W. Brainerd. Stanford University Press. Stanford.

Thompson, J. Eric S.
 1954 **The Rise and Fall of Maya Civilization.** University of Oklahoma Press. Norman.

Wagner, Philip L.
 1964 National Vegetation of Middle America. In Robert C. West ed. Natural Environment and Early Cultures. **Handbook of Middle American Indians.** Vol. 1. University of Texas Press. Austin.

IS NORTH, NORTH?—continued from Page 23

10. *ibid.*, pp. 21-22.
 11. Mixer, George W.
 Fifth Edition, 1967 **Primer of Navigation**, pp. 314-316, D. Van Nostrand Company, Inc., Princeton, New Jersey.
 12. Taylor, E.G.R.
 1957 **The Haven-Finding Art**, pp. 9-12, Abelard-Schuman Limited, New York.
 13. Andrews, George F.
 1975 **Maya Cities: Placemaking and Urbanization**, pp. 51-52, University of Oklahoma Press, Norman, Oklahoma.
 14. Aveni, p. 38.
 15. Coe, p. 142.

16. Taylor, p. 12. 23. *ibid.*, p. 58. 27. Aveni, pp. 20-21.
 17. *ibid.*, pp. 12-13. 24. *ibid.*, pp. 57-58. 28. *ibid.*, p. 17.
 18. Aveni, pp. 103-104. 25. *ibid.*, p. 112. 29. Taylor, p. 249.
 19. Andrews, p. 52. 26. Taylor, p. 248.
 20. Palmer, p. 37.
 21. Aveni, pp. 223-227.
 22. Malmstrom, Vincent H.
 December, 1981 "Where Time Began," **Science Digest Magazine**, pp. 59 & 112.

ANSWERS TO THE SCHOLAR'S CORNER:

1. b,c,d, (2 Nephi 4:17-20); 2. a (1 Nephi 1:164-165, c (1 Nephi 1:159); 3. d (Jacob 3:30-153); 4. a (Ether 1:98-101); 5. a (3 Nephi 11:2-27, b (Ether 1:94-96); c (3 Nephi 10:36-41).



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