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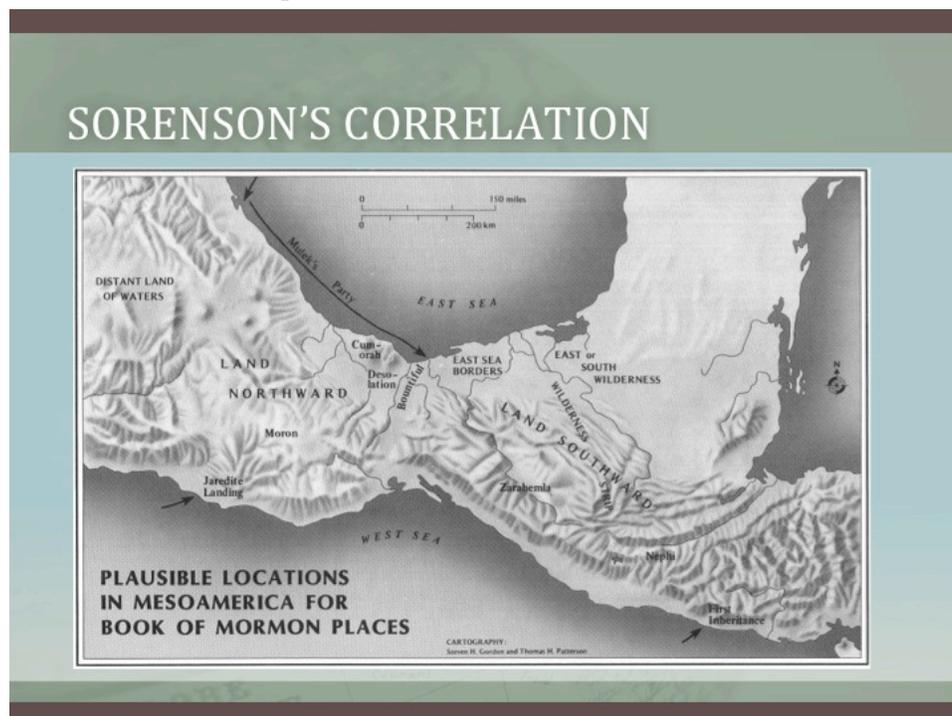
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From the East to the West: The Problem of Directions in the Book of Mormon



Brant A. Gardner

In 1985, John L. Sorenson published *An Ancient American Setting for the Book of Mormon*.¹ That book was the culmination of decades of work establishing a real world setting that plausibly fit the textual geography in the Book of Mormon. Sorenson's model places the Book of Mormon in part of the region known as Mesoamerica, extending from perhaps a little south of modern Guatemala to somewhat north of the Isthmus of Tehuantepec.



In addition to his work on the geography, Sorenson took his correlation to the next step. He examined the relationship between the available historical and cultural information for that region and the descriptions and events in the Book of Mormon. The correlations were impressive and have led to further productive investigation.²

In spite of the many reasons that recommend this model, there is one major problem with the correlation. Deane G. Matheny, a lawyer with a Ph.D. in anthropology from the University of Utah, explains:

The most fundamental geographical problem associated with Sorenson's model has to do with issues of directionality. . . . In order for his model to fit the geography of Mesoamerica, one must assume that the Nephites had a system of directions with cardinal directions skewed "45 degrees or more" off of the usually observed cardinals. . . . In other words, the whole directional card must be shifted more than 60 degrees to the west for this model to fit the geography of the chosen area. Otherwise, as Vogel has pointed out, the land north will be on the west, and the south on the east, and so forth. . . . Making this shift in directions creates its own set of problems, however, because in such a Nephite directional system the sun would come up in the south and set in the north.³

These are serious considerations. How could Nephites possibly think that the sun would come upon in the south and set in the north? They couldn't. Yet we have a geographic correlation that fits both real world geography and cultural history remarkably well—except when we come to the terms north, south, east, and west.⁴ I propose that if Mesoamerica is a good fit for the Book of Mormon's real world geography, then information about Mesoamerica may be used to reexamine and refine the nature of that fit.⁵ In short, an understanding of the Mesoamerican directional system offers an explanation for the way that Book of Mormon directions correspond to that geography, without recourse to an artificial shift in the directions.

The Mesoamerican Directional System

Scholars have found a very similar directional system among the various Mesoamerican cultures. Much of the data come from the Maya cultures because the ability to translate the carved and painted texts provides a unique view of pre-contact culture currently unavailable for any other Mesoamerican people. Nevertheless, what may be more carefully worked out in the Maya data has sufficient corroboration in data from other cultures to allow an essentially pan-Mesoamerican orientation system.

The Mesoamerican system is not a replica of our Western understanding of cardinal directions, even though it is often described using Western directional terms. While both systems are used to describe the real world and share some base characteristics, there is an incomplete overlap in meaning between the two systems. That incomplete overlap in meaning is too often hidden when we use the terms from the Western system of cardinal directions to describe the Mesoamerican system.

Unlike our four cardinal directions, the Mesoamerican system had five “directions.” Four have similarities to our north, south, east and west, but the fifth “direction” was the center (which has no Western counterpart). To our Western understanding, the center doesn’t seem like a direction, but it was nevertheless a very important part of the Mesoamerican method of orientation in the world. David Freidel, Professor of Archaeology at Washington University in St. Louis and Linda Schele, Professor in Art at the University of Texas, describe this concept for the Maya:

Just as the gods marked the periphery by placing the four sides and corners around the center, the Maya shaman creates a five-part image to sanctify space and open a portal to the Otherworld. Mayanists have adopted the Latin word *quincunx* for this five-point concept, although the Maya have many ways of expressing it in their own languages. The discerning of the four sides or the four corners and the establishing of their position relative to the center point is what we mean by “centering.” The Yukatek farmers today “center” their fields ritually even before they begin to cut them out of the fallow brushland. They mark off their fields and the units within them with small piles of stones, just as villages mark off their lands from those of neighboring communities with large piles of stones.⁶

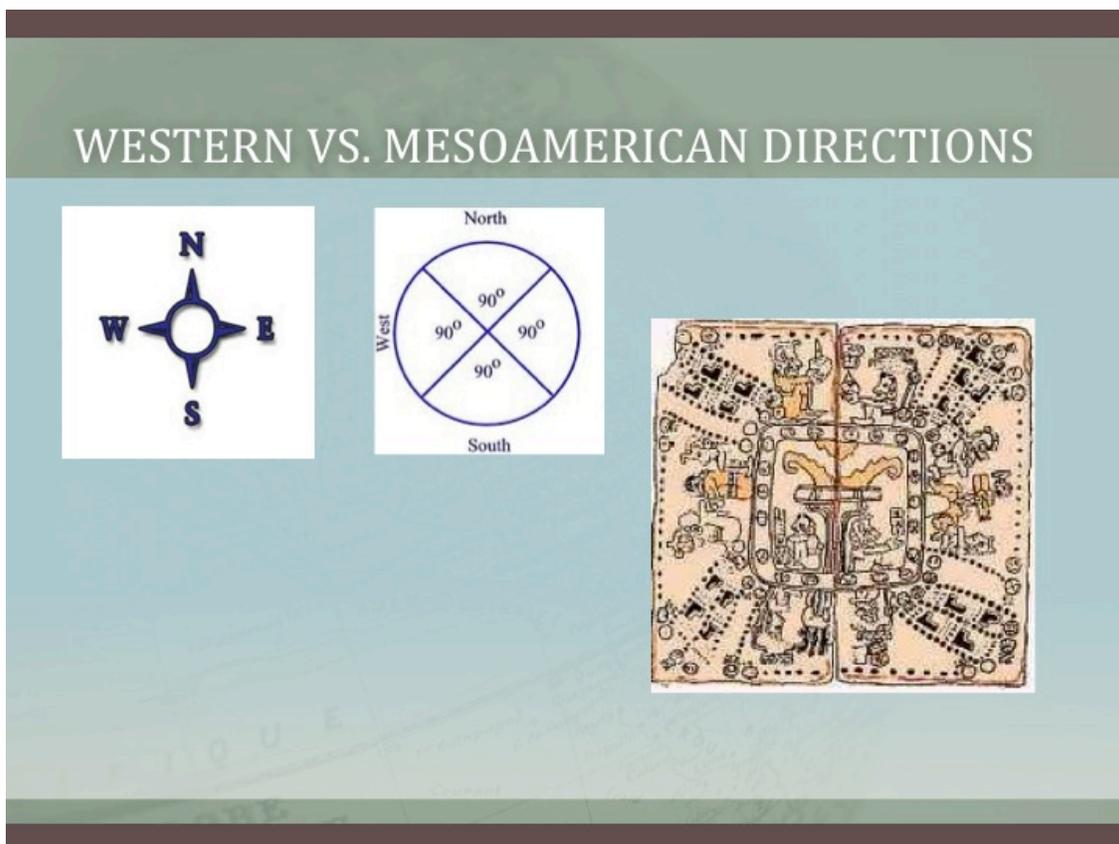
For Westerners, the very idea of a “direction” almost implies movement. Our system tells us where we are headed. The Mesoamerican system helped people define where they were. From small to large or large to small, Mesoamerican peoples centered themselves, their homes, and their cities at the crossroads of the world. Mary Miller, Professor of History of Art at Yale and Karl Taube, Associate Professor in the Department of Anthropology at the University of California Riverside, describe the way that the five-part concept influenced multiple levels of the Mesoamerican world:

One of the underlying organizational principles of Mesoamerican religion is replication, in which essential patterns of everyday life and the surrounding world are copied and incorporated as models of religious thought and action. Basic features of the social world are often repeated on an increasingly larger scale to encompass the world and the workings of the universe. For example, in the Maya region, the house with its four walls and corner posts could stand for a maize field, the community, and the structure of the cosmos. Grand and abstract

concepts are placed in human terms, and conversely, the ordered structure of the universe serves to sanctify and validate human social conventions.²

There was no universal center. Each city was its own world—its own center. Each family home replicated the world and placed that family at its center.

Not only does the “center direction” differ from our Western understanding, even the Mesoamerican directions that roughly correspond to our north, south, east and west were differently conceived. Susan Milbrath, affiliate professor of Anthropology at the University of Florida, describes the Mesoamerican mode of orientation using a Maya community as her example: “Analysis of Chamula astronomical concepts indicates that the primary axis is an east-west direction based on the sun’s daily path. . . . Even though they recognize that the zenith position is overhead, the east is visualized as the ‘up’ direction and the west as ‘down.’”³ A universal aspect of Mesoamerican directional systems is that they are based on the path of the sun. They encode that path throughout the year, tracing the shifting rising and setting of the sun from solstice to solstice.



Western cardinal directions are conceptually a +, with each direction directly and cleanly associated with the “pure” direction equidistant from all other directions. The Mesoamerican system, on the other hand, is better represented in the form of an ‘x.’ East is not a line toward the sun at the equinox, but the entire wedge created by tracing the passage of the sun along the horizon from solstice to solstice from the center. Archaeologist Prudence M. Rice puts it clearly: “Maya quadripartite organization of horizontal space is not strictly based on the four fixed cardinal directions recognized in the modern world. Instead, the divisions seem to invoke the solstice-equinox positions and movements of the sun as it rises on the eastern horizon and sets on the western.”² Although the plausible origin of this conception is the travel of the sun along the horizon, Mesoamerican systems regularized their depictions (and therefore their perceptions) into a quadripartite system surrounding the center. The world was depicted as a square with lines drawn from corner to corner. The Codex Mendoza shows the Aztec capital city at the center of the world. Tenochtitlan, indicated by the eagle on the cactus (the symbol for Tenochtitlan), sits at the center of the crossed lines that extend from each corner of the cosmos to the opposite corner.¹⁰

TENOCHTITLAN



While the five-part concept defined the understanding of one's orientation in the cosmos, the actual directional system appears have been built on only a single "direction," which was the path of the sun throughout the day and throughout the year. Other spatial relationships were made against that defining axis.

Steven Pinker, Professor of Psychology at Harvard University, provides some interesting background on this terminological problem. His emphasis was on understanding how the brain encodes meaning rather than anything to do with geography, but the example is informative:

A set of studies by the anthropologist Stephen Levinson and his colleagues aim[ed]to show that a language's spatial terms determine how its speakers use the three dimensions of space to remember the locations of objects. Levinson's group examined Tzeltal, a language spoken in the Chiapas region of Mexico. . . Tzeltal has no general words for "left" or "right." The closest it has are terms for the left or right arm or leg, but the terms are rarely used to refer to the left side of an object, table, or room. Instead the Tzeltal speakers describe spatial arrangements relative to the mountain slope that dominates their villages. The spatial vocabulary of Tzeltal includes words that mean "up-the-slope" (which is roughly southward), "down-the-slope" (roughly northward), and "across-the-slope." These coordinates are used not just when traipsing up and down the mountain but also when on flat terrain or indoors, and even when describing the arrangements of small objects. According to Levinson, Tzeltal speakers say "The spoon is downslope of the teacup," not "The spoon is on the right of the teacup."¹¹

We should not assume that Tzeltal speakers don't understand right and left. They certainly do. They simply use different terminology to describe those spatial relationships. What Pinker didn't know was that the upslope/downslope spatial orientation was repeated in their concept of world directions. Upslope/downslope are not only the terms the Tzeltal use instead of 'left /right,' but are also used instead of 'south/north.'¹² The Tzeltal conceive of the East/West axis as the critical direction for orientation. Upslope (left and south) and downslope (right and north) are simply the same terms they would use for anything else that is spatially oriented against the main reference (the sun in the case of the directions, or the human body in the case of the location of the spoon in the cup). They are not terms for "north" or "south", but simply for spatial orientation against the reference position.

David Stuart of the Peabody Museum at Harvard University analyzed two Maya glyphs and argued for their meaning as "right" and "left" by noting their visual associations with other glyphs typically given as "south" and "north." He concludes: "As students of Maya cosmology have often

noted, the sun's path defines the principal axis of the universe, with its 'right' and 'left' determining the perpendicular axis that corresponds to our 'north' and 'south.' In Chamula and other Maya communities, the celestial "sides" are perceived from the sun's own perspective."¹³

This idea is corroborated by a larger study of direction terms in various Mesoamerican languages. Nicholas A. Hopkins, visiting instructor at the Centro de Estudios Mayas, Universidad Nacional Autónoma de México, and J. Kathryn Josserand, Research Associate, Pre-Columbian Art Research Institute, found a general agreement in vocabulary for east and west that was related to the path of the sun.¹⁴ They noted: "Terms for 'north' and 'south' are much more elusive. First, there are far fewer reports of these terms. Second, there are no consistent patterns in the nomenclature. Many languages have no recorded terms for 'north' and 'south', even when 'east' and 'west' are noted."¹⁵ They concluded:

The extreme chaos of terms for 'north' and 'south' reinforces the idea that these "directions" are almost irrelevant. Directional orientation is based on the movements of the sun, east to west, and the other two "directions" are of lesser importance. How then, do we derive the system of four directions that is recorded in village barrios regional states, and other matters? The solution seems to be, as Karen Bassie has argued, that 'east' and 'west' are not directions at all, but are broad quadrants of the sky centered on, but not limited to, the cardinal directions 'east' and 'west'. 'East' is the entire section of the horizon where the sun rises during the year, from solstice to solstice and back again. This quadrant is represented in site layout by the E-group complexes found at Uaxactun and elsewhere. 'West' is the corresponding quadrant where the sun is observed to set. 'North' and 'south' are simply the quadrants that lie between these two, that lie 'at the sides of the sky', 'to the right hand' or 'to the left'. That is, two defined quadrants imply two others, giving a total of four. The "four corners of the Maya world" are simply the limits of the east-west quadrants, and do not imply four cardinal directions.¹⁶

Hopkins and Josserand report an interesting example of what happened when an informant was asked to give the word for 'north'. The Tojolabal speaker (A Mayan language) did not provide a word, but rather a definition: "wa xkilatik ti b'a norte ta wa xkan to b'a surda jk'ab'tik b'a. . [periods as in original] wa xmukxi ja k'ak'u'i (We are looking north when we stand with our left hand toward where the sun goes down.)" ¹⁷

There was no "north" in the Mesoamerican system—only a spatial relationship to that side of the sun's path. That is why the vocabulary varies so greatly. It wasn't that Mesoamericans didn't know

where north was, they conceived it entirely differently. It existed only as a quadrant on the right or left of the sun's path—where some Mesoamerican cultures called it “right” and some “left.”

It is both interesting and important to note that Mesoamericans were not the only peoples to use left/right rather than specific names for directions. William J. Hamblin, professor of History at Brigham Young University notes:

The Hebrews, like most Semitic peoples, oriented themselves by facing east, toward the rising sun. Thus *east* in Hebrew was simply *front* (*qedem*), with *south* as *right* (*yamîn*), *north* as *left* (*šemôl*), and *west* as *rear* (*achôr*) or “sea” (*yam*). . . .

The Egyptians oriented themselves by facing south, toward the source of the Nile. “One of the terms for ‘south’ [in Egyptian] is also a term for ‘face’; the usual word for ‘north’ is probably related to a word which means the ‘back of the head.’” The word for *east* is the same as for *left*, and *west* is the same word as *right*.¹⁸

One need not assume any linguistic connection between the Middle Eastern and Mesoamerican languages to account for the similarities. Using the body as the directional model from an accepted focal point is easily seen as independent invention.

Book of Mormon Directions in Translation

It is worth emphasizing that our Book of Mormon is the result of Joseph Smith's translation. The nature of that translation has been the subject of discussion among faithful scholars, with opinions ranging from Brigham H. Roberts' declaration that Joseph “had to give expression to those facts and ideas in such language as he could command”¹⁹ to Royal Skousen's understanding that Joseph Smith precisely read a translation that had already been done and which appeared in some manner when using the interpreters.²⁰ My own analysis of the available data is more in line with Roberts.²¹

In the case of Book of Mormon directions, I suggest that Joseph used common vocabulary to express the Book of Mormon system of spatial orientation and that the perception of cardinal directions in the text is the result of the translation rather than the plate text.²² I also suggest that there are sufficient hints to allow us to reconstruct that plate text system from traces remaining in Joseph's translation.

Although we certainly find the words north, south, east and west in the Book of Mormon, there is an important and very specific phrase that I believe replicates the essential Mesoamerican directional

system: “From the east to the west.” Against the background of Mesoamerican directions, it is a reasonable initial hypothesis that this phrase represents plate text terms that indicated the path of the sun. This phrase implying solar movement occurs ten times.²³

There is a single occurrence of “from the west to the east” in 3 Ne. 1:17 and a single related “from the sea west to the sea east” in Hel. 3:8. Importantly, both of these reversals of solar direction come in the context of an expansion of the meaning of “whole earth.”

And they began to know that the Son of God must shortly appear; yea, in fine, all the people upon **the face of the whole earth** from the west to the east, both in the land north and in the land south, were so exceedingly astonished that they fell to the earth. (3 Ne. 1:17)

And it came to pass that they did multiply and spread, and did go forth from the land southward to the land northward, and did spread insomuch that they began to cover **the face of the whole earth**, from the sea south to the sea north, from the sea west to the sea east. (Hel. 3:8)

Although the “from-to” construction implies movement, the cases of “from the west to the east” do not come in connection with any movement but rather with descriptions of “the face of the whole earth.” With only two examples it is a weak hypothesis, but I suggest that there was a literary reversal used in describing the “whole earth.” I believe that by reversing the known path of the sun, it placed “the face of the whole earth” firmly in the metaphorical rather than the physical realm.²⁴

In contrast to the movement implied when using the phrase “from the east to the west,” the common usage for the other two “directions” is “on the north/on the south.”²⁵ (3 Nephi 1:17, Helaman 3:8) There are no instances of “from the north to the south” or “from the south to the north,” not even in the verses describing the whole earth. For example, Alma 46:17: “And it came to pass that when he had poured out his soul to God, he named all the land which was south of the land Desolation, yea, and in fine, all the land, both *on the north* and *on the south*—A chosen land, and the land of liberty.”²⁶ Hopkins and Josserand report that many of the languages they surveyed use terms such as “on the left,” or “on the right” to designate south and north.²⁷ Where the Mesoamerican cultures used terms such as ‘on the right/on the left’ or some other spatial indicator (such as the ‘upslope/downslope’ of the Tzeltal) the Book of Mormon translation supplies the words ‘north/south.’ Although the specific word comes from Joseph’s western understanding, the words are couched in phrases that replicate the functional relationships of the Mesoamerican system.

The Book of Mormon vocabulary of spatial orientation also replicates the four quarters assigned to east-west and the sides of the sky we know as north and south. In Mosiah 27:6 we find: “And there began to be much peace again in the land; and the people began to be very numerous, and began to scatter abroad upon the face of the earth, yea, on the north and on the south, on the east and on the west, building large cities and villages in all quarters of the land.”²⁸ Of course, this is not definitively a translation from the plate text because we also find quarters of the land in the Bible and it is always possible that the term was borrowed from biblical usage.²⁹ Nevertheless, it fits with the entire system, even if it cannot be probatory of the source of the concept.³⁰

This conception of the Nephite usage of directional terms helps explain a passage that would otherwise be difficult. The flight of the Lamanite/Amlicite army is described in Alma 2:35-37:

And it came to pass that when they had all crossed the river Sidon that the Lamanites and the Amlicites began to flee before them, notwithstanding they were so numerous that they could not be numbered.

And they fled before the Nephites towards the wilderness **which was west and north**, away beyond the borders of the land; and the Nephites did pursue them with their might, and did slay them.

Yea, they were met on every hand, and slain and driven, until they were scattered **on the west, and on the north**, until they had reached the wilderness, which was called Hermounts; and it was that part of the wilderness which was infested by wild and ravenous beasts.

In this description, a fleeing army heads both west and north. Because we see ‘northward’ with some frequency in the Book of Mormon, it could have been used to indicate travel to the northwest.³¹ Instead, the text opts for travel both north and west. This is conceptually difficult in the plus style (+) cardinal directions, but quite understandable if the x-style quadrants are meant. In that case, they would simply wander back and forth over the conceptual line dividing the west from the northern quarter.³²

Just as with the description given by the Tojolabal speaker, if one were to stand with their left hand to the sun’s setting during the summer solstice, one would be looking ‘north,’ and that ‘north’ corresponds quite nicely to the north that Sorenson suggested. No skewing of north 60 degrees to the west is required. However, it should be noted that it would be a misrepresentation of Nephite directions to use north to indicate only the direction based upon the summer solstice. For the Nephites, ‘north’ would indicate anything to that side of the sun’s path.

An inherent misperception of any ancient directional system occurs simply by our attempts to represent them on a map. Our maps take a birds-eye view, and often literally a satellite's view of the land we are interested in. Almost any map we use to describe the Book of Mormon geography assumes an understanding of an area of land much larger than the ancients would have comprehended. Their world was limited to what they could see, travel to, or have described to them.³³ No remaining map created by any Mesoamerican people has any of the details of our modern maps. They are spatially inaccurate and locate landmarks without precise distance interrelationships. The maps place the reader at the center and describe the conceptual bounds of the world in distances that might be a day or two of travel.³⁴

Combined with the differences in terminology and cultural perceptions, it is little wonder that the Book of Mormon directions appear difficult fit onto a modern map. That inherent difficulty becomes even greater when we insist upon reading literal geographic statements where the text does not intend a literal reading. That is the issue that clouds our understanding of the Nephite seas.

Where is the Nephite Sea East and Sea West? ³⁵

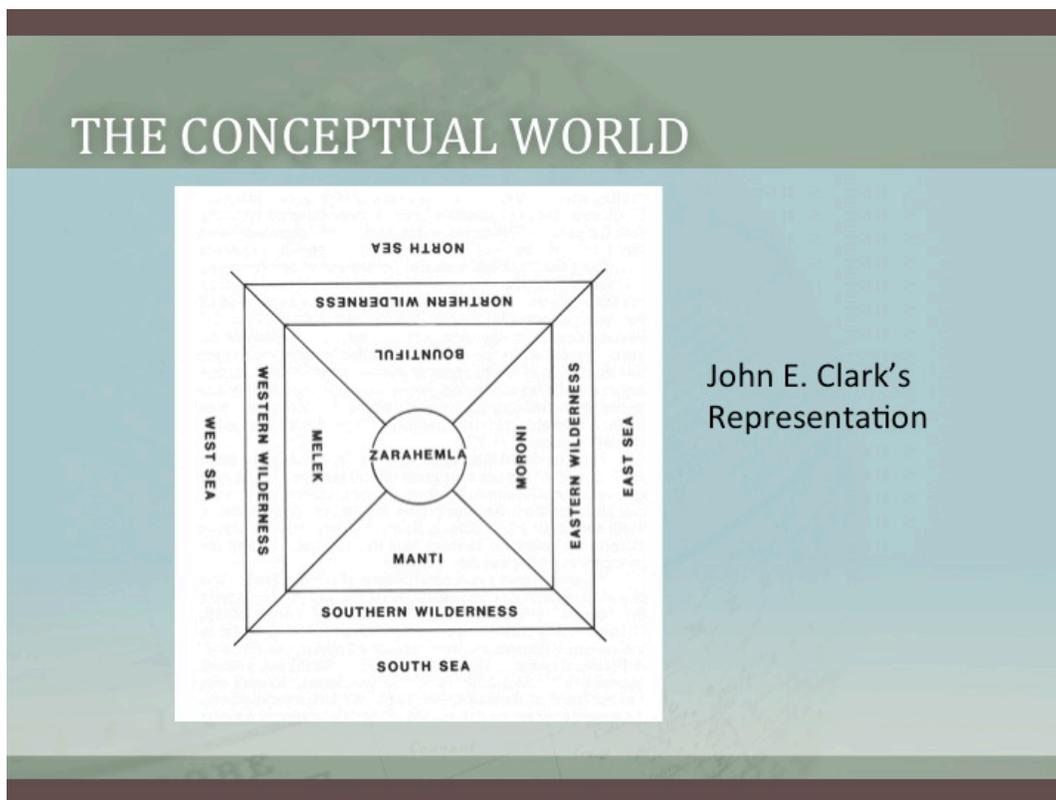
Another possible contraindication for Sorenson's geographic correlation is the relationship of that geography to surrounding seas. Helaman 3:8 clearly mentions four seas: "And it came to pass that they did multiply and spread, and did go forth from the land southward to the land northward, and did spread insomuch that they began to cover the face of the whole earth, from the **sea south** to the **sea north**, from the **sea west** to the **sea east**." Some Book of Mormon geographers therefore insist on identifying four surrounding bodies of water.³⁶ However, John E. Clark notes of these seas:

I am convinced that the reference to a north sea and a south sea is devoid of any concrete geographical content. All specific references or allusions to Book of Mormon seas are only to the east and west seas. Any geography that tries to accommodate a north and south sea, I think, is doomed to fail. But we cannot dismiss the reference to these seas out of hand. If they are metaphorical, what was the metaphor?

[This figure] shows a conceptualization of Nephite lands. The city of Zarahemla and the lands immediately surrounding it were the "center" (Helaman 1:24-27) or "heart" (Alma 60:19; Helaman 1:18) of the land (fig. 7). The surrounding lands, to the various wildernesses, were considered quarters of the land. A Bountiful quarter (Alma 52:10, 13; 53:8; 58:35) and a Manti quarter (43:26; 56:1-2, 9; 58:30) are mentioned. Moroni was another "part" of the land (Alma

59:6). We lack information on the eastern quarter; my designation of “Melek” is merely my best guess.

We have seen that the Nephite lands were surrounded by wilderness on every side. And, conceptually, beyond each wilderness lay a sea to the south, north, west, and east. Thus the land was conceived as surrounded by seas or floating on one large sea. The land was divided into a center and four quarters. Each quarter duplicated the others. The quartering of the land was not the way most of us would do it, by making a cross following the cardinal directions, but was a cross as shown in figure [3]. Such a conception of the world would not be out of place in the Middle East at the time of Lehi; and it is remarkably close to the Mesoamerican view of their world. . . The main point is that the reference to north and south seas fits nicely into the Mesoamerican scene as part of a metaphor for the whole earth and was probably used in a metaphorical sense in the Book of Mormon.³⁷



Clark's proposal that the north and south seas are metaphorical rather than physical finds an interesting parallel in the metaphorical use of the phrase “the other side of the sea” in various Maya documents. Frauke Sachse of the University of Bonn, and Allen J. Christenson of Brigham Young University, note that it is a metaphor that “remains hitherto largely unrecognized because a presumed literalness has obscured its metaphorical interpretation.”³⁸ They conclude by noting that “the phrase

‘the other side of the sea’ in the Colonial sources is only a metaphor for a place of origin in the sense of creation and not departure and thus does not necessarily refer to an actual location that could be found on any map.”³⁹ It is perhaps not coincidental that the metaphorical meaning that Clark suggests for the sea north and sea south is also associated with a conceptual organization of the world.

As Hopkins and Josserand worked through the vocabulary terms used for east and west, they presented their reconstruction of what the Classic Maya terms might have been (the * indicates a reconstructed form as opposed to a word that has been recorded). For east and west they reconstruct both the words and the plausible original meanings: “*el-ab k’in ‘the front porch of the house of the Sun (where the Sun exists)’, and *’och-ib k’in ‘the door of the house of the Sun (where the Sun enters).”⁴⁰ They argue that these proto-forms may be traced to as early as 2000 B.C.⁴¹

In a world conceptually surrounded by seas, the house of the sun would lie across the sea, or on “the other side of the sea.” Thus Sachse and Christenson explain: “We understand that in the Maya world view all creation involves the underlying concept of birth from a primordial sea in darkness. The world came into being because the earth and the mountains arose from the sea and the sky was lifted up from the water. Creation thus involves ‘dawning.’”⁴² The “other side of the sea” refers metaphorically to an origin in the conceptual east sea, the place of dawning and creation. Thus there was a very strong cultural preference for having a sea east and the parallel sea west. The question is how that conceptual world might have related to the physical seas that the Book of Mormon text requires.

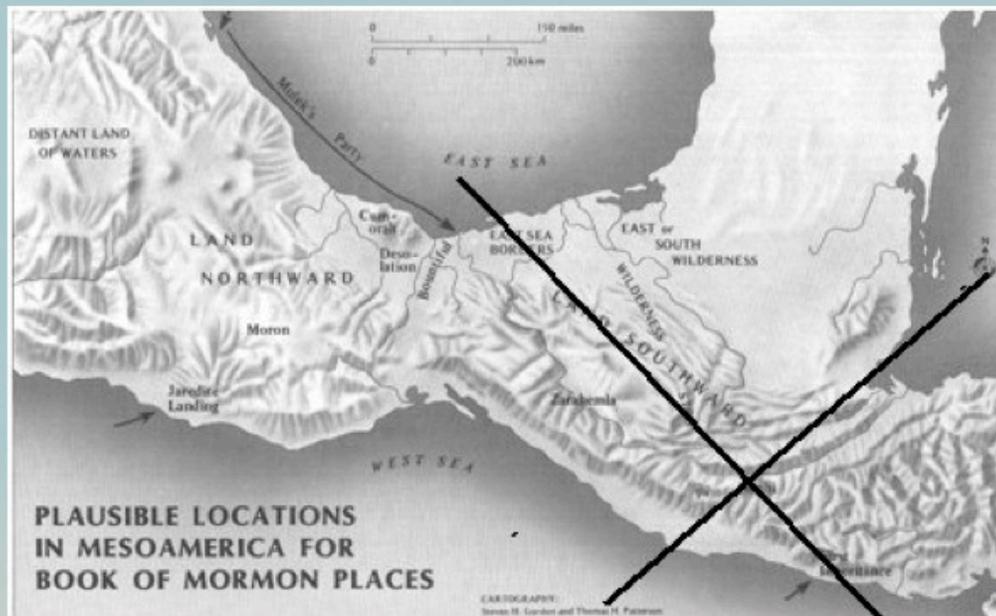
In spite of the metaphorical meanings for sea north and sea south, and the metaphorical meaning associated with the east sea, the Book of Mormon text does support the physical presence of a sea east. Sorenson’s correlation has the expected sea east, but applies that designation to the Gulf of Mexico. Anyone examining a modern map perceives the Gulf of Mexico to be north of the lands surrounding the Isthmus of Tehuantepec. How can this body of water in the north be the sea east? In Sorenson’s correlation, this is part of the skewing of directions. I suggest that no skewing is necessary, only the application of the principles of Mesoamerican directions.

The first important part of the explanation is the Mesoamerican concept of the center. Any directions given in the Book of Mormon necessarily related to some location that is conceptually the center of the world for those who live there. Directions related to a different center might result in different locations being placed in the direction quadrants. We can see this same principle even in our modern directional system. We may describe Denver as being in the east when we are located in Salt Lake City, but in the west when we are located in St. Louis. What is in the east (or west) depends upon

the vantage point from which we view the direction. I propose that the term “sea east” is a description rather than a name, and that two different bodies of water might have been considered the sea east based upon the different center points from which they are described.

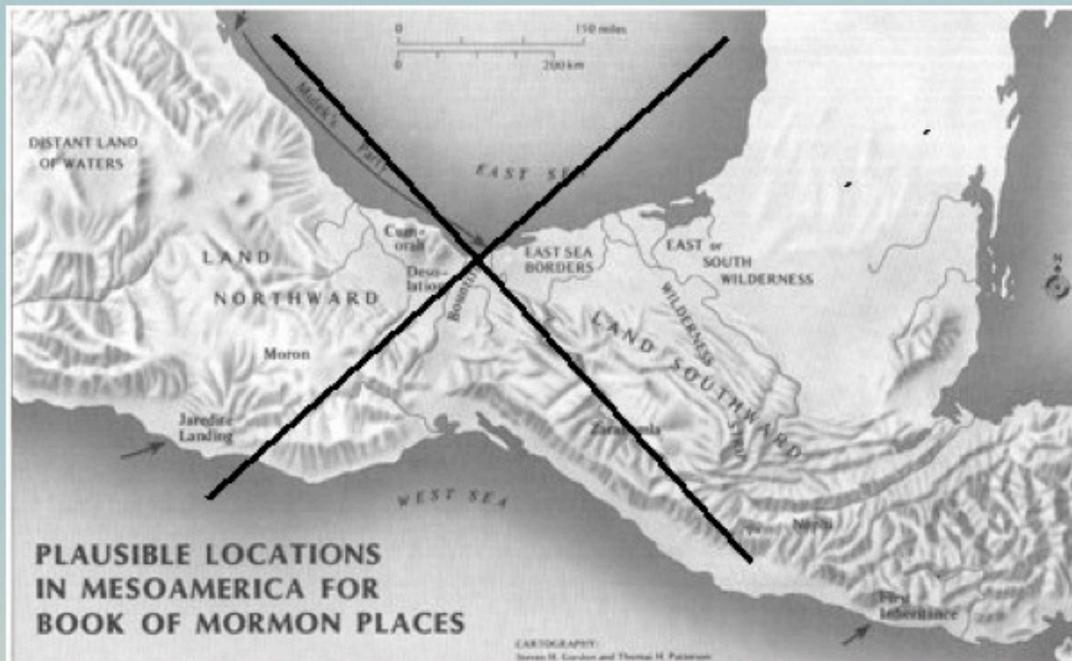
The original Nephite center point was not Zarahemla, but rather the City of Nephi. In Sorenson’s correlation, we have the highland valley of Guatemala as a plausible land of Nephi. From that center, the east sea would be right where several Book of Mormon geographers suggest; off the coast of modern Belize.⁴³ From that original center point, the Nephites would then have had the option of calling the Pacific either the sea west or sea south, since it creates the coastline that would be both south and west of the land of Nephi. Because the definition of Mesoamerican direction system had the sun setting in the sea west, it is logical that they would have selected that designation for what we know as the Pacific Ocean. The interesting combination of the sea west being both west and south helps explain Alma 53:22: “And now it came to pass that Helaman did march at the head of his two thousand stripling soldiers, to the support of the people in the borders of the land on the south by the west sea.” The land south of Zarahemla bordered the west sea, not a south sea even though there was a coastline on the south.

CITY OF NEPHI AS THE CENTER



While there is a reference to a sea east from the land of Nephi, most references to the sea east come from the time when directions were given in relation to the City of Bountiful, not the City of Nephi or even the City of Zarahemla.⁴ Using Sorenson's correlation, Bountiful would be located at the northern side of the Isthmus of Tehuantepec. With that location as the center point, the Gulf of Mexico lies both on the north and on the east. Just as the cultural necessity of the sun rising across a sea east and setting in the sea west allowed the Nephites to define a sea west from the center point of the City of Nephi, that same cultural preference would naturally select sea east as the appropriate designation of that major body of water. No skewing of directions is necessary to see the Gulf of Mexico as the sea east based on the perspective of Bountiful as the center. Regardless of the body of water, the sea east existed as a description that was related to the cosmological understanding of the east as a place of creation and of the rising/birth of the sun. In the Book of Mormon, it is plausible that two different bodies of water served that function and were designated (not named) sea east to conform to the cosmological principle.

BOUNTIFUL AS THE CENTER



The Land Northward and Land Southward

There is another feature of the Book of Mormon that may be plausibly related to an underlying Mesoamerican directional system. The vast majority of the times we see either the word *northward* or *southward* in the Book of Mormon, they are descriptive of a place, not of movement. They refer to the *land northward* and the *land southward*.⁴⁵ The term *northward* only appears three times as a description of motion and *southward* only twice.⁴⁶ *Eastward* occurs three times, always as an indication of direction of travel, and *westward* does not occur at all.⁴⁷



The phrases ‘land northward/land southward’ can parallel the functions of the ‘north/south’ spatial orientation markers, but they are textually distinct from them. We find in 3 Ne. 6:2 “And it came to pass that they had not eaten up all their provisions; therefore they did take with them all that they had not devoured, of all their grain of every kind, and their gold, and their silver, and all their precious things, and they did return to their own lands and their possessions, both *on the north and on the south, both on the land northward and on the land southward.*” There is no reason to indicate the spatial orientation twice, and the reference here clearly separates the ‘land’ from the spatial orientation.⁴⁸

The two lands conceptually meet along a dividing line: “Thus the land on the northward was called Desolation, and the land on the southward was called Bountiful, it being the wilderness which is filled with all manner of wild animals of every kind, a part of which had come from the land northward for food” (Alma 22:31). When the land northward has a name, it is Desolation. When the land southward has a name, it is Bountiful. They are adjacent lands. *Land northward* and *Desolation* are interchangeable labels, as are *land southward* and *Bountiful*.

The obvious conceptual inversion of Desolation/Bountiful suggests that there is another aspect of Mesoamerican direction systems in play. Prudence M. Rice indicates that each of the four conceptual directions had other attributes:

Among the lowland Maya, this solar basis for naming directions is evident by incorporating, *k'in* ‘sun’, into the term. East (*lak'in*) was associated with sunrise, birth, and the color red (*chak*), while West (*chik'in*, *ochk'in*) was associated with sunset, death, and the color black (*ek'*). By contrast, *xaman* (North) was associated with “up” (as in the sun at zenith), the Sun God’s “right” side on his journey, heavens, the number 13, the place of ancestors, and the color white (*sak*). *Nojol* (South) was associated with “down” or the sun’s nadir, the sun’s “left,” the Underworld, the number 9, night (“death of the sun and its Underworld journey back to the east), and the color Yellow (*k'an*).⁴⁹

Although the association between “north” and “right” is common, it was not universal. David Stuart indicates:

“The ‘south’ glyph is widely thought to read *nohol*, the word for ‘south’ in the Yucatecan language, attested also in Chontal and Cholti. The -lo suffix on a ‘south’ glyph written in Naj Tunich cave offers good support for this reading. . . The root of the term is *noh*, which has the related meanings of ‘large, great,’ ‘principal,’ or ‘right-side’ . . .

The NOH reading seems fitting in the context of the ‘hand’ terms on Tikal’s Marcador. The first glyph of the pair would simply read NOH-K’AB, a widespread and familiar term in Mayan languages for ‘right hand.’”⁵⁰

In the case Stuart describes, the orientation that leads to the terms for “north” and “south” is based on facing the sun rather than from the perspective of the sun.

It appears that there were two possible methods of deriving a term for “north” or “south,” both based on the same principle, but from either facing the sun or from the sun’s perspective. In that light

Hopkins and Josserand note the data from the later Mexica, who were Nahuatl speakers: “While Classical Nahuatl has a mythological reference to the ‘place of Death’ as the base of ‘north’, one variety of modern Nahuatl makes an association of ‘south’ (for which no term is recorded) as ‘sinister, left-handed’, and regards ‘north’ as positive and right-handed [while calling it ‘down-slope’].”⁵¹ As with the data for Mayan languages, the Nahuatl languages also demonstrate a reversal of the “handedness” of north and south.

There are strong indications that there was a similar bad/good perception about left/right (and therefore north/south which shared those terms) among the Classic Maya as there was in the Classical Nahuatl. Objects to the left of the viewer are consistently of lower status than those on the right.⁵² Maya epigraphers Stephen Houston, David Stuart, and Karl Taube note: “Consistently the right hand is ‘straight, correct large’ (*no* or *to* in Ch’olti’) or ‘fine, pure’ (*batz’i k’ob* in Colonial Tzotzil) and *wikiaq’ab*, ‘decorated, adorned’ in K’iche’, while the left hand is not quite obedient and thus, as in Colonial Yukatek, ‘ill behaved, graceless’ (*tz’ik*) or ‘clumsy like a cloven hoof’ (*tz’itz’*), and in K’iche’, *moxq’ab*, ‘crazy hand’).”⁵³

In a spatial relation system that uses the right/left hand designation for the terms we call south and north, it is not surprising at all that the Nephites used a word for ‘left hand/north’ that would have a pejorative association. That was mirrored by the favorable association of ‘right hand/south.’ That the land northward was also associated with a “dead” Jaredite culture simply vindicated the pejorative association. This gives us a very simple explanation for why the land northward is Desolation and land southward is Bountiful. The labels replicate the cultural perception of the spatial relationships based upon one facing the rising sun (and indicate that the Nephite preference was to associate left/north similar to the Mayan languages of Yukatek⁵⁴, Chontal, and Cholti).

Conclusion

The most serious contraindication for Sorenson’s correlation between Mesoamerica and the Book of Mormon has been his shifting of north some 60 degrees to the west. The quality of the correlations with the rest of the geography and cultural data suggest that we look to Mesoamerica to see if the cultural data from the region in which the Book of Mormon took place (according to this correlation) might provide an understanding of what has come to be called “Nephite North” (though it is not a term Sorenson used⁵⁵). The combination of the Mesoamerican center and the perception of the quadrants as wedges emanating for that center explain how the Book of Mormon “north” might include a region that our cultural predisposition for cardinal directions would not recognize. Combined with the shifting center points from which directions or spatial relationships may be

discussed, we have a culturally appropriate understanding the underlying plate text directions that yielded the English translations of north, south, east and west. In addition to explaining the spatial terms, it also provides a cultural underpinning for why the land northward was Desolation and the land southward Bountiful. Sorenson's geographic correlation not only remains the best supported, but what has been a directional conundrum actually provides further indication that the plate text was written in a region steeped in the Mesoamerican understanding of spatial orientation.

Notes

¹ John L. Sorenson, *An Ancient American Setting for the Book of Mormon* (Salt Lake City and Provo: Deseret Book and the Foundation for Ancient Research and Mormon Studies, 1985).

² John L. and Janet F. Hilton, "A Correlation of the Sidon River and the Lands of Manti and Zarahemla with the Southern End of Rio Grijalva (San Miguel)," *Journal of Book of Mormon Studies*, vol. 1, no. 1 (1992): 142-62 and Lawrence L. Poulsen, "The River Sidon," <http://www.poulsenll.org/bom/grijalvasidon.html>, accessed April 2011, have increased the detail of the suggested correlation between the Sidon and the Grijalva River. I have used Sorenson's geographic and general cultural connections as the underlying model for explaining the correspondence of the actions in the Book of Mormon with Mesoamerican culture and history. See Brant A. Gardner, *Second Witness: Analytical and Contextual Commentary on the Book of Mormon*, 6 vols. (Salt Lake City: Greg Kofford Books, 2007-08).

³ Deanne G. Matheny, "Does the Shoe Fit? A Critique of the Limited Tehuantepec Geography," in *New Approaches to the Book of Mormon: Explorations in Critical Methodology*, edited by Brent Lee Metcalfe (Salt Lake City: Signature Books, 1993), 277. Perhaps the most important criticism of Sorenson's model has been the variance from cardinal directions. Doug Christensen, post to Book of Mormon Archaeological Forum Group, Facebook. <http://www.facebook.com/groups/bmaf.org/permalink/10151035621679242/> Accessed July 2012:

Despite the differences, there is almost unanimous agreement among scholars that Sorenson's so called "Nephite North" which is required in order to make his model work, unnecessarily muddies the picture. . . .

Joseph and Blake Allen recently responded to an inquiry about the Sorenson model. Their answer is typical of the current thinking of most LDS scholars: "We don't feel that there is any strength to the idea of a rotated map. Sorenson pursued the hourglass concept and then superimposed it on a Mesoamerican map, thereby proposing a shift in Nephite directions from the standard cardinal directions, rotating the map and calling the result by the name of "Nephite north."

This theory has received an abundant amount of negative criticism, as there is no evidence from either the Book of Mormon or Maya culture that hints at a directional shift.

⁴ The cultural data have been sufficiently impressive that other LDS authors have attempted to retain the basic culture area, but find a way to correlate the geography with the cardinal directions

rather than Sorenson's necessary shift of the Nephite cultural north. See Dee Stoddard, "'From the East to the West Sea' An Analysis of John L. Sorenson's Book of Mormon Directional Statements," 2009 accessed August 2001 from <http://www.bmaf.org/node/251>.

⁵ John L. Sorenson, "Viva Zapato! Hurray for the Shoe!," *FARMS Review of Books on the Book of Mormon*, 6 no. 1 (1994), 305 notes: "This supposed "standard scheme" [cardinal directions] is actually a mental artifact of Western European culture developed largely since the rise of the compass and of science not many centuries ago." Sorenson's defense of his understanding of directions is based on appropriate anthropology. The refinement suggested here is the result of a more specific application of the Mesoamerican data. However, an important point of difference is that Sorenson believes (p. 308) that: "Aside from whatever these translated words for directions denoted in relation to the natural world, their use in the language of the Nephites does not seem to show that they paid prime attention to the sun's rising or setting." I will examine the evidence that there is evidence that the Nephite terms are based on a prime attention to the path of the sun.

⁶ David Freidel, Linda Schele and Joy Parker, *Maya Cosmos: Three Thousand Years on the Shaman's Path* (New York: William Morrow and Company, Inc., 1993), 127-28.

⁷ Mary Miller and Karl Taube, *An Illustrated Dictionary of the Gods and Symbols of Ancient Mexico and the Maya* (London: Thames and Hudson, 1993, paperback 1997), 30.

⁸ Susan Milbrath, *Star Gods of the Maya: Astronomy in Art, Folklore, and Calendars* (Austin: University of Texas Press, 1999), 17, 19.

⁹ Prudence M. Rice, *Maya Political Science. Time, Astronomy, and the Cosmos* (Austin: University of Austin Press, 2004), 20.

¹⁰ "Codex Mendoza" in *Antigüedades de México* (Mexico: Secretaria de Hacienda y Crédito Público, 1964), 1:7. This initial page shows Tenochtitlan centered in the cosmos. "Codex Fejervary-Mayer," in *Antigüedades de México* (Mexico: Secretaria de Hacienda y Crédito Público, 1964), 4:189. This codex opens with a depiction of a deity at the center of the cosmos, depicting not only the center and the quadripartite directions, but also the world trees anchoring the corners of the cosmos.

¹¹ Steven Pinker, *The Stuff of Thought: Language as a Window into Human Nature* (New York: Viking, 2007), 141-42.

¹² Nicholas A. Hopkins and J. Kathryn Josserand, "Directions and Partitions in Maya World View," *Foundation for the Advancement of Mesoamerican Studies, Inc.* 2011, <http://www.famsi.org/research/hopkins/directions.html>, accessed April 2011, 13. This paper is an expansion of a paper presented March 24, 2001 in the symposium "Four Corners of the Maya World," 19th Maya Weekend, University Museum, University of Pennsylvania. The current publication is posthumous for Dr. Josserand: "Some languages form the words for 'north' and 'south' on the basis of local geographical conditions." They do not collect the Tzeltal terms for north and south. They do collect a 'down-slope' meaning for 'north' and 'right-handed' for Nahuatl, p. 14.

¹³ David Stuart, "Glyphs for 'Right' and 'Left'?" January, 2002, 4. Downloaded from *Mesoweb*, <http://www.mesoweb.com/stuart/notes/rightleft.html>, February 2012.

¹⁴ Hopkins and Josserand, 9-11.

¹⁵ *Ibid.*, 13.

¹⁶ *Ibid.*, 15-16.

¹⁷ *Ibid.*, 13-14: "The Tojolabal entries are clearly not lexical; the compiler of the dictionary, Carlos Lenkersdorf, is concerned with explaining to Tojolabal speakers the meaning of terms in Spanish (and vice versa) rather than simply listing lexical items."

¹⁸ William J. Hamblin, "Directions in Hebrew, Egyptian, and Nephite Language," in *Reexploring the Book of Mormon*, edited by John W. Welch (Provo, Utah: Foundation for Ancient Research and Mormon Studies, 1992), 183.

¹⁹ Brigham H. Roberts, *New Witnesses for God*, 3 vols. (Salt Lake City: The Deseret News, 1909), 2:116.

²⁰ Royal Skousen, "Translating the Book of Mormon: Evidence from the Original Manuscript," in *Book of Mormon Authorship Revisited*, edited by Noel B. Reynolds (Provo, Utah: Foundation for Ancient Research and Mormon Studies, 1997), 64–65. A revised version is Royal Skousen, "How Joseph Smith Translated the Book of Mormon: Evidence from the Original Manuscript," *Journal of Book of Mormon Studies* 7, no. 1 (1998): 24. Skousen's understanding is best represented by his definition of "tight control" in these documents: "Joseph Smith saw specific words written out in English and read them off to the scribe—the accuracy of the resulting text depending on the carefulness of Joseph Smith and his scribe."

²¹ Brant A. Gardner, *The Gift and Power: Translating the Book of Mormon* (Salt Lake City: Greg Kofford Books, 2011), 185-92.

²² Stoddard, "'From the East to the West Sea' An Analysis of John L. Sorenson's Book of Mormon Directional Statements," is adamant that Book of Mormon directions conform to something similar to our western cardinal directions:

1. The directional system of the Nephites has six Nephite cardinal directions: north, northward, south, southward, east, and west.

2. "Northward" reflects the general direction of northwest rather than northeast. "Northward" could be either a northwest or a northeast direction by its very nature, but northwest is the correct orientation from an Isthmus of Tehuantepec perspective. Or, as Noah Webster in his 1828 dictionary says about "northward" as an adjective, as in land northward: "Being towards the north, or nearer to the north than to the east and west points."

3. "Southward" reflects the general direction of southeast rather than southwest. "Southward" could be either a southeast or a southwest direction by its very nature, but southeast is the correct orientation from an Isthmus of Tehuantepec perspective. Interestingly, Noah Webster does not show an adjectival definition for "southward" in his 1828 dictionary.

4. North, south, east, and west are the directions that readers of the twenty-first century are accustomed to based on compass bearings. When these cardinal directions are viewed from the perspective of a horizontally positioned hourglass that is placed over a map of Mesoamerica, they coincide with the same four cardinal directions employed by Book of Mormon readers of the twenty-first century.

The certainty of these declarations comes from dual assumptions. The first is that the translation must necessarily represent the precise plate meaning that is found in the English words. The second is that therefore the application of modern meaning may therefore accurately interpret textual information. Neither of these propositions can be supported by the data that I have reviewed.

Stoddard's ideas are influenced Joseph Lovell Allen and Blake Joseph Allen, *Exploring the Lands of the Book of Mormon*, 2nd ed. (Orem, UT: Book of Mormon Tours and Research Institute, 2008, 360-61.

²³ Alma 22:27, 29,32,33; 50:8; Hel. 3:8; 4:7; 11:20; 3 Ne. 1:17;20:13. Instances compiled using an electronic search for the terms 'east' and 'west' and compiling only those with this particular configuration.

²⁴ The phrase "on the east and on the west" occurs in Mosiah 27:6, but this is also in the context of the "face of the earth." When it occurs in 22:27, it is a description of "all the regions round about." Hel. 1:31 uses "on the east, nor on the west" as part of a description of Lamanites who were surrounded.

The only context that is not clearly related to "all" or being surrounded, is Alma 50:28: "34 And it came to pass that they did not head them until they had come to the borders of the land Desolation; and there they did head them, by the narrow pass which led by the sea into the land northward, yea, by the sea, on the west and on the east."

²⁵ Alma 22:29, 33; 46:17; 3 Ne. 6:2.

²⁶ The Book of Mormon can also use 'on the east' or 'on the west' as terms of spatial orientation rather than direction:

Therefore when Zerahemnah saw the men of Lehi **on the east** of the river Sidon, and the armies of Moroni **on the west** of the river Sidon, that they were encircled about by the Nephites, they were struck with terror. (Alma 43:53).

And now, behold, the Lamanites could not retreat either way, neither **on the north**, nor **on the south**, nor **on the east**, nor **on the west**, for they were surrounded on every hand by the Nephites. (Hel. 1:31)

²⁷ Hopkins and Josserand, 13.

²⁸ This is the only verse indicating the four quarters. However, a phrase indicating that something is "in" a quarter occurs more frequently. See Alma 43:26; 52:10; 56:1; 58:30; 58:35; Ether 2:5; 14:15.

²⁹ Gen. 19:4; Num. 34:3; Josh. 15:5; 18:14-15; Isaiah 47:15; 56:11; Mark 1:45.

³⁰ Hopkins and Josserand, 16, "This concept of quadrants survives even where the directional terms have been lost. In Tenejapa Tzeltal, directional orientation has shifted to *ta alan*, 'downhill' (north) versus *ta ajk'ol* 'uphill' (south). However, these are conceived of as quadrants, separated and opposed to the other quadrants (east and west), but called *ta jeich* 'transverse', 'to the side'.

³¹ Northward, eastward, and southward are all used as directions of travel. There is no occurrence of travel westward, but there is no reason to assume that it wasn't a possible lexical item. As directions of travel: northward—Alma 52:23; 56:46; 63:6: southward—Alma 17:1; Ether 15:10: eastward—1 Ne. 17:1; Ether 9:3; 14:26.

³² Lawrence L. Poulsen, "The War with the Amlicites," *Book of Mormon Geography* <http://www.poulsenll.org/bom/amlicites.html>, accessed April 2011.

³³ Alan Jones, a friend recently returned from a mission in the Philippines described a problem encountered when attempting to explain maps to a Filipino. They had no concept of what it meant and it had to be explained to them that they were seeing as if they were a bird flying above the land. The very concept of our maps was foreign to them.

³⁴ Some of this information is presented in Lawrence L. Poulsen, "Book of Mormon Geography," paper presented August 2008 at the Foundation for Apologetic Information and Research Conference. <http://www.fairlds.org/wp-content/uploads/2011/11/2008-Larry-Poulsen.pdf>, accessed February 2012, 9.

³⁵ Many of the concepts presented in this section were worked out in conversation with Lawrence Poulsen, for whose counsel I am grateful.

³⁶ Norman, *Book of Mormon Geography—Mesoamerican Historic Geography*. A graphic of the map is available at: V. Garth Norman, "The Definitive Mesoamerican Book of Mormon Lands Map." Interestingly, Norman has the sea north and the sea east as the Gulf of Mexico. See also E. L. Peay, *The Lands of Zarahemla: Nephi's Land of Promise*, 2 vols. (Provo, Utah: Cedar Fort, Incorporated, 1994), 2:24, has a sea west, east, and south, but no listing for a sea north.

³⁷ John E. Clark, "Revisiting 'A Key for evaluating Nephite Geographies,'" *Mormon Studies Review* 23, no. 1 (2011): 41 [13-42]

³⁸ Frauke Sachse and Allen J. Christenson, "Tulan and the Other Side of the Sea: Unraveling a Metaphorical Concept from Colonial Guatemalan Highland Sources," *Mesoweb Publications*, www.mesoweb.com/articles/Tulan/Tulan.pdf. Accessed February 2012, 1

³⁹ *Ibid.*, 25-26.

⁴⁰Hopkins and Josserand, 7-8. The * at the beginning of the word indicates that it is a reconstruction of an early form and is not actually found in that form in the later data.

⁴¹ Ibid., 8.

⁴² Sachse and Christenson, 2.

⁴³ The verse used to establish this correlation is Alma 22:27, which provides a description of the lands, but from the center point of a Lamanite king in the land of Nephi. Some of those making this correlation based on that passage are: Allen, *Exploring the Lands of the Book of Mormon*, 195; Allen and Allen, *Exploring the Lands of the Book of Mormon*, 393; Norman, *Book of Mormon Geography—Mesoamerican Historic Geography*. A graphic of the map is available at: V. Garth Norman, “The Definitive Mesoamerican Book of Mormon Lands Map,” <http://www.ancientamerica.org/library/media/HTML/7hvlmli5/book%20of%20mormon%20map.htm> (accessed April 2011); Lawrence L. Poulsen, “Lawrence Poulsen’s Book of Mormon Geography,” <http://www.poulsenll.org/bom/index.html>, accessed April 2011. While the verse is found in the book of Alma where the action focuses on Zarahemla as the center of Nephite culture, Alma 22:27 is given as part of the missionary journey to the land of Nephi and describes geography from that vantage point.

⁴⁴ **Nephi as the center:** Alma 22:32-33

Bountiful as the center: Alma 27:22; 50:34; 52:13; Hel. 4:6-7.

There are two other references I am not listing because the east sea occurs in a context that reads better as a metaphor for ‘the whole world’: Hel. 3:8; 11:20.

⁴⁵ **Land northward:** Omni 1:22, Alma 22:30-33, 46:22; 50:11, 29, 31, 33-34; 51:30; 52:2, 9; 63:4-5, 7, 9-10; Hel. 3:3, 9-11; 6:6; 7:1-2, 11:20; 3 Ne. 3:24; 4:23; 6:2; 8:12; Morm. 2:29. **Land southward:** Alma 22:31,32; Hel. 3:8; 4:8; 5:16; 3 Ne. 3:24; 6:2; 8:11; Morm. 1:6; 2:29; 3:5; 8:2; Eth. 9:31-32; 10:19, 21.

Another verse may represent the metaphorical ‘whole world.’ “And thus it did come to pass that the people of Nephi began to prosper again in the land, and began to build up their waste places, and began to multiply and spread, even until they did cover the whole face of the land, both on the northward and on the southward, from the sea west to the sea east.” (Hel. 11:20). In this case,

northward and southward are locations, even though not stated as lands. I hypothesize that this constitutes a generic reference rather than a directional one.

⁴⁶ **Northward motion:** Alma 63:6; Morm. 2:20, Eth. 1:42 (in the Old World). **Southward motion:** Alma 17:1; Eth. 15:10.

⁴⁷ **Eastward motion:** 1 Ne. 17:1; Eth. 9:3, 14:26.

⁴⁸ John L. Sorenson, *An Ancient American Setting*, 41, notes the occurrences of northward/southward, but always considers them as indicators of directions rather than as labels as I am suggesting:

A semantic point from the Book of Mormon is important. The Book of Mormon usually refers to the “land northward” and “land southward,” rarely to the “land north” or “land south.” (The latter terms occur only seven times; *-ward* terms appear 47 times.) The suffix *ward*, of course, signifies “tending or leading toward.” Gage correctly thought of Guatemala as “southward” from Mexico City, even though technically it was more nearly east. Similarly, if you board a plane in Los Angeles for Caracas, Venezuela, do you not mentally consider your direction southward? After all, your destination is South America; but actually you’ll end up traveling more east than south. Still, *southward* is correct.

Sorenson appears to want to use *-ward* as a specific direction rather than as an indicator of direction of travel, or as a name.

⁴⁹ Rice, *Maya Political Science*, 20.

⁵⁰ David Stuart, “Glyphs for ‘Right’ and ‘Left’?” January, 2002, 2. Downloaded from <http://www.mesoweb.com/stuart/notes/rightleft.html>, February 2012.

⁵¹ Hopkins and Josserand, 14.

⁵² Stephen Houston, David Stuart, and Karl Taube, *The Memory of Bones. Body, Being, and Experience among the Classic Maya* (Austin: University of Texas Press, 2006), 29.

⁵³ *Ibid.*, 30.

⁵⁴ Yukatek is the more modern spelling and Yucatec the more traditional. Both terms appear depending upon the preference of the author. I have left the spelling as in the original citations.

⁵⁵ Sorenson, "Viva Zapato! Hurray for the Shoe!," 305: "The concept "Nephite north" is not mine, consequently it is not appropriate on a map representing my views."