Chapter Seven

## AN "EAST WIND"

Old and New World Perspectives

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#### INTRODUCTION

Wind in many Near Eastern traditions is linked to divine origins. Punishment from God may come in the form of a destructive wind—one carrying a dry, searing heat; one bearing a plague of insects; or even one causing an overabundance of rain. References to an "east wind" can be nearly synonymous with any damaging, hot windstorm in the region of Palestine, where suffocating east winds blowing from the Arabian Desert shrivel plants and even make daily routines nearly unbearable for both humans and animals.

This essay investigates the concept of "east wind" in biblical and other Near Eastern traditions as well as those of ancient Mesoamerica. As I argue, unique associations, both geographical and metaphorical, found in the Bible demonstrate the parochial nature of east wind citations in Palestine proper, many of which are not readily applicable to other regions. In addition, I discuss several instances in scripture when a destructive or scorching east wind is mentioned and is seemingly incongruous with geographical or topographical realities outside of Palestine. Finally, I examine two mentions of "east wind" as a punishment from God in the Book of Mormon—Mosiah 7:31 and 12:6—centuries after Lehi and his group left the Old World, references that may also seem out of place in a New World setting. However, unlike similar seemingly heterotopic references to an east wind in Genesis, Exodus, and Jonah in the Old Testament, I will provide evidence from Mesoamerican traditions, both ancient and modern, identifying an east wind as a hot, dry, or destructive phenomenon. Using a Mesoamerican lens renders intelligible and appropriate both mentions of an east wind in Mosiah in the Book of Mormon. Although the Abinadi narrative, with its use of east wind, will not be discussed in this chapter until the biblical foundation has been laid; understanding the east winds of the Book of Mormon is the primary goal of this study.

# EAST WIND IN PALESTINE AND THE BIBLICAL TRADITION

In the Old Testament there are at least twenty references to an east wind. The east wind is specifically designated as the "wind of the LORD" (Hosea 13:15), symbolizing his might and destructive power over the wicked. This notion of divine punishment in the form of wind is a commonly encountered theme in the Old Testament. Thus, as the "wind of the Lord," the east wind is said to be fully controlled by God (Psalm 78:26). In some cases, it is a *sečārâ*, often translated as "whirlwind," that causes destruction. Other times, however, as in Job 38:1 and 40:6, the term *sečārâ* does not make reference to a tornado per se but rather to a strong wind—that is, the searing east wind coming from the Arabian Peninsula. Often, *sečārâ* is more properly rendered as "storm." For example, "tempest" or "storm" is more appropriate when Job complained to his friends that the Lord "crushes me with a tempest" (*sečārâ*) (Job 9:17–18). Elijah is taken up in a "whirlwind" (*sa'ar*), a term that also regularly refers to a "tempest" or "storm." Such storms or whirlwinds can be means of God's punishment, such as his punishment upon the wicked in Jeremiah 23:19.

The Lord uses an east wind to accomplish many of his purposes. Thus, in Jeremiah 18:15–17, an east wind is said to scatter all those among Israel who had "forgotten the Lord." Hosea 3:15 also indicates that the east wind is a symbol of exile while also denoting Shalamaneser, the king of Assyria.

War is also compared to an east wind (Jeremiah 18:17). Moses sent locusts as a plague upon Egypt, which arrived in the morning on the east wind (Exodus 10:13). In the book of Job, an east wind is equated with pernicious speech (15:2), and it was an east wind that was responsible for killing the children of Job (Job 1:19). The Hebrew verb  $q\bar{a}dam$ , "meet, confront, go before," a cognate to  $q\bar{a}dim$ , or "east wind," often has a martial context, such as in Deuteronomy 23:4 and Nehemiah 13:2.

The book of Ezekiel makes reference to an east wind more often than any other book in the Old Testament. In Ezekiel 27:26 the east wind allegorically represents the Chaldeans. Elsewhere in Ezekiel the scorching east wind causes plants to wither (17:10; cf. Genesis 41:6) and fruit to dry up (19:12). Similarly, in Hosea 13:15 the east wind coming up from the wilderness dries up springs and fountains.

As the "wind of the Lord," however, the east wind was sometimes used by God to bless his people. When the children of Israel were wandering in the desert, God provided manna for them to eat (Exodus 16). He also miraculously brought quails to them by causing "an east wind to blow in the heaven: and by his power he brought in the south wind. He rained flesh also upon them as dust, and feathered fowls like as the sand of the sea" (Psalm 78:26–32). Also, when Moses stretched his hand out over the Red Sea, the Lord sent "a strong east wind" to blow the sea back all night long to provide a pathway for the children of Israel to escape (Exodus 14:21).

## EAST AND THE EAST WIND IN PALESTINE

Winds in the Palestine area vary considerably with the seasons. The rainy season typically extends from October to April<sup>1</sup> and is divided into three rainy periods. The first is *moreh*, which comes at the beginning of autumn; the second is the winter rains of *gešem*; and the third is *malqosh*, or the spring rains.<sup>2</sup> The two principal seasons in Palestine are the dry summer and the rainy winter, with transitional months in between known as "inter-change" periods.<sup>3</sup> During these transitional times, the east wind prevails in Palestine. The east wind, *qādim* in Hebrew, usually begins to blow around April or May (though it can come as early as February) and remains until June,<sup>4</sup> September, October, or as late as November each year.<sup>5</sup> In Hebrew the term *qādim* means "east" but often more specifically refers to the "east

wind."<sup>6</sup> Additionally, cognate to *qādim* is *qedem*, meaning "east, antiquity, front, that which is before, aforetime" and "from the front or east."<sup>7</sup>

In Modern Hebrew scorching east winds are known as *šarav*, but they are more commonly known by their Arabic equivalent, *hamsīn*<sup>8</sup> (alternately written as *khamsīn* and *khamsin*), meaning "fifty," as it was thought to blow for fifty days a year.<sup>9</sup> The term *khamsin* can be quite general in its application; it can refer to the southeasterly winds that blow over Egypt as well as to the easterly winds near the south or southwest of the Red Sea.<sup>10</sup> Today, however, any day when the hot east winds blow is called a *khamsin* day in Palestine.

Traditionally, the *qādim* or *khamsin* is said to last three days at a time but can last more than ten, twelve, or more.<sup>11</sup> Once in 1902 the east winds were reported to have continued in the early autumn for almost five weeks.<sup>12</sup> These winds are described by Calmet as not coming in "continued long currents, but in gusts at different intervals, each blast lasting several minutes, and passing along with the rapidity of lightning."<sup>13</sup> Conversely, recent meteorological data in Israel indicate that 92 percent of the days when easterly wind storms prevail, easterly winds do not simply come in short gusts but last for at least twenty-four hours at a time.<sup>14</sup>

In Palestine the *qādim* is said to be an insufferably hot, "remarkably dry and penetrating" wind that originates in the Arabian Desert.<sup>15</sup> The force of these winds crossing the desert and coming over southeastern mountain slopes has been described as a "blast of a furnace."<sup>16</sup> Its origin in the desert regions is reflected in the Old Testament where it refers to the east wind as a *rûaḥ midbār*, "desert wind" or "wind of the wilderness" (Jeremiah 13:24).<sup>17</sup> In Lebanon the east wind is known as "the poison wind"<sup>18</sup> and is likewise described in Palestine as a wind of "poisonous and suffocating breath."<sup>19</sup> The wind has the effect of desiccating the air to such a degree that even wooden objects are warped as evaporation rates increase.<sup>20</sup> Plants wither and die due to the heat and lack of moisture in the air.<sup>21</sup> According to Reynier, when the east wind gusts when the grain is not yet formed, which results in their withering and loss.<sup>22</sup>

Temperatures can also climb, often as much as twenty degrees after the wind begins. Bromiley notes that the "wind blows from the southeast (or east or south), the temperature rises by 10° C (18° F) or more, the air becomes filled with very fine sand and takes on the color of lead, the humidity falls, vegetation wilts, and human beings and animals become irritable."<sup>23</sup> One of the peculiar effects of the intense heat accompanying the east wind storms is that it causes fruit to ripen more quickly.<sup>24</sup>

The east wind brings a haze, often described as being purple or violet, that can be so thick at times that there is a need to turn on lights.<sup>25</sup> In Golan the east wind is described as "hot and sultry and often full of fine dust; it dries everything up, making the vegetation wither and die, dark-ening the horizon and producing an effect of intense irritation in human beings."<sup>26</sup> For Murray it is as a "dusky yellow hue from being laden with impalpable dust through which the sun shines obscurely."<sup>27</sup> These fine dust particles carried in the east wind also leave sand on people, houses, and animals. Thus, during the summer months of the east wind, people in Palestine bathe more frequently for health reasons.<sup>28</sup>

Due to the suffocating, dry east wind in Palestine, simple daily activities become difficult and unpleasant. "No one dare stir from their houses," states Calmet, "while this invisible flame is sweeping over the face of the country."29 The fine dust brought from Syria and Arabian deserts makes breathing challenging and can cause lingering respiratory problems.<sup>30</sup> The moistureless air and pervasive dust particles cause respiration to quicken, "and the skin becomes quite dry and shrunk; and sometimes a prickly sensation is felt all over the body."<sup>31</sup> Geikie describes its effects as drying "the throat, bringing on catarrh and bronchial affections; while its lack of ozone makes one unwilling to work with either mind or body, creates violent headache and oppression of the chest, causes relentless and depression of spirits, sleepless nights or bad dreams, thirst, quickened pulse, burning heat in the palms of the hands and soles of the feet, and sometimes even fever."32 According to Smith, the east winds "come with a mist of fine sand, veiling the sun, scorching vegetation, and bringing languor and fever to men."33 Statistics kept by the American University of Beirut Medical Center show that fever diseases and neuroses spike in the days when the hot east wind blows.<sup>34</sup> Macalister similarly notes the "punishing" effects of the east wind that bring on "severe headaches."35 Illness caused by the east wind can lead even to death.36

The destructive powers of the east wind are found throughout the lore of Palestine. In the seventy-sixth chapter of the apocryphal Book of Enoch, the east wind is stated to be one of the winds located at twelve portals, three at each of the cardinal directions. Of the twelve winds and portals,

four are said to bring "blessings" and "peace," while eight are said to be "winds of injury." Line 5 describes the winds of the east portals as follows: "And the first wind from these portals, which is called the eastern, comes forth from the first portal which is towards the east, inclining towards the south; out of it comes destruction, dryness and heat and death."<sup>37</sup>

The east wind in various areas is also known as *sirocco*, an Italian<sup>38</sup> term from the Arabic šarki, "eastern." For those in Egypt and near the Red Sea, *sirocco* winds are equivalent to the *khamsin*; for those in Israel they are the *sharav*. In Golan they call the east wind *esh-Sherqiyeh* ("east") or *sirocco*. According to Aveni and Mizrachi,<sup>39</sup> this wind "from the east or SE blows for two, three, or four days, seldom longer, with varying intensity." The *sirocco* begins as a dry wind, but due to its heat it collects moisture by the time it reaches the northern areas of the Mediterranean. Thus, the derivation of *sirocco* from the Arabic *šarki*, "eastern," more accurately describes its prefrontal character.<sup>40</sup> There is no unifying characteristic of a *sirocco* wind since at its early stages, when it is forming in deserts of Northern Africa, it is a dry wind, but after passing over the Mediterranean Sea, it carries moist air and therefore often precedes depressions when it travels easterly across the Mediterranean Sea.

The concept of an "east wind" in Palestine, however, is not always negative. Janzen notes that there is a distinction between the fall east wind and the spring east wind.<sup>41</sup> The fall east wind is considered "good." He writes: "[The fall east wind's] first onset signals the end of the hot, dry summer and the coming of the first rains from the west. In one observation, a first fall east wind was followed within two hours by a heavy ten-minute rain accompanied by thunder and lightning, and this in turn was followed two or three hours later by the return of the east wind." The summer east wind is a destructive and disruptive force in Palestine, but it is also loathed in the winter, when it brings often bitterly cold temperatures out of the desert and makes temperatures in the spring and autumn drop.<sup>42</sup> The east wind during the winter "is usually as disagreeably cold as its relative in the summer is hot and suffocating."<sup>43</sup> In fact, the east wind that blows in the winter can bring such a penetrating cold that people can die from its effects.<sup>44</sup>

Other winds in Palestine carry altogether different connotations than the east wind does. The north wind<sup>45</sup> in Palestine is favorable, hence the

line in the Song of Solomon 4:14, "Awake, O north wind; and come, though south; blow upon my garden." Whereas winds blowing from the east bring dry weather, winds from the west bring the rains. Western winds from the Mediterranean laden with moisture travel from the west or the southwest, creating storms and rainy weather. In Israel today, the most extreme weather events are associated with westerly winds.<sup>46</sup> Thus, the Arabs refer to west winds as "the fathers of the rain."<sup>47</sup> The west wind is refreshing and can be beneficial (e.g., the wind that drove away the locusts in Exodus 10:19), though it is rarely referred to in the Old Testament.<sup>48</sup>

Luke, the author of the book of Luke and Acts in the New Testament, also intimates that rain comes from the west. In Luke 12:54–55, he writes:

54. And he said also to the people, When ye see a cloud rise out of the west, straightway ye say, There cometh a shower; and so it is.

55. And when ye see the south wind blow, ye say, There will be heat; and it cometh to pass.

In verse 55, however, Luke describes a weather phenomenon that is not typical of Palestine. He associates a "south wind" (νότον πνέοντα) (*noton pneonta*) with the coming of "heat" or "burning" (Καύσων) (*kausōn*, cf. English "caustic"), yet anyone familiar with Palestine would know that it was an east wind that brings such a scorching heat. This inconsistency in Luke's text suggests to Theissen and Maloney that Luke was "unacquainted with conditions in Palestine."<sup>49</sup> These authors continue: "This Gospel can scarcely stem from the interior of Palestine of Syria. If it was written anywhere in the East, it could only have been in a coastal region. Caesarea is not impossible, but it is more likely that Luke views Palestine from a Western perspective."<sup>50</sup> Bovon similarly concludes that "the phenomena described by Luke, if they do not apply well to Palestine, . . . are suited to the region of the Aegean Sea and the northern shores of the Mediterranean" and that he may have adapted aspects of his own region and climate into his narrative.<sup>51</sup>

## EAST WINDS AND THE NEW TESTAMENT

An east wind represents a different meteorological phenomenon at the opposite end of the Mediterranean. For those near the Strait of Gibraltar,

it is the levanter (also known as gregale or Euroclydon), a wind of varying strengths that blows in the west Mediterranean Sea between Spain and Morocco. Prevalent between July and October, this east wind is particularly dangerous to ships, but it was also thought in times past to have negative health effects on humans. Medical practitioners of the nineteenth century associated the blowing of the levanter with an altering of the quality of "bile" in the human body, which they believed then caused cholera morbus, bilious diarrhea, yellow fever, and other debilitating illnesses.<sup>52</sup>

As the east to northeast blowing levanter becomes funneled while passing through the Strait of Gibraltar, it becomes mainly easterly. The levanter often brings with it storm clouds and rain and creates fierce seas. In 1867, *Nautical Magazine* contained a warning to seafaring crafts of the hazards of navigating during a levanter:

The greatest scourge of the bay of Cadiz is undoubtedly the *Levanter* or East wind. When this wind has been continuing for a week, perhaps a fortnight, especially in those places which are heated by it, all mercantile transactions are suspended, and the most powerful boats can scarcely be trusted except in the night or early mornings when it is slack . . . , [but] as soon as the sun is up it again makes itself felt with severe gusts and at nine or ten o'clock no boat can cross the bay.<sup>53</sup>

Due to the steady movement of the levanter from northeast to southeast, however, it has also served as a navigational aid to seafarers for millennia by giving them a single directional rule of thumb.<sup>54</sup>

In the New Testament, Acts 27:14 makes reference to the levanter as a powerful "east wind." Paul, while on his way to Rome, encountered a violent storm that destroyed his ship.<sup>55</sup> The verse in the KJV reads, "But not long after there arose against it a tempestuous wind, called Euroclydon." In the Mediterranean the strong northeast wind that commonly passes through the Strait of Gibraltar is also known as the Euroclydon (from the Greek *euroklydōn*, lit. "east wind, north wind"). The term "Euroclydon" appears just once in the New Testament, in this verse in Acts. The exact derivation of the term "Euroclydon" has vexed interpreters and ancient copyists, resulting in several spelling variations in different manuscripts. The Codex Alexandrinus, the Westcott-Hort, Tregelles, and GNT Morph read Eὐρακύλων (*eurakudōn*), "the northeast

wind," which corresponds precisely to Jerome's *euro-aquilo* in the Vulgate. However, other manuscripts, such as the Textus Receptus, have Εὐροκλύδων (*eurokudōn*), from εὖρος (*euros*), "east wind";<sup>56</sup> and κλύδων (*kludōn*), "a wave" or "a violent agitation of the sea"—that is, an eastern wind tempest accompanied by rough or wavy seas.<sup>57</sup> Some, however, interpret εὖρος as deriving from the Greek εὐρὑς (*eurus*), "broad," thereby indicating a "broad wave."<sup>58</sup>

The ferocity of this easterly or northeasterly wind that wrecked Paul's vessel is revealed in verse 14 in its description as "tempestuous." The Greek term translated as "tempestuous" in the KJV is  $\tau \upsilon \varphi \omega \upsilon \kappa \delta \varsigma$  (*typhōnikos*), which is cognate to the English "typhoon" and derives from the noun *typhon*, "whirlwind."<sup>59</sup>

This singular occurrence of a destructive east wind in the New Testament but in a region far to the west of Palestine extends the scope of both the metaphor and the meteorological reality for those in Palestine who traverse the Mediterranean Sea.

## GEOGRAPHICAL VARIATIONS AND EAST WINDS

The significance and characteristics of an "east wind" in the Near East will vary considerably depending on the geographical location. An east wind in Palestine many not have the same associations just a few hundred miles away. As McCarvey has correctly noted, "A writer who would always speak correctly and in definite terms of the winds of a country, must not only live in it, but he must be a close observer."<sup>60</sup> The notion of an east wind as a scorching and pestilent phenomenon is specific to Palestine, and the metaphorical and meteorological impact of an east wind may not be easily understood in other areas or countries where no such associations exist.

For example, the "east wind" in Assyria does not share any of the negative connotations with Palestine, which is to the west; rather, it is recognized as a bringer of rains. Thus, the Assyrian east wind (*en-líl*), sometimes translated as "Lord of Air," can also be interpreted as a wind or storm<sup>61</sup> god.<sup>62</sup> In Baghdad today south, east, and southeast winds are each called a "cloud wind" in the winter and even bring moisture in the autumn.<sup>63</sup>

Assyrian texts similarly connect the expression *bēl gimri*, "lord of totality," with the east wind (e.g., "šadû(kur.ra) en-líl bēl gim-ri," "the east wind: Enlil,

lord of all"). In Assyria the "east wind," *en-líl šá-a-ri*, and the eastern directions derive from the notion of a "mountain,"<sup>64</sup> sometimes expressed as *hušānu(hur. sag)*, or more commonly as *šadû(kur) rabû*, "great mountain," *kur* being a term for both "mountain" and "east"<sup>65</sup> in Assyrian.<sup>66</sup> The specific mountains referred to are those east of Mesopotamia, the Zagros Mountains. Sumerian tradition similarly designates the "east wind" (*kur.ra*) as a "mountain wind," referring to the mountains either east or northeast<sup>67</sup> of Mesopotamia.<sup>68</sup>

There is no blanket applicability with "east wind" as a negative, destructive force beyond the immediate Palestine area, even among relatively close geographical neighbors. We have to proceed with caution when we divest such terms of their "home meaning" when used in other regions.<sup>69</sup>

It is therefore curious that there are instances in the scriptures when a harmful "east wind" is mentioned outside of a Palestinian context. Genesis 4:6, 23, and 27 and Jonah 4:8 in the Old Testament and Mosiah 12:6 and 27:6 in the Book of Mormon all contain references to such a destructive or scorching "east wind" in Egypt, Nineveh, and in the New World, respectively. All three instances merit further investigation to explain this apparent decontextualization of a term originally limited in scope to Palestine.

#### EGYPT: A SOUTH OR EAST WIND?

An early reference to the east wind appears in Genesis 41, which recounts Pharaoh's dream and Joseph's interpretation of the various aspects of it. Pharaoh dreams of seven thin ears of corn that are "blasted with the east wind"<sup>70</sup> that "sprung up after them" (Genesis 41:6). The destructive force of the east wind is again mentioned in verse 23. Joseph tells Pharaoh that the dream is a prophecy of misfortune in the form of famine: "The seven empty ears blasted with the east wind shall be seven years of famine" (v. 27). Many have viewed these references to the "east wind" as misplaced since the east wind in Egypt does not have the same negative connotations as a blistering, dry wind as it does in Palestine.<sup>71</sup> In fact, the east wind in Egypt is described as being "soft, favourable, and wholesome."<sup>72</sup> In Egypt it is a south or southeast wind, associated with the goddess Nephthys,<sup>73</sup> that fits the description of a parching wind.<sup>74</sup> Indeed, Egyptians seem to have been principally oriented toward the south<sup>75</sup>—the source of the Nile—whereas those in Palestine were oriented to the east.<sup>76</sup> So why does the text

of Genesis seem to impose a strictly Palestinian understanding of the east wind into a narrative taking place in Egypt?

The translators of the Greek Septuagint version of the Old Testament, working in the third century BC, clearly understood the contradiction and took steps to ameliorate the problem. Translators knew "the parching effects of the east wind, with which the inhabitants of Palestine are familiar, are not attributable to the wind in Egypt, but either to the south wind, called in that country the khamsim, or to that known as the samûm, which comes from the south-east or south-south-east."77 The Septuagint translation itself was done in Egypt, so the translators were surely keenly aware of the incongruity. Therefore, in verses 6, 23, and 27 of Genesis 41, these translators left out "east wind" altogether, simply stating that the thin ears of corn were ἀνεμόφθοροι, "destroyed by the wind," in place of shadûfot qādim, "blasted with east wind," in the Hebrew text. In his fourth-century Latin translation of the Old Testament, Jerome rendered it vento urente "burning wind" (v. 23), with no reference to "east" in verses 6, 23, and 27. Wycliff follows suit, but translating it in all of the previously mentioned verses as "brennynge wynd," "burning wind." In verses 6 and 23 Jerome translates the "east wind" references in the Hebrew text simply as percussae uredine, "stricken with blight," which is faithful to the original sense of the blighting effects of the sirocco on crops but omits any mention of the east wind itself. Jerome originally used the Greek Septuagint version for this Latin translation; though when he became disenchanted with the condition of the text, he then focused primarily on translating the Hebrew text. Although a few parts of Jerome's translation clearly relied heavily on the Septuagint (for example, to augment sections of Esther), he largely based his work on the Hebrew text (likely the Masoretic Text).78 Nevertheless, he seems to either have followed the Septuagint more closely than the Hebrew in dealing with the "east wind" references in Genesis 41, or he sought to render intelligible the decontextualized reference to a destructive "east wind" in Egypt by changing it to "burning wind."

Thus, according to Malan, the Jewish translators in Alexandria necessarily avoided translating the Hebrew *qādim* or rûaḥ qādim as "east wind" since having ears of corn being blasted by an "east wind" would have caused confusion, as "that wind in Egypt rather helps . . . [plants] to grow; and is counted a blessing and not a curse."<sup>79</sup> Instead the translators opted for a decontextualizing of the expression, simply rendering it as "destroyed by the wind" and leaving the interpretation up to the reader.

Based on the situation on the ground in Egypt, one may have expected them to have changed all three cases to "south wind" to make the expression intelligible in an Egyptian context.<sup>80</sup> Indeed, Septuagint translators made just such a change elsewhere in the Old Testament. In Exodus 10:13, following the directions of the Lord, Moses causes an east wind to blow throughout Egypt, bringing with it a plague of locusts: "And Moses stretched forth his rod over the land of Egypt, and the LORD brought an east wind upon the land all that day, and all *that* night; *and* when it was morning, the east wind brought the locusts." While the Hebrew text contains rûah qādim, "east wind," the Septuagint translators changed this reference in Greek to ό ἄνεμος ὁ νότος, "the south wind," since in Egypt it was the south wind that brought locusts from Ethiopia (which were a source of food for the Egyptians), not an east wind like in Palestine.<sup>81</sup> Thus, to rectify this apparent discrepancy, the translators of the Septuagint, "encountering the hot wind of the Levant of the Hebrew Bible, either deleted the reference to its eastern origin, or they substituted it for their hot southern one, the chasmin."82 Such an interpretative alteration is justified, according to McClintock and Strong, since the south wind has the same characteristics in Egypt as an east wind does for those in Palestine.<sup>83</sup> References to the destructive east wind in Genesis 41 and to a locust-bearing east wind in Exodus 10:13 would have been out of place and likely misunderstood in an Egyptian setting since it is the south or southeast wind that has those characteristics in Egypt.

Another instance in the Old Testament when mention of an east wind seems out of context is with Jonah in the city of Nineveh. As Jonah sat outside Nineveh in the morning, waiting to see the judgments of God fall upon the city, "God prepared a vehement east wind;<sup>84</sup> and the sun beat upon the head of Jonah, that he fainted, and wished in himself to die, and said, *It is* better for me to die than to live" (Jonah 4:8, KJV). In Hebrew the expression is *rûaḥ qādim ḥărîšî*, "a vehement<sup>85</sup> east wind," and in LXX Greek it is  $\pi \nu \varepsilon \dot{\nu} \mu \alpha \tau$  καύσωνι συγκαίοντι, "a burning east wind." In this case, however, the Hebrew *qādim* cannot refer to the *khamsin* winds for several reasons. First, as Walton and colleagues point out, the sun would not be a factor since the morning is not when the sun is "burning."<sup>86</sup> Furthermore, the setting is Nineveh, not

Palestine. They add, "The east wind was a problem in Palestine because of the desert to the east, but for Nineveh an east wind would often result in rain. Here it is a particular type of east wind (NIV: 'scorching') but this word is used here so it is difficult to understand precisely."<sup>87</sup> Due to the physical geography in Mesopotamia, the prevailing winds are northwest and southwest, but "the east wind was named the mountain wind (Akk: *IMšadu*) and usually brought rain."<sup>88</sup> Therefore, this scorching wind that made Jonah grow faint and welcome the prospect of death is heterotopic if literally interpreted.

We thus see a Palestinian tradition and understanding of "east wind" being applied to a foreign geographical setting by biblical writers. This leads us to another seemingly incongruous case of a punitive "east wind" reference—one in the New World, as recorded in the Book of Mormon. But as I will show, there is indeed ample evidence in Mesoamerica of precisely this type of a hot or destructive east wind.

#### EAST WINDS IN THE ABINADI NARRATIVE

In the Book of Mormon, in 160 BC a prophet named Abinadi went among the people of King Noah, a despot, who levied heavy taxes on his people, practiced idolatry, kept company with harlots, and spent lavishly on his building projects for himself and his henchmen (Mosiah 11:3-14). Abinadi offered stern words from the Lord to the king and the people, calling upon them to "repent and turn unto the Lord their God" (11:23). His message was immediately rejected, and the people sought to kill him. Two years later Abinadi returned in disguise, made his way into the city, and began again to firmly call the people to repentance. He prophesied that the Lord would bring punishment for their wickedness in the form of famine and pestilence. Abinadi then added this warning from the Lord: "And it shall come to pass that I will send forth hail among them, and it shall smite them; and they shall also be smitten with the east wind; and insects shall pester their land also, and devour their grain" (Mosiah 12:6).89 The text states that the people in the New World, where Book of Mormon events primarily took place, were to "be smitten with the east wind."

Approximately thirty-nine years later, the Nephite king Limhi sent a proclamation to all of his people that they should gather to the temple to hear his speech (Mosiah 7:17). In his address, he recounted how great

a prophet Abinadi was, one who had prophesied of the coming of Christ and many other things and who had been killed because he told the people "of the[ir] wickedness and abominations" (Mosiah 7:23). For the murder of Abinadi and a host of other sins committed by the people, the judgments of God were brought upon them, resulting in bondage and afflictions (v. 24). Limhi then spoke the words of the Lord regarding the consequences of their actions: "And again he saith: If my people shall sow filthiness they shall reap the east wind, which bringeth immediate destruction" (Mosiah 7:31). Their current state of oppression was evidence that precisely this had come to pass.

Here in Mosiah 7:31, we have the first of only two occurrences of "east wind" in the text of the Book of Mormon. The east wind is said in this verse to bring "immediate destruction." As noted earlier, the east wind is "the Lord's wind" in the Old Testament and a means by which he punishes and occasionally blesses his people. However, the notion of a punishing east wind was geographically specific to the lands of Palestine in biblical tradition. Why then would the Lord make reference to this wind when speaking to people in a distant land who have been separated from the Old World for such a considerable period of time? Would the concept of a punishing east wind have resonated with those in a New World setting?

## EAST WINDS IN MESOAMERICA

There are several important cultural and geographical considerations that need to be taken into account before we can embark on any meaningful discussion of what "east wind" may have meant in ancient Mesoamerica. First, as discussed previously, lexical meaning associated with any directional wind will vary based on the geographical location. Thus, in the temperate zone of the northern hemisphere an east wind is associated with rainy weather and a west wind with clearer skies.<sup>90</sup> To those in Britain an east wind brings bitterly cold weather, whereas for those living in Palestine it brings aridity and heat. If we apply a Mesoamerican lens to the Book of Mormon, what weather phenomenon would an east wind entail?

To answer this question we must first realize that Mesoamerica is a vast area of highly different elevations, climates, and geographical features, all of which could influence the effect of an east wind on a particular population. Since the exact location of Book of Mormon events is not known, this immediately complicates our attempts to correlate weather phenomena and their metaphorical or conceptual interpretations. We should also note that references to the "east wind" in the Book of Mormon appear around 150 BC, representing some 450 years of separation from Palestine and the specific associations of the east wind with that region.<sup>91</sup>

In addition, while it might be taken for granted that a reference to "east" or any other direction means exactly what we think, there is considerable variation among Mesoamerican groups in the identification and location of the cardinal directions. For example, while the Yucatec system of directions contains four designated terms that are commonly translated as the four directions, it is not based strictly on the four cardinal points as we understand them but rather gives prominence to the diurnal movement of the sun along the east-west axis.<sup>92</sup> Furthermore, the Western view of four cardinal directions does not correspond to Mesoamerican worldview at times since a fifth direction, the center, is often equally as important as the other four.

In the Classic period (AD 250–900) for the Maya four putative "directions" are named: *xaman*, "north"; *nohool*, "south"; *chik'in*, "west"; and *lak'in* or *elk'in*, "east". In other contexts the term for "north" is *nal*, suggesting a regional variation or a different meaning of that "direction." Colonial Yucatecan sources have similar terms but also give *lik'in* as a variant of *lak'in* for "east."<sup>93</sup> Early work by Léon de Rosny<sup>94</sup> and Eduard Seler<sup>95</sup> helped to identify the Maya symbols thought to correspond to the four cardinal directions. For the ancient Maya, each of these four directions was linked with a color: east with "red," west with "black," north with "white" (though sometimes with east and an east wind),<sup>96</sup> and south with "yellow," with blue-green being the color of "center."<sup>97</sup>

The interpretation of the four glyphs that seemed to some to correspond to the cardinal directions has been controversial and is nowhere near resolution today.<sup>98</sup> Some scholars believe the four directions are represented by the four hieroglyphs at each wall of Tomb 12 at the site of Río Azul, Guatemala, which do precisely correspond to the cardinal directions, providing evidence of a one-to-one association.<sup>99</sup> Others, such as Coggins<sup>100</sup> and Bricker,<sup>101</sup> believe that terms for "north" related to "up" and the zenith, while "south" correlated to "down" and nadir. In our effort to understand the references to a destructive east wind in the New World among the people of the Book of Mormon, this question of just what is meant by "east" among indigenous Mesoamerican populations is essential.<sup>102</sup>

Firstly, it may be somewhat of a surprise that many Maya groups commonly do not have words for all of the four directions as we understand them, often having no directional terms or only those for "east" and "west."<sup>103</sup> This absence suggests they were perhaps not as culturally salient as they are in Western societies. Through a careful comparative study of Mesoamerican languages, Hopkins and Josserand found that languages that base their terms "east" and "west" on the verbs "exit" and "enter," respectively, are located primarily along the Gulf Coast lowlands, with some occurrences in nearby groups of the Huastec, Mije, Yucatecan, Chuj, Q'eqchi', and Xinca.<sup>104</sup> In the Maya highlands, "east" and "west" are most often based on the notions of "rise" and "fall"—as with the Totonac, Zoque, Tzotzil, and Tojolabal groups—or on the verbs "appear" and "disappear," such as with the Mixtec and Zapotec peoples.

Hopkins and Josserand further state: "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."<sup>105</sup> Hopkins and Josserand's conclusion, following that of Bassie-Sweet,<sup>106</sup> is that "east" and "west" refer to much larger areas than strictly those of their corresponding cardinal directions and that "north" and "south" are less important quadrants that lie between these two primary "broad quadrants." Indeed, they argue that the common references to the "four corners of the Maya world" are "simply the limits of the east-west quadrants, and do not imply four cardinal directions."<sup>107</sup> This deduction agrees with Watanabe's conclusion that it is impossible to link the Yucatecan terms *xaman* (often translated as "north") and *nohol* (often translated as "south") to the cardinal directions. He argues instead that they refer to the "two principal seasons of the year," not locations on a compass.

As the above discussion shows, the concept of "cardinal directions" in Mesoamerica is not nearly as straight forward as it is for many Western cultures. Just as an "east wind" in Palestine has a unique significance to the geography and the culture of that region, so concepts of direction in Mesoamerica are pregnant with local mythological and cultural underpinnings.

Thus, in Classical Nahuatl, "north" is "the place of Death,"<sup>108</sup> while "south," *amilpampa*, means "place of the ocean," a feature of the local geography, similar to the Huastec and Chontal terms for "south" as "(big) mountain."<sup>109</sup> We therefore have to guard against too quickly assuming that a directional reference in the Old World will automatically have the same interpretation in the New World.

## EAST WINDS AS WINDS OF DESTRUCTION IN MESOAMERICA

Despite the complexities and inherent problems with making strict associations with east winds in Mesoamerica, fortunately the concepts of "east" and "west" are some of the most consistent in Mesoamerica since they commonly relate to the "exit" and "entrance" points of the sun. What is more, there does exist a considerable body of evidence that numerous pre-Columbian and modern inhabitants of Mesoamerica indeed viewed the east wind negatively and as a destructive force.

Winds throughout Mesoamerica are the quintessential evil force, and so any reference to malevolent or destructive winds would have been readily understood. Winds are commonly said to reside at the four corners of the earth, as they do for the Yucatec Maya.<sup>110</sup> Concepts of evil and maliciousness are often associated with different "winds." For instance, Villa Rojas notes that among the Tzeltal Maya, they say that *naguales* ("evil spirits") are incorporeal and invisible, "sheer wind."<sup>111</sup> Winds are also commonly linked to most types of illness. For example, the Yucatec Maya associate nearly all disease and sickness to a specific *'iik'* ("wind"). Villa Rojas notes that in the Yucatecan town of Chan Kom, "wind brings colds and fevers to children."<sup>112</sup> Whirlwinds and dust devils are particularly dangerous, and if one is encountered on the road, the inhabitants of Chan Kom will quickly get out of its way. Whirlwinds represent "a serious danger to humans, as one may fall gravely ill from contact with it."<sup>113</sup> In fact, "any little unusual agitation of the air suggests the presence of dangerous winds."<sup>114</sup>

Whirlwinds (*moòson 'iik'*) and other winds in the Yucatan originating from bodies of water are said to be most likely to bring illness. This is why *cenotes*, or sinkholes, are considered so dangerous since they are "the doors to the sea."<sup>115</sup> Therefore, north and west winds, which are believed

to come more directly from the sea than east or south winds do, can bring sickness with them.

Villa Rojas likewise notes that the people of Chan Kom directly associate *vientos maléficos* ("evil winds") with personified entities.<sup>116</sup> These evil wind spirits carry names such as *ak-than-ik*, "the wind that drives forth," or *dzan-che-ik*, "the wind that tramples," (i.e., rheumatism). Winds are also anthropomorphic in their shape,<sup>117</sup> sometimes as *alux*: small mythical beings that can cause various illnesses, such as *coc-ik*, "asthma wind," and *coc-tancaz-ik*, "asthma-seizure wind." Names of other wind-based sickness are *Nak-tan-coc-ik*, "sticks-to-the-chest wind" (i.e., pneumonia); *Mamuk-ik*, "suddenly embracing wind?" (i.e., chills); *Balam-tun-hol-ik*, "jaguar-entrance wind" (i.e., malaria).<sup>118</sup> There are scores of such wind-related diseases among the Yucatec Maya. Indeed, a large number of illnesses contain the term *'iik*, "wind," in their names. For instance, in the following prayer a Mopan Maya priest speaks to the evil winds who have stricken a child with fever:

I am standing up before you to beg your saintly aid as I hold so and so's pulse, his veins, and his flesh. You evil winds that cause him to tremble, whence do you come? Perhaps it is you, the wind that blows over the water. Perhaps it is you, the wind that comes over the earth. I have found you out. From where you lie hid in the patient's foot, or in his heart I am going to drag you out, you evil winds of sickness.<sup>119</sup>

The process of healing involves identifying the exact wind that is afflicting the person, usually through divination. This can be followed by prescribed foods, drinks, activities, or, at other times, rituals to free the person from the debilitating effects of the winds. Ritual specialists in the Yucatan "use formulaic expressions, rapidly chanted brief prayers, and special gestures to ward it off and protect themselves" from disease-causing whirlwinds.<sup>120</sup> Martel notes that in such prayers "the winds are constantly associated with powerful sources of life and death."<sup>121</sup>

Ritual specialists are also called on to control evil winds. In colonial times a Maya healer was sometimes known as an *Ah mac ik*, or "evil wind stopper."<sup>122</sup> He was enlisted when violent winds were damaging cornfields.<sup>123</sup>

There are said to be three major winds that "attack" in any season in the Yucatan, which are known as *ajau ik*', *mozon ik*', and *lak'in ik*', the latter being "the east wind." "While three are dangerous winds, they are not alike; the most feared *ajau ik*'," which "is the owner of the yellow clouds and is at the end of the earth, . . . lives there."<sup>124</sup>

Among numerous Maya groups, the east wind is said to be greater or of a higher order than the other winds. According to Hanks, individual spirits among the Maya of the Yucatan have names relating to their axiomatic characteristics inherent in them, such as *ht'uúp balan 'iik'*, "youngest-brother jaguar wind."<sup>125</sup> One such spirit is named *lak'in 'iik'*, "east wind." All the spirit winds are "endowed with fixed spatial coordinates that define their proper place in the cosmos," and the east wind and other directional winds have precedence over other types of winds. Hanks similarly notes that some spirits, "known by names such as *lak'in 'ik'* east wind'..., are held to have been created *before* other spirits, such as the Catholic saints."<sup>126</sup> He states that the east wind and "other purely directional spirits" are considered "higher" than other types of beings.<sup>127</sup>

The preeminence of the east wind was also noted by J. Thompson,<sup>128</sup> who states that the Lacandon Maya believe the four (or six, depending on different sources) wind gods are at the four cardinal points, and they, along with an earthquake, are the means of the final destruction at the end of the world. The wind in charge among this pantheon is the east wind, known as Hunaunic.<sup>129</sup>

In the Yucatan, a Maya priest casting a protective spell on a recently planted cornfield addresses the four winds of the four primary directions. Among these, only the east wind is given the designation as *noh*, "big" or "large" (*noh lak'in 'ik*"). For example, in a prayer to the four winds and other deities, a Yucatec healer, while making an offer of *saka* drink, petitions,<sup>130</sup>

bey šan ti? noh lak'in ?ik';

bey ti? túun ti? kan tí?i¢ in kòol šan

So also to the great east wind;

So then to the four corners of my cornfield also.

The Maya of the Yucatan refer to the god of the east wind as *ajlak'in* or *ajlak'in ik'*. Tozzer notes that the Lacandon Maya also refer to the god of

the east wind as *ahlaqinqu* (*ajlak'in k'u*).<sup>131</sup> Additionally, the Maya of the Yucatan worshipped the tapir in the form of an idol known as Ah-Zakik-ual, "Lord of the East Wind," at a pyramid in Valladolid, Yucatan, and celebrated every four years in the form of sham battles.<sup>132</sup> The Maya god Chac Xib Chac, "Red Man Chac," is another god known to be the god of the east wind in colonial and pre-Columbian sources.<sup>133</sup>

#### EAST WINDS AS HOT OR DESTRUCTIVE FORCES

There are various Mesoamerican societies for whom the east wind is considered destructive or is known to be a wind that brings higher temperatures. For instance, the *lik'in ik'*, or "east wind," is said to be "hot" in the Yucatan, as is the south wind, whereas north and west winds are "cold."<sup>134</sup> The Itzaj Maya of the Yucatan also associate the east wind (*ajlak'in ik'*) with a strong summer wind: *ka' ti wak'-ij jum=p'eel aj-k'a'am ik' aj-lak'in ik'* (when a strong wind blew, the summer [*east*] wind).<sup>135</sup>

The Itzaj Maya observe the four winds when burning their fields to prepare them for planting. Any of the four winds can dry the underbrush quickly, but they must be sure to keep the fire under control. Of the four winds, they say the *aj-lak'in-ka'an*, or "summer east wind," "most bears watching" so that the flames will not leap over their firebreak.<sup>136</sup> Similarly, in Belize, the Mopan Maya pray to the various winds—*tšuk iq*, "red wind;" *sik iq*, "white wind" (i.e., east wind); and *mison iq*, "whirlwind"—before planting to petition help during the burning of their fields.<sup>137</sup>

For various groups, an east wind can be a scorching, drying wind. In Bachajón, a Tzeltal-speaking town in Chiapas, the east wind, as Bretón notes, is "fearful because of its sometimes destructive force—'order of God and of the ancestors that come out of the sea'—and that does not always come accompanied by rain."<sup>138</sup> For the neighboring Tzotzil of Chiapas, Mexico, the east wind is known as *k'ak'alil 'ik'*, which means "firey wind."<sup>139</sup> The drying effects of the east wind are also found in Belize, where a "strong east wind blows for most of the dry season and intensifies dessication."<sup>140</sup>

The east wind is especially considered a destructive force among the Totonac peoples of central Mexico, who are commonly thought to be the builders of the impressive city of El Tajín. The climate varies among the different temperate zones occupied by the numerous Totonac groups today, though

most areas closer to Cempoala are hot with high humidity. The Totonacs of Upper Necaxa reside today in areas such as northeast Puebla, Cacahuatlán, Chicontla, and the Necaxa River Valley, while other Totonac speakers live along the Gulf Coast of Veracruz, Hidalgo, and Puebla in towns such as Poza Rica, Coatepec, Misantla, Papantla, and others. Their language is not mutually intelligible with some other forms of Totonac, such as Northern Totonac. For the Upper Necaxa Totonac the east wind is etymologically cognate to terms referring to destruction, disintegration, and the end of the world:<sup>141</sup>

la'hwa:nán (vi) "cause destruction (wind)"

*la'wa:ú:'ni'(n)* "high winds from the east that come in June, bringing heavy rains"

pa:ta'nká'n mima:chá la'hwa:ú:'ni' "the strong winds come from the east"

la'hwán (vi) "disintegrate, rot, breakdown"

la'hwát "disaster, end of the world"

la'hwaní(') "dissolve on sby, fall to pieces on sby"

The intransitive verb *la'hwán*, "disintegrate, rot, breakdown," serves as the base for the expanded forms, such as *la'hwa:nán*, "cause destruction (wind)," and even more specifically *la'wa:ú:'ni'(n)*, "high winds from the east that come in June, bringing heavy rains."

This menacing influence of the east wind also extended to certain bodies of water. For example, Lois notes that Itzaj Maya moor their canoes in the *aj cetz* inlet at Jobonpich as "protection from the East Wind."<sup>142</sup> Furthermore, an east wind on the Lake Petén Itzá can dramatically affect the navigability of the lake. Teobert Maler noted that "in unsafe dugouts, *many a life is lost, when the north wind breaks forth with great force or the east wind, sweeping over the whole length of the lake* . . . , *[it] lashes the water*."<sup>143</sup> At times the wind blows so hard on this lake from the east that it creates "a similar buzzing sound of an organ, to the extent that this is designated by the natives, as the dance of the gods."<sup>144</sup> Despite Lake Texcoco being drained in the seventeenth century to control floods,<sup>145</sup> east winds on remaining areas of the lake, which surrounded the ancient Aztec capital of Tenochtitlan in Mexico, would cause the waters to withdraw upwards of six hundred meters towards the west bank.<sup>146</sup>

## POSITIVE CONNOTATIONS OF THE EAST WIND

Recognizing the vast amounts of time, scores of varying geographical locations, and dozens of individual groups in question in Mesoamerica, we should not be surprised that an east wind could have positive associations among some groups and that other winds could be linked to misfortune and destruction. Thus, in some parts of the arid areas of Mexico, the east wind is thought of as gentle, one that can bring fertilizing moisture.<sup>147</sup> In Itzaj Mayan, the term *ajchaaki(l)ja*', "thunderstorm," is a compound of the term *chaak*, referring to the rain god, and *ja*', "water," which, according to Ximena<sup>148</sup> "is mainly associated with the East Wind." Arnold also notes that in the Yucatan "the East wind and the North bring the rain. . . . In prayers it is always alluded to as 'the great East' (*noh-lakin*). There live the *chaac*, gods of the rain.<sup>"149</sup>

Among the Aztecs, Quetzalcoatl in his aspect as Ehecatl was a wind god. As a wind god, Quetzalcoatl was a "god of the violent wind-storms, which destroy the houses and crops."<sup>150</sup> The Aztec god of the east wind, Tlalocáyotl, however, was a wind god with passive and more positive characteristics, such as being "sweet, warm, favorable,"<sup>151</sup> who was said to hail "from the land of the Rain Gods."<sup>152</sup>

In many parts of the Maya area, it is the west wind that is known for its destructive power or for its evil character. The west wind in the Yucatan is "considered evil because of its instability."<sup>153</sup> In the Yucatan, the *chikinik* (*chik'in ik'*) is known as the "Western wind, evil wind, that brings sickness and death; probably sent as a punishment by the sun, *Kin*."<sup>154</sup> Díaz Solís also notes that the *chik'in ik'*, or west wind, comes from the "region of sicknesses."<sup>155</sup>

In summary, while in some cases an east wind is viewed in a positive light, it is far more common for Mesoamerican groups to associate an "east wind" with a pestilent or dangerous force. As the previous discussion shows, certain Mesoamerican groups view east winds as hot and desiccating phenomena. Winds throughout Mesoamerica are inherently dangerous, as they are considered embodied evil spirits that spread sickness and misfortune. The east wind in some Mesoamerican traditions is also said to be preeminent among the other winds, a fact possibly reflected by the consistent attachment of *noh*, "great," to it by the Yucatec Maya.

## EAST WINDS AND HURRICANES

The destructive nature of east winds is also reflected in the association of an east wind with hurricanes and other catastrophic events in Mesoamerica. All the wind gods of the Yucatec Maya have names corresponding to their directions, but it is only the east that has the additional title Bulhacil u Talkin, "Inundation of the East." In the Motul dictionary, Bul ik<sup>156</sup> is given as "wind storm with earthquakes" and is associated with red and white, both of which are colors specifically associated with the east among many Maya groups. This reference to "wind storm with earthquakes" closely links the east wind with destructive natural phenomena. Furthermore, I would suggest this further links east winds to the largest storms encountered in Mesoamerica-hurricanes.<sup>157</sup> Note that the Totonac entries cited previously mention the destructive nature of "high winds from the east that come in June, bringing heavy rains," la'wa:ú:'ni'(n), deriving from the term la'hwa:nán, "cause destruction (wind)."158 The June date corresponds exactly with the onset of the hurricane season in Mexico-the Atlantic hurricane season extends from 1 June to 20 November. It is therefore possible that references to a punishing "east wind" in the Book of Mormon could refer to these powerful storms that come from the east out of the Atlantic. The strongest hurricanes develop off the western coast of Africa, while weaker hurricanes and other tropical storms can form in the Gulf of Mexico, the Atlantic Ocean, or the Caribbean Sea.<sup>159</sup> Winds in the tropics generally blow from the east globally, and the majority of tropical cyclones would come from the Atlantic Ocean for Mesoamerica.

Hieroglyphic data from the Classic period Maya (AD 250–900) provide some evidence of how hurricanes were viewed in pre-Columbian times. On Naranjo Altar 1, dating to 22 August AD 583, the text records a *naab-ch'ich'* event, referring to a "pooling of blood" usually linked to warfare,<sup>160</sup> that took place on 3 June AD 544. Following this expression, the glyph for sky occurs, independently read *chan*, with four *ik'*, or "wind," signs attached at each of the four directions (figure 1). Stephen Houston



Figure 1. Glyph for "hurricane," with central "sky" sign surrounded by four "wind" signs, on Naranjo Altar 1. Drawing by Asa Hull.

has argued quite convincingly that this glyph is the term for "hurricane."<sup>161</sup> The reading of the collocation is still unknown, but the four instances of *ik*', "wind," at the four cardinal directions on the glyph itself do offer us some valuable insight. Diego de Landa—bishop of the Yucatan, Mexico, in the sixteenth century—discusses "a hurricane of four winds"<sup>162</sup> that "overthrew all the large trees causing a great destruction of every kind of game." Hieroglyphic evidence, together with de Landa's description

above, suggests a focus on the four directionality of the winds of hurricanes.<sup>163</sup> So while there is no explicit connection from the hieroglyphs linking the glyph for "hurricane" to the east lexically or iconographically, it would certainly have been common knowledge that hurricanes primarily hailed from the east. These destructive winds of hurricanes from the east may therefore provide the logical interpretation for the mentions of a punishing east wind in the Book of Mormon.

#### DISCUSSION

As demonstrated in this chapter, there are at least three cases in the Bible where an east wind is mentioned with its Palestinian entailments of heat or destruction but in regions where the east wind had no such negative associations. There are several possible explanations for these heterotopic references in the Bible. First, since Hebrew had terms for only the four main winds, designating a wind as coming from the east included any wind from an easterly direction in general.<sup>164</sup> Accordingly, the term *sirocco* can at times apply to a south wind as well as an east wind.<sup>165</sup> Indeed, as Lods points out, the  $q\bar{a}dim$  or *sirocco* blows from the east, but more precisely from the southeast.<sup>166</sup> Barnes emphasizes that the broadly defined term *sirocco* can in fact refer to "all winds blowing in from the desert, east, southeast, south, and even south-southwest. They are all hot winds."<sup>167</sup> Horne also states that the people living in the east "generally term every wind an east wind, that blows between the east and north and the east and

south.<sup>3168</sup> A reference to an "east wind" could therefore have a significantly more expansive intent than one strictly originating from due east.

Furthermore, in Palestine and in the scriptures an east wind can at times be stripped of any directional association, applying in practice to any violent wind regardless of its directional origin.<sup>169</sup> This "general sense" of an east wind, according to Smith and Plumptre, in effect becomes "the usual name of every wind that burn[s] up vegetation."<sup>170</sup> The fullest manifestation of the semantic broadening of "east wind" is its metaphorical extension to become "the proverbial name for whatever is hateful or disagreeable," whereby if a calamity befalls someone, "he will say the east wind blows on him."<sup>171</sup> It is worth remembering also that other nonliteral meanings do occur, such as the allegorical use of "east wind" that is well attested in the Old Testament (e.g., Hosea 3:15).<sup>172</sup> In short, an "east wind" does not always mean an actual east wind.

The appearance of the term "east wind" in the New World context of the Book of Mormon is considerably easier to account for than similar possibly heterotopic references in the Bible. As I see it, when applying a Mesoamerican lens to the Book of Mormon "east wind," there are at least three plausible explanations.

1. A codified metaphor. The Lehites, as well as the Mulekites, originally came from parts of the Old World where an "east wind" was known by experience or at the least by reputation. The metaphorical entailments of an "east wind" may have survived in their language as a codified expression for "destruction" or "ill-will," much as it still does in parts of the world today, even outside of Palestine. As noted previously, the more general usage of "east wind" to refer to any destructive wind or even to unfortunate events<sup>173</sup> could also be applicable to these New World occurrences.

2. Old Testament usage. Since Lehi and his group brought the brass plates to the New World and the plates were standardly referenced in Nephite society, Lehi's people would certainly have been familiar with the contexts and significance of the expression from the likely more than one dozen occurrences in the books they were known to possess.

3. Negative associations with the east wind in Mesoamerica. As discussed in detail in this chapter, for various indigenous groups in Mesoamerica, an east wind can have numerous negative associations: as a hot or dry wind in some areas; as a wind tied to malevolent forces and spirits; and as a highly destructive wind that brings floods (i.e., hurricanes). If the geographical context of the Book of Mormon were Mesoamerica, a punitive east wind would be readily understood.

These three highly plausible explanations are not mutually exclusive; no single answer has to be sought to explain "east wind" references in the Book of Mormon. Indeed, all three can coexist and be relevant to our understanding of this topic, just as multiple interpretations of the significance of "east wind" existed and currently exist in the Old World.

#### CONCLUSION

This study has shown that "east wind" as a concept is varied in the Old World, one whose meaning and associations change with the seasons and specific geographical locations. In the Bible it can at once refer to the levanter in the eastern Mediterranean, which destroys ships, and at other times to dry, hot sirocco or khamsin in Palestine, among others. While there are references in the Bible to an "east wind" as a dry or hot wind in geographic areas where no such association exists, I have here suggested that in many cases the generalizing of the term allows for less literal interpretations—an equally valid means of interpreting "east wind" references in the Book of Mormon also. As I have argued, a careful analysis of traditions, climate, and geography of Mesoamerica provides sufficient interpretive propriety to comfortably posit a negative association with an east wind, thereby showing mentions of a punitive east wind in Mosiah 7:31 and 12:6 to be fully intelligible in a New World setting. Furthermore, understanding both the biblical foundations of the "east wind" and the possible understandings of the "east wind" in Book of Mormon lands opens a rich range of understandings when reading Abinadi's prophecy.

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- Cf. *The International Standard Bible Encyclopedia*, ed. Geoffrey W. Bromiley, vol. 1, *A–D* (Grand Rapids, MI: William B. Eerdmans, 1986), 642. See also Thomas Hartwell Horne, *An Introduction to the Critical Study and Knowledge of the Holy Scriptures* (London: T. Cadell, 1821), 2:35.
- Francis Brown et al., A Hebrew and English Lexicon of the Old Testament with an Appendix Containing the Biblical Aramaic (Boston: Houghton Mifflin, 1906), 870.
- 7. The verbal form *qādam* appears twenty-six times in the Old Testament with the basic meaning of "be in front, come before, meet, approach." G. Johannes Botterweck, Helmer Ringgren, and Heinz-Josef Fabry, *Theological Dictionary of the Old Testament* (Grand Rapids, MI: William B. Eerdmans, 2003), 12:512. The verb contains both the idea of "to confront (meet) someone with either a good or bad intent" as well as "to precede someone or something either temporally or geographically." Gleason L. Archer, Robert Laird Harris, Bruce K. Waltke, eds., *Theological Wordbook of the Old Testament* (Chicago: Moody Press, 1980), 785. The confrontational and temporally precipitous aspects of the verb are reflected in the meanings of the adjective *qedem*, a "front, from the front or east" and "aforetime, ancient."
- 8. Arabs also refer to this hot desert wind as Simoom (Semoom, Samoom, or Smoum), that is, "poisonous," which the Turks call Samiel. Augustin Calmet, Dictionary of the Holy Bible (Boston: Crocker and Brewster, 1832), 927. In Coptic. the khamsin is known as "Marisi," that is, "southern." Solomon Caesar Malan, Philosophy, or Truth? Remarks on the First Five Lectures by the Dean of Westminster [A.P. Stanley] on the Jewish Church: With Other Plain Words on Questions of the Day, Regarding Faith, the Bible, and the Church (London: Joseph Masters, 1865), 267.
- 9. Bromiley, The International Standard Bible Encyclopedia, 642.
- Roy Quantic, *Climatology for Airline Pilots* (Oxford: John Wiley and Sons, 2008), 258.
- John Murray, A Handbook for Travellers in Egypt: Including Descriptions of the Course of the Nile through Egypt and Nubia, Alexandria, Cairo, the Pyramids, and Thebes, the Suez Canal, the Peninsula of Mount Sinai, the Oases, the Fyoom, Etc. (London: John Murray, 1875), 3.

- 12. Elihu Grant, *The Peasantry of Palestine: The Life, Manners and Customs of the Village: Illustrated with Original Photographs* (New York: Pilgrim Press, 1907), 26.
- 13. Calmet, Dictionary of the Holy Bible, 927.
- H. Saaroni, B. Ziv, A. Bitan, and P. Alpert, "Easterly Wind Storms over Israel," Theoretical and Applied Climatology 59 (1980): 68.
- John McClintock and James Strong, Cyclopaedia of Biblical, Theological, and Ecclesiastical Literature (New York: Harper, 1868), 2:942.
- 16. James Neil, Strange Scenes [in Palestine] (London: British Library, 1888), 23.
- Cf. Uppsala S. Tengström and Heinz-Josef Fabry, "Rûah Spirit, Wind," in *Theological Dictionary of the Old Testament*, ed. G. Johannes Botterweck, Helmer Ringgren, and Heinz-Josef Fabry (Grand Rapids, MI: William B. Eerdmans, 2004), 13:380.
- 18. Cunningham Geikie, *The Holy Land and the Bible: A Book of Scripture Illustrations Gathered in Palestine* (New York: Pott, 1888), 2:64.
- 19. Calmet, Dictionary of the Holy Bible, 927.
- Cf. Patrick Fairbairn, *The Imperial Bible-Dictionary: Historical, Biographical, Geographical, and Doctrinal* (London: Blackie and Son, 1866), 1:474.
- Cf. Janzen, At the Scent of Water, 101; Lods, Israel, 21; Neil, Strange Scenes [in Palestine], 23. See also Tage Sivall, "Sirocco in the Levant," Geografiska Annaler 39, no. 2/3 (1957): 114–42, 116.
- 22. Cited in Malan, Philosophy, or Truth?, 267.
- 23. Bromiley, The International Standard Bible Encyclopedia, 1:642.
- Calmet, Dictionary of the Holy Bible, 927; See also Malan, Philosophy, or Truth?, 267.
- 25. Geikie, The Holy Land and the Bible, 2:61.
- Anthony Aveni and Yonathan Mizrachi, "The Geometry and Astronomy of Rujm el-Hiri, a Megalithic Site in the Southern Levant," *Journal of Field Archaeology* 25, no. 4 (1998):486.
- 27. Murray, A Handbook for Travellers in Egypt, 3.
- 28. Edmond Louis Stapfer, *Palestine in the Time of Christ* (London: Hodder and Stoughton, 1886), 197.
- 29. Calmet, Dictionary of the Holy Bible, 927.
- 30. Lods, Israel, 21.
- 31. Murray, A Handbook for Travellers in Egypt, 3.
- 32. Geikie, The Holy Land and the Bible," 2:61-62.

- 33. Sir William Smith, Concise Dictionary of the Bible: Comprising Its Antiquities, Biography, Geography, and Natural History: Being a Condensation of the Larger Dictionary (Boston: Little, Brown, 1865), 67.
- 34. Sivall, "Sirocco in the Levant," 116.
- R. A. A. Macalister, A History of Civilization in Palestine (Cambridge: Cambridge University Press, 2011), 8.
- 36. Janzen, At the Scent of Water, 101.
- 37. George Henry Schodde, *The Book of Enoch: Translated from the Ethiopic, with Introduction and Notes* (Andover: W. F. Draper, 1882), 95. M. A. Knibb translates the same passage as follows: "And the first wind from those gates, called the east wind, comes out through the first gate which is towards the east, the one which inclines to the south; from it comes devastation, drought, and heat, and destruction." Hedley Frederick Davis Sparks, ed., *The Apocryphal Old Testament* (New York: Oxford University Press, 1984), 265.
- 38. The *sirocco* is also a southeast wind in Sicily, mainly in Palermo, that brings with it higher than normal temperatures that can surge by forty degrees. It is described as "oppressive" and "resembling burning steam from the mouth of an oven." John Wilkes, *Encyclopaedia Londinensis* (London: John, of Milland House, 1928), 23:251.
- 39. Aveni and Mizrachi, "The Geometry and Astronomy of Rujm el-Hiri," 486.
- 40. Sivall, "Sirocco in the Levant," 122.
- 41. Janzen, At the Scent of Water, 102.
- 42. Lods, Israel, 21. See also Vilnay and Bonne, Steimatzky's Palestine Guide, 7.
- 43. Grant, The Peasantry of Palestine, 26.
- 44. Geikie, The Holy Land and the Bible, 2:64.
- A north wind is associated with bringing rain in Proverbs 25:23, but this is not normally accurate for Palestine; see Tengström and Fabry, "Rûaḥ Spirit, Wind," 380.
- S. Rubin, R. Shrayer, and Z. Ganot, *The Probability of Extreme Wind Events in Israel* (Bet Dagan: Israel Meteorological Service [in preparation], 1977).
- 47. Shepherd, *The Westminster Bible Dictionary*, 526. Cf. Smith, *Concise Dictionary* of the Bible, 1010.
- 48. Tengström and Fabry, "Rûah Spirit, Wind," 380.
- Gerd Theissen and Linda M. Maloney, *The Gospels in Context: Social and Political History in the Synoptic Tradition* (Edinburgh: T&T Clark, 1992), 252.
- 50. Theissen and Maloney, The Gospels in Context, 254.

- 51. "Le phénomènes décrit par Luc, s'ils s'appliquent pas bien à la Palestine, conviennent parfaitement à la région de la mer Egée et aux rives septentrionales de la Méditerranée." François Bovon, Révélations et Écritures: Nouveau Testament et Littérature Apocryphe Chrétienne: Recueil d'articles (Genève: Labor et Fides, 1993), 6; translation mine.
- 52. René La Roche, Yellow Fever, Considered in Its Historical, Pathological, Etiological, and Therapeutical Relations: Including a Sketch of the Disease as it Has Occurred in Philadelphia from 1699 to 1854, with an Examination of the Connections Between it and the Fevers Known Under the Same Name in Other Parts of Temperate, as Well as in Tropical, Regions (Philadelphia: Blanchard and Lea, 1855), 2:182.
- 53. The Nautical Magazine 36 (1867): 531-32.
- Paul Coones, *Euroclydon: A Tempestuous Wind* (Oxford: University of Oxford, 1986).
- 55. The Old Testament contains references to an east wind that destroys ships. Ezekiel 27:25–26 states that the ships of Tarshish were "broken" by the east wind "in the midst of the seas." David also said of God, "Thou breakest the ships of Tarshish with an east wind" (Psalm 48:7).
- 56. Cf. Eύρος, the Greek god of the "East Wind."
- 57. Alexander, A Cyclopædia of Biblical Literature, 1107. For a similar discussion, see Charles Randall Barnes, The People's Bible Encyclopedia: Biographical, Geographical, Historical, and Doctrinal: Illustrated by Nearly Four Hundred Engravings, Maps, Chats, Etc. (Chicago: People's Publication Society, 1912), 2:343.
- 58. McClintock and Strong, Cyclopaedia of Biblical, Theological, and Ecclesiastical Literature, 942.
- 59. The etymology of *typhoon* is somewhat obscure since terms with similar pronunciations and meanings appear in numerous languages around the world. Seemingly obvious cognates exist in Semitic languages, Sanskrit, Chinese, Japanese, and Greek. The Persian and Arabic term is *tūfān*, "storm"; furthermore, the same term means "big cyclonic storm" in Hindi. The term in Sanskrit *tanuna*, "wind," is also clearly cognate. Japanese and some areas of China use the same Kanji characters, 大風, meaning "big-wind," pronounced *taifū* and *táifēng*, respectively. The adjective *typhōnikos*, "tempestuous," in Greek is part of a large cognate set in many languages in the world, though exactly how the term diffused is still in debate.

- 60. John William McGarvey, Lands of the Bible: A Geographical and Topographical Description of Palestine, with Letters of Travel in Egypt, Syria, Asia Minor, and Greece (Cincinnati: Guide Printing and Publishing Company, 1893), 379.
- A Sumerian proverb similarly describes the east wind as "a rain-bearing wind" and "a wind of prosperity." Text 6.1.4, lines 12–13, http://etcsl.orinst.ox.ac.uk/ proverbs/t.6.1.04.html.
- Ewa Wasilewska, Creation Stories of the Middle East (London: Jessica Kingsley, 2000), 76.
- J. Neumann, "The Winds in the World of the Ancient Mesopotamian Civilizations," *Bulletin American Meteorological Society* 58, no. 10 (1977): 1052, 1055.
- 64. The first scholar to suggest the "east wind" could also be "mountain wind" was Delitzsch. See F. Delitzsch, Assyrische Studien (Leipzig: Hinrichs'sche Buchhandlung, 1874), 141; cf. Neumann, "The Winds in the World of the Ancient Mesopotamian Civilizations," 1051; Knut Tallqvist, "Himmelsgegenden un Winde," Studia Orientalia 2 (1928): 105–85, 114.
- 65. The term kur, relating to both "mountain" and "east (wind)," derives from PIE \*gwer- "mount; ridge of hills" and has cognates in Sanskrit (giri), Karvelian, Uralic and other languages. Aleksi Sahala, "Sumero-Indo-European Language Contacts" (unpublished paper, University of Helsinki), http://www.ling.helsinki. fi/~asahala/.
- 66. Alasdair Livingstone, *Mystical and Mythological Explanatory Works of Assyrian and Babylonian Scholars* (Winona Lake, IN: Eisenbrauns, 1986), 74.
- 67. There is, however, some evidence that "east wind" in Assyrian could more correctly be translated as "northeast wind." Neumann, "The Winds in the World of the Ancient Mesopotamian Civilizations," 1051.
- Wayne Horowitz, Mesopotamian Cosmic Geography (Winona Lake, IN: Eisenbrauns, 1998), 197.
- 69. Cf. Malan, Philosophy, or Truth?, 270.
- 70. Similar language likely appears in Isaiah 37:27 (KJV), where "corn" is implied but not explicit: "They were as the grass of the field, and as the green herb, as the grass on the housetops, and as corn blasted before it be grown up." In the KJV and other translations (e.g., NIV, ESV, NAS, etc.), no reference is made to a specific wind. The final phrase in this verse in Hebrew reads, ûsh'dēmā*h lif'nēy qāmāh*, "and (corn) blasted before it be grown up." The term *qāmāh*, meaning "standing grain" or "grown up" (the latter being somewhat dubious), is emended to *qādim*, "east wind," in other translations (e.g., HCS, ISV). This reading is

supported by 1Q Isa<sup>a</sup>, which also reads, "blasted by the east wind," with the inclusion of a QDM (a *yod* was later added also), producing "east wind" instead of "standing grain." De Waard suggests the Saint Mark's Isaiah Scroll is the original and preferred reading of the Hebrew text in this case. Jan de Waard, *A Handbook on Isaiah* (Winona Lake, IN: Eisenbrauns, 1997), 146–47; cf. John N. Oswalt, *The Book of Isaiah, Chapters 1–39* (Grand Rapids, MI: William B. Eerdmans, 1986), 657.

- 71. It is possible, however, that "east wind" and "south wind" may have had a synonymous usage also. For instance, Warington and Colenso see the couplet of east and south winds in Psalm 78:26–32 as compelling evidence "to regard 'east wind' of the first clause as identical with the 'south wind' of the second." George Warington and John William Colenso, *The Mosaic Origin of the Pentateuch Considered in Connection with Parts II. and III. of BP. Colenso's 'Critical examination'* (London: William Skeffington, 1864), 94. Furthermore, it is more accurately a southeast wind in Egypt that corresponds in nature to the east wind of Palestine.
- 72. Malan, Philosophy, or Truth?, 266.
- 73. The south wind is associated with Re in Egyptian tradition, while the east wind with Nephthys. In chapter 161 of the Book of the Dead, a ritual is performed over the coffin of the deceased. This ceremony is said to be "truly secrect, which no one of the peole should know," counting outsiders, "for it is a secret which the common folk do not know yet." The ritual that involves opening for portals in the sky delineates the specific god associated with each of the four directions: "one for the north wind—that is Osiris; another for the south wind—that is Re; another for the west wind—that is Isis, another for the east wind—that is Nephthys." Eva Von Dassow, ed., *The Egyptian Book of the Dead: The Book of Going Forth by Day* (San Francisco: Chronicle Books, 2008), 125.
- Fairbairn, The Imperial Bible-Dictionary, 474; cf. Warington and Colenso, The Mosaic Origin of the Pentateuch Considered, 93.
- 75. The southward orientation for the ancient Egyptians is reflected in the term for "left hand," *i3b*, from which "east wind," *i3bt*, derives, since a southward-facing stance places east on one's left.
- William H. Stiebing, "The End of the Mycenean Age," *Biblical Archeologist* 43, no. 1 (Winter 1980): 20.
- 77. McClintock and Strong, *Cyclopaedia of Biblical, Theological, and Ecclesiastical Literature*, 942, emphasis in original.

- See Hildegard Temporini and Wolfgang Haase, ed., Aufstieg U Niedergang D Roemwelt Teil 2 Bd 26/1 (New York: Walter de Gruyter, 1992), 241.
- 79. Malan, Philosophy, or Truth?, 268.
- Cf. Walter C. Kaiser Jr., A History of Israel: From the Bronze Age through the Jewish Wars (Nashville: Broadman and Holman, 1998), 71.
- John Gill, John Gill's Exposition of the Bible (n.p, 2009), http://www.bibleclassics. com/bible/commentary.php?com=gill.
- 82. "Rencontrant le vent chaud du Levant de la Bible hébraïque, soit ont supprimé la mention de son origine orientale, soit lui ont substitué leur chaud du sud, le chasmin." Bovon, "Révélations et Écritures," 61n20; translation mine.
- 83. McClintock and Strong, Cyclopaedia of Biblical, Theological, and Ecclesiastical Literature, 942.
- 84. This "burning heat" (καύσωνι) is reminiscent of the "burning heat" (καύσωνι) in the morning mentioned in James 1:11 that withers grass and flowers, the former referencing events outside of Palestine and the latter within it.
- 85. The Hebrew adjective (*hariši*)—translated as "vehement" (KJV), "scorching" (NIV), and "sultry" (ASV)—simply means "quiet" from the verb *haraš*, "be silent, dumb, speechless"; the semantic extension to "heat" is only supposition.
- John. H. Walton, Victor H. Matthews, and Mark W. Chavalas, *The IVP Bible Background Commentary: Old Testament* (Downers Grove, IL: InterVarsity Press, 2000), 780.
- 87. Walton, Matthews, and Chavalas, The IVP Bible Background Commentary, 780.
- John H. Walton, ed., *The Minor Prophets, Job, Psalms, Proverbs, Ecclesiastes, Song of Songs*, Zondervan Illustrated Bible Backgrounds Commentary Set (Grand Rapids, MI: Zondervan, 2009), 116.
- 89. While most parts of Abinadi's prophesies are carefully noted to have come to pass, as Grant Hardy has remarked, the fulfilment of the prophecy regarding hail, east wind, and insects is not recorded in the text. Grant Hardy, *Understanding the Book of Mormon: A Reader's Guide* (Oxford: Oxford University Press, 2010), 159.
- V. Ramasamy, On Translating Tirukkural (Chennai, India: International Institute of Tamil Studies, 2001), 114.
- Cf. John L. Sorenson, "Viva Zapato! Hurray for the Shoe! (Review of 'Does the Shoe Fit? A Critique of the Limited Tehuantepec Geography' by Deanne G. Matheny)," *FARMS Review of Books* 6, no. 1 (1994): 297–361.

- John M. Watanabe, "In the World of the Sun: A Cognitive Model of Mayan Cosmology," *Man, New Series* 18, no. 4 (December 1983): 710–28, 721.
- Alfredo Barrera Vásquez et al., Diccionario Maya Cordemex: Maya-Español, Español-Maya (Mérida, Mexico: Ediciones Cordemex, 1980).
- 94. Léon de Rosny, *Essai Sur le Déchiffrement de l'écriture Hiératique de l'Amérique Centrale* (Paris: Maisonneuve, 1876).
- Eduard Seler, Gesammelte Abhandlungen zur Amerikanischen Sprach- und Alterthumskunde, 5 vols. (Berlin: A. Asher, 1902–1923).
- 96. For the color "white" being associated with an "east wind," see Alfonso Villa Rojas and Howard Francis Cline, *The Maya of the East Central Quintana Roo* (Washington, DC: Carnegie Institute of Washington, 1945), 135.
- Cf. Nicholas A. Hopkins and J. Kathryn Josserand, "Directions and Partitions in Maya World View," *Foundation for the Advancement of Mesoamerican Studies*, 2011, http://www.famsi.org/research/hopkins/directions.html.
- See Victoria R. Bricker, "Directional Glyphs in Maya Inscriptions and Codices," *American Antiquity* 48, no. 2 (1983): 347–53. See also Brian Stross, "Classic Maya Directional Glyphs," *Journal of Linguistic Anthropology* 1, no. 1 (1991): 97–114.
- Cf. Michael P. Closs, "A Phonetic Version of the Maya Glyph for North," American Antiquity 53, no. 2 (April 1988): 386–93. See also Susan Milbrath, Star Gods of the Maya: Astronomy in Art, Folklore, and Calendars (Austin: University of Texas Press, 2000). For a discussion of the tomb's epigraphy, see David Stuart's article "The Paintings of Tomb 12, Rio Azul," in Rio Azul Reports Number 3: The 1985 Season, ed. R. E. W. Adams (San Antonio: University of Texas at San Antonio, 1987), 161–67.
- 100. Clemency Coggins, "The Shape of Time: Some Political Implications of a Four-Part Figure," *American Antiquity* 45 (1980): 727–39; "Reply to Michael Closs: A Phonetic Version of the Maya Glyph for North," *American Antiquity* 53, no. 2 (1998): 401.
- 101. Victoria R. Bricker, "A Phonetic Reading for Zenith: Reply to Cross," American Antiquity 53, no. 2 (1988): 394–400.
- 102. Brant Gardner has written a thorough and enlightening discussion on the question of directions in the Book of Mormon in a Mesoamerican context. Brant A. Gardner, "From the East to the West: The Problem of Directions in the Book of Mormon," *Interpreter: A Journal of Mormon Scripture* 3 (2013): 119–53.
- 103. Hopkins and Josserand, "Directions and Partitions in Maya World View."

- 104. Hopkins and Josserand, "Directions and Partitions in Maya World View," 14.
- 105. Hopkins and Josserand, "Directions and Partitions in Maya World View," 14-15.
- 106. Karen Bassie-Sweet, *At the Edge of the World: Caves and Late Classic Maya World View* (Norman: University of Oklahoma Press, 1996).
- 107. Hopkins and Josserand, "Directions and Partitions in Maya World View," 15.
- Fray Alonso de Molina, Vocabulario Nahuatl-Castellano, Castellano-Nahuatl, 2nd ed. (Mexico City: Ediciones Colofón, 1966).
- 109. Hopkins and Josserand, "Directions and Partitions in Maya World View," 14.
- Robert Redfield and Alfonso Villa Rojas, *Chan Kom: A Maya Village* (Chicago: University of Chicago Press, 1934), 114.
- 111. Alfonso Villa Rojas, "Kinship and Nagualism in a Tzeltal Community, Southeastern Mexico," *American Anthropologist, New Series* 49, no. 4, part 1 (October– December 1947): 578–87, 584.
- 112. Redfield and Villa Rojas, Chan Kom: A Maya Village, 164.
- 113. Manuel Gutiérrez-Estévez, "The Christian Era of the Yucatec Maya," in South and Meso-American Native Spirituality: From the Cult of the Feathered Serpent to the Theology of Liberation, ed. Gary H. Gossen and Miguel León-Portilla (New York: Crossroad, 1993), 270.
- 114. Redfield and Villa Rojas, Chan Kom: A Maya Village, 164.
- 115. Redfield and Villa Rojas, Chan Kom: A Maya Village, 165.
- 116. Redfield and Villa Rojas, Chan Kom: A Maya Village, 165.
- 117. In the Yucatan, winds known as káakas íik, sometimes in the shape of human, can take a hold of people and make them ill. Christine A. Kray, "A Practice Approach to Ritual: Catholic Enactment of Community in Yucatán," Anthropos 102, no. 2 (2007): 536. The Nahua of Mexico have a similar belief about enanos (dwarves), who are also said to be los aires ("the airs"), another term for "winds." These small beings blow on an individual to make him or her ill. William Madsen, "Shamanism in Mexico," Southwestern Journal of Anthropology 11, no. 1 (1955): 49–50.
- 118. Redfield and Villa Rojas, Chan Kom: A Maya Village, 166.
- 119. J. Eric Thompson, "Ethnology of the Mayas of Southern and Central British Honduras. Publications of the Field Museum of Natural History," *Anthropological Series* 17, no. 2 (1930): 73.
- 120. Gutiérrez-Estévez, "The Christian Era of the Yucatec Maya," 270.
- 121. Patricia Martel, "Some Poetic Recourses of the H-men," *Acta Americana* 13, nos. 1-2 (2005): 60.

- 122. John F. Chuchiak IV, "The Medicinal Practices of the Yucatec Maya," Acta Americana, vol. 13, nos. 1–2 (2005): 12. In the Motul dictionary of Yucatec, the entry reads: "Ah mac ik: 'conjurador de vientos, ye el que cura con palabras del Demonio a los niños q[ue] tienen auentado el vientre" (conjurer of winds, and he who can cure with Demonic words children w[ho] have a bloated stomach). Antonio de Ciudad Real, Calepino Maya de Motul, Critical and Annotated Edition, ed. René Acuña (Mexico City: Plaza y Valdés, 2001), 49; translation mine.
- 123. Alfred M. Tozzer, A Comparative Study of the Maya and the Lacandon (New York: MacMillan, 1907), 157. See also J. Eric Thompson, Maya History and Religion (Norman: University of Oklahoma Press, 1990), 272.
- 124."Si bien los tres son vientos peligrosos, no lo son por igual; el más temido el ajau ik', que 'es el dueño de las nubes amarillas y está al final de la tierra ahí vive." Virginia Mellado Campos and María del Carmen Carrillo Farga, La Medicina Tradicional de los Pueblos Indígenas de México (México: Instituto Nacional Indigenista, 1994), 2:406; translation mine.
- 125. William F. Hanks, *Intertexts: Writings on Language, Utterance, and Context* (Lanham, MD: Rowan and Littlefield, 2000), 225.
- 126. Hanks, Intertexts, 225.
- 127. Hanks, Intertexts, 225.
- 128. Thompson, Maya History and Religion, 271.
- 129. Thompson, Maya History and Religion, 271.
- 130. Victoria Bricker, "The Ethnographic Context of Some Traditional Mayan Speech Genres," in *Explorations in the Ethnography of Speaking*, ed. Richard Bauman and Joel Sherzer (New York: Cambridge University Press, 1974), 368–88, 382. See also Donald Eugene Thompson, *Maya Paganism and Christianity: A History of the Fusion of Two Religions* (New Orleans: Tulane University Printing Offices, 1954), 23.
- 131. Tozzer, A Comparative Study of the Maya and the Lacandon, 156.
- 132. Channing Arnold and Frederick J. Tabor Frost, *The American Egypt: A Record of Travel in Yucatan* (London: Hutchinson, 1909), 105. See also Daniel G. Brinton, *A Primer of Mayan Hieroglyphics, Philology and Literature*, vol. 3, no. 2, in Series in Philology Literature and Archaeology (Boston: Ginn, 1895), 42.
- 133. Cf. Diego de Landa, Landa's Relación de las Cosas de Yucatán, ed. Alfred M. Tozzer (Millwood, NY: Kraus Reprint, 1978), 137–38.
- 134. Gutiérrez-Estévez, "The Christian Era of the Yucatec Maya," 269.

- Charles Hofling and Félix Fernando Tesucún, *Itzaj Maya Grammar* (Salt Lake City: University of Utah Press, 2000), 220.
- Scott Atran, "Itza Maya Tropical Agro-Forestry," *Current Anthropology* 34, no. 5 (December 1993): 678.
- 137. Thompson, "Ethnology of the Mayas of Southern and Central British Honduras,"47.
- 138."Temible por su fuerza a veces destructora—'mando de Dios y de los abuelos que salen del mar'—, y que no siempre llega acompañado de lluvias." Alain Bretón, Bachajón: Organización Socioterritorial de una Comunidad Tzeltal (Mexico City: Instituto Nacional Indigenista, 1984), 193; translation mine.
- Robert M. Laughlin and John B. Haviland, *The Great Tzotzil Dictionary of Santo Domingo Zinacantán: With Grammatical Analysis and Historical Commentary:* English-Tzotzil, issue 31 of Smithsonian Contributions to Anthropology, vol. 2 (Washington, DC: Smithsonian Institution Press, 1988), 486.
- Great Britain, Colonial Office, British Honduras: A Report (H. M. Stationery Office, 1963), 96.
- 141. David Beck, *Upper Necaxa Totonac Dictionary* (Berlin: Walter de Gruyter GmbH, 2001), 267–68.
- 142. Ximena Lois, "Gender Markers as 'Rigid Determiners' of the Itzaj Maya World," International Journal of American Linguistics 64, no. 3 (1998): 241.
- 143. Teobert Maler, Explorations in the Department of Peten, Guatemala, and Adjacent Regions: Motul de San José, Petén Itzá, vol. 4, no. 3, in Memoirs of the Peabody Museum of Archaeology and Ethnology (Cambridge, MA: Harvard University, 1910), 164; italics original.
- 144."Un bourdonnement comparable au son d'un orgue, à tel point que ce phénomène est désigné, par les indigènes, sous le nom danse de dieux." Georges Kastner and Francis Maillan, Le Rêve d'Oswald, ou les Sirènes: Grande Symphonie Dramatique Vocale et Instrumentale (Paris: Brandus et Dufour, 1858), 94; translation mine.
- 145. The unintended consequence of the drainage of Lake Texcoco was the creation of a dry lakebed that now causes severe dust pollution that today carries pathogens over Mexico City—ironically, a modern, human-caused pestilence brought by the east wind. M. L. Luna-Guido et al., "Organic Matter Dynamics in Soils of the Former Lake Texcoco, Mexico," in *Sustainable Management of Soil Organic Matter*, ed. Robert M. Rees, B. C. Ball, C. D. Campbell, and C. A. Watson (Wallingford, UK: CABI, 2001), 195.

- 146. Albert Kimsey Owen and William C. Crooks, The Texcoco-Huehuetoca Canal: Proposed as a Basis on which to Issue Treasury Money, and to Inaugurate a National System, to Multiply and to Diversify Home Industries (Philadelphia: H. C. Baird, 1880), 100.
- 147. Charles Edward Herring, *The Worship of Creative Energy as Symbolized by the Serpent* (New York: Nabu Press, 1907).
- 148. Lois, "Gender Markers as 'Rigid Determiners' of the Itzaj Maya World," 238.
- 149. "El viento del Este y el Norte aportan la lluvia... En las oraciones siempre se alude a él como 'el gran Este' (noh-lakin). Allí habitan los chaac, dioses de la lluvia." Paul Arnold, El Libro de los Muertos (Mexico City: Editorial Diana, 1983), 63; translation mine.
- 150. Daniel Garrison Brinton, American Hero-Myths: A Study in the Native Religions of the Western Continent (Philadelphia: H. C. Watts, 1882), 132.
- 151. Félix Báez-Jorge, "El Aire y el Mal en el Imaginario de los Nahuas de Chicontepec (Análisis Comparative de una Demonología Sincrética)," *La Palabra y el Hombre* (April–June 2004): 129, http://cdigital.uv.mx/bitstream/123456789/39 5/1/2004130P123.pdf.
- 152. Eduard Seler and Augustus Henry Keane, The Tonalamatl of the Aubin Collection: An Old Mexican Picture Manuscript in the Paris National Library (Mexican Manuscript No. 18–19) (Berlin: Hazell, Watson, and Winey, 1901), 44.
- 153."Considerado maligno por su inestabilidad." Universidad de Yucatán, Revista de la Universidad de Yucatán (México: Depto. de Publicidad de la Universidad de Yucatán, 1983), 25:168; translation mine.
- 154."Viento del oeste, viento malo, que trae enfermedades y muerte; probablemente enviado como castigo por el sol, Kin." Nelson Reed, La Guerra de Castas de Yucatán, vol. 10 of Biblioteca Era (Mexico City: Ediciones Era, 1971), 277–78; translation mine.
- Lucila Díaz Solís, La Flor Calendárica de los Mayas (Mexico City: Díaz Massa, 1968), 90; translation mine.
- 156. In colonial Yucatec, Çac bul ik is given as "tempestad grande de viento, con temblores de tier[ra]" (large storm with wind, with tremors of the ear[th]). Ciudad Real, *Calepino Maya de Motul, Critical and Annotated Edition*, 132.
- 157. Garth Norman has also interpreted references to an "east wind" in Mosiah as hurricanes; see Garth V. Norman, "Hurricanes in the Book of Mormon," *Meridian Magazine*, 20 September 2010, http://www.ldsmag.com/article/1/6333.

- 158. The term in Totonac for "hurricane" is *istulu-un*. Celestino Patiño, *Vocabu-lario Totonaco* (Mexico City: Oficina Tipográfica del Gobierno del Estado, Xalapa-Enriquez, 1907), 12.
- 159. Lawrence R. Walker, D. Jean Lodge, Nicholas V. L. Brokaw, and Robert B. Waide, "An Introduction to Hurricanes in the Caribbean," *Biotropica* 23, no. 4, part A (December 1991): 313.
- 160. The mention of "hurricane" immediately after a war-related verb is highly meaningful. I suggest it makes metaphorical reference to the fierceness of the battle. Note that an example of just such a description of a military engagement as a "hurricane" can be found on an inscription from the Third Dynasty of Ur which contains a record of the invasion of the Amurru (Amorites) into Mesopotamia around 2100 BC. A Sumerian scribe who witnessed the event described the conquerors as "a host whose onslaught was like a hurricane." Robert Moore Fisher, *The Metropolis in Modern Life* (Garden City, NY: Doubleday, 1955), 9. See also Stuart Piggott, *Ancient Europe* (New Brunswick, NJ: Transaction Publishers, 1970), 78.
- Stephen Houston, "Hurricane!," Mesoweb, 2006, http://www.mesoweb.com/ articles/houston/hurricane.pdf.
- 162. The notion of a cyclic wind as one coming from "the four directions" is also found in the Chinese term *jufeng*, which appears cognate to the English *typhoon*. In Guangzhou, China, in AD 470 Shen Huaiyuan wrote the earliest known description of a typhoon (*jufeng*) as "a wind that comes from all four directions." Kin-sheun Louie and Kam-biu Liu, "Ancient Records of Typhoons in Chinese Historical Documents," in *Hurricanes and Typhoons: Past, Present, and Future*, ed. Richard J. Murnane and Kam-biu Liu (New York: Columbia University Press, 2004), 240.
- 163. De Landa, Landa's Relación de las cosas de Yucatan, 40-41.
- 164. Bovon, Révélations et Écritures, 61n20. See also Alexander, A Cyclopædia of Biblical Literature, 1107; Johann Heinrich Kurtz, History of the Old Covenant (Edinburgh: T&T Clark, 1870), 1:365; A. Southerland, "Egypt and the Pentateuch," in Dickinsons Theological Quarterly 57 (1876): 164.
- 165. Neil, Strange Scenes [in Palestine], 22.
- 166. Lods, Israel, 21.
- 167. Barnes, The People's Bible Encyclopedia, 1176.
- 168. Horne, An Introduction to the Critical Study and Knowledge of the Holy Scriptures, 2:35.

- 169. Alexander, A Cyclopædia of Biblical Literature, 1107; Geikie, The Holy Land and the Bible, 63; McClintock and Strong, Cyclopaedia of Biblical, Theological, and Ecclesiastical Literature, 1107; Shepherd, The Westminster Bible Dictionary, 526.
- 170. Robert Payne Smith and Edward Hayes Plumptre, *The First Book of Moses*, *Called Genesis* (London: Cassell, 1885), 367.
- 171. Geikie, The Holy Land and the Bible, 64.
- 172. Alexander, A Cyclopædia of Biblical Literature, 1107. See also John Day, "The Development of Life after Death in Ancient Israel," in After the Exile: Essays in Honour of Rex Mason, ed. John Barton and David J. Reimer (Macon, GA: Mercer University Press), 244. A good example of this appears in the Habakkuk Commentary (1QpHab) of the Dead Sea Scrolls where the commentator takes an allegorical read of Habakkuk 1:9: "They shall come all for violence: their faces shall sup up as the east wind, and they shall gather the captivity as the sand." The commentator associates the heat of the east wind with Semitic idiom of anger, thus interpreting the east wind as angry speech. William H. Brownlee, "Biblical Interpretation among the Sectaries of the Dead Sea Scrolls," The Biblical Archaeologist 14, no. 3 (1951): 63–64.
- 173. Cf. Barnes, *The People's Bible Encyclopedia*, 1176; Geikie, *The Holy Land and the Bible*, 64.