

# Interpreter

A Journal of Latter-day Saint Faith and Scholarship



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# A Journal of Latter-day Saint Faith and Scholarship

Volume 65



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# Anachronisms: Accidental Evidence in Book of Mormon Criticisms

**Matthew Roper** 

# **Editor's Note**

This volume of *Interpreter: A Journal of Latter-Day Saint Faith and Scholarship* consists of what started as a series of articles by Matthew Roper. These articles, appearing from May to July 2025, collectively comprise a book named *Anachronisms: Accidental Evidence in Book of Mormon Criticisms*. The articles have been combined in this volume and edited slightly from the way they were first serialized. Page numbers in this volume differ from those in the original articles.

# **Preface**

When the Book of Mormon came off the press on 27 March 1830, it opened itself to textual scrutiny. Was evidence of the amazing world of the Book of Mormon—with highways, written language, cement buildings, towers, temples, elephants, and kingdoms—observable in what the 1830 reader knew about the ancient American world? For many, it wasn't. The prevailing prejudice in nineteenth-century America was that Amerindian peoples were rude savages, so the historical and cultural assumptions evident in the Book of Mormon seemed too fantastic. Obvious anachronisms abounded. In 1830, everybody knew there were no swords or cement buildings in ancient America, and the ancient inhabitants certainly did not know how to read and write.

In 1841 John Lloyd Stephens and Frederick Catherwood published *Incidents of Travel in Central America, Chiapas, and Yucatan*<sup>1</sup> and, suddenly, some presumed "facts" about the ancient Americas changed.<sup>2</sup> This record of their expedition offered detailed descriptions and illustrations of forty-four sites and showed that at least some ancient Amerindians were sophisticated, contrary to popular opinion. By 1842 excerpts from *Incidents of Travel* were being published in the Church's newspaper, *Times and Seasons*, and the editor noted that "It will not be a bad plan to compare Mr. Stephens' ruined cities with those in the Book of Mormon: light cleaves to light, and facts are supported by facts."<sup>3</sup>

As expeditions, archaeological discoveries, and the field of anthropology progressed, more became known about the ancient Americas and her peoples. Slowly, what were previously judged as anachronisms in the Book of Mormon became evidences, supported by what was learned about the past—the book was right about cement buildings, towers, kingdoms, and many other things.

In May 2005 the Library of Congress hosted a symposium on "The Worlds of Joseph Smith," timed to commemorate the bicentennial anniversary of Joseph's birth. I had recently completed a

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master's degree in anthropology at Brigham Young University, chaired by Professor John E. Clark. He was asked to speak at the symposium and took me on as a research associate. Part of his focus was to demonstrate that the list of anachronisms claimed for the Book of Mormon in 1830 was dwindling as more of the past was revealed. I went to work reading and annotating everything I could find, published between 1830 and 1900, that criticized the Book of Mormon. My task was to identify every criticism that could be tested archaeologically. Matthew Roper already had a handle on all of this material and graceously opened his trove of research to me.

Research continued after the Library of Congress symposium in preparation for the 2005 FAIR Conference. Professor Clark invited Matt and me to work with him and present at the conference together. That was an exciting time for me, and I felt I was the proverbial mule at the Kentucky Derby—I had no place being there, but I enjoyed the company it let me keep. 6

Of course, Matt's research in this area began long before the 2005 FAIR Conference and has continued in the twenty years since. His meticulous work has yielded a bounty of correlations, gleaned from both the dustiest books and the latest scientific research. It is that bounty that he shares in this book.

Matt would be the first to tell you that the real and intended purpose of the Book of Mormon is to convince the world that Jesus is the Christ. While the work presented in this book substantiates historical, geographical, and cultural claims of the Book of Mormon, the author is, in fact, converted to the truth of the Book of Mormon by the power of the Holy Ghost.

—Wade Ardern May 2025

#### **Notes**

- John L. Stephens, Incidents of Travel in Central America, Chiapas, and Yucatan, 2 vols. (New York: Harper & Brothers, 1841), archive.org/details/IncidentsOf TravelInCentral America Chiapas And Yucatan Vol. 21841 Stephens / Incidents %200f%20 Travel%20 in%20 Central%20 America%2 C%20 Chiapas%2 C%20 and%20 Yucatan%20 Vol. %201%20 %281841%29%20 Stephens/mode/2 up.
- 2. Otherpublicationsexisted.Forexample, Juan Galindo, considered the first Maya archaeologist, published his exploration of Palenque in London as early as 1831. Galindo's work was the inspiration for the expedition later undertaken by Stephens and Catherwood. See Juan Galindo, "Ruins of Panenque," *The London Literary Gazette and Journal of Belles Lettres, Arts, Sciences, &c.* 769 (15 October 1831): 665–66, archive.org/details/B-001-003-446/page/669 /mode/2up.
- 3. "Zarahemla," *Times and Seasons* 3, no. 23 (1 October 1842): 927, archive.org /details/per\_utah-and-the-mormons\_times-and-seasons\_1842-10-01\_3\_23.
- 4. The Worlds of Joseph Smith: A Bicentennial Conference at the Library of Congress, 6-7 May 2005, loc.gov/item/prn-05-038/.
- John E. Clark, Wade Ardern, and Matthew Roper, "Debating the Foundations of Mormonism: The Book of Mormon and Archaeology" (presentation, 7th Annual FAIRConference, Sandy, UT, 4August 2005), fairlatter days aints.org/conference /august-2005/debating-the-foundations-of-mormonism-the-book-of-mormon-and-archaeology.
- 6. This is a paraphrase of a statement made by Jeffrey R. Holland when, as President of Brigham Young University, he spoke during the priesthood session of the April 1983 General Conference. See Jeffrey R. Holland, "Within the Clasp of Your Arms," *Ensign*, May 1983, churchofjesuschrist.org/study/ensign/1983/05/within-the-clasp-of-your-arms.

# Introduction

All the scriptures, including the Book of Mormon, will remain in the realm of faith. Science will not be able to prove or disprove holy writ. However, enough plausible evidence will come forth to prevent scoffers from having a field day, but not enough to remove the requirement of faith. Believers must be patient during such unfolding.

—Neal A. Maxwell¹

When I was a boy, I went for a swim at the beach. Enjoying the water and the summer sun, I failed to notice the imperceptible draw of currents pulling me out to sea. When I realized what was happening, I began to panic. Although I was a good swimmer, the feeling of being alone and out of my depth left me confused and disoriented. Regaining my composure, I took my bearings from landmarks I had noticed earlier in the day (familiar rocks; a nearby pier) and recalled the advice somebody had once given me. To escape the treacherous current, I swam parallel to the shore for a few minutes until I was able to work my way back to safety.

It is no surprise that the Book of Mormon is controversial. Anachronisms, elements in the text that some readers conclude are out of their time in a translation of an ancient record, are among the most commonly stated reasons for rejecting the text as an authentically ancient record. When one finds oneself in the waters of controversy, good answers to difficult questions can be hard to come by. Perhaps hampered by our lack of knowledge, we may find ourselves far from shore and feeling out of our depth. We may become so focused on a particular question that evades immediate explanation that we fail to notice how many other issues that once seemed problematic have changed or been resolved through new research and discoveries. In such circumstances, knowing where we have been in terms of Book

of Mormon questions can provide perspective on where we are and where in the future we may expect to be.

For years, I have been interested in tracking what people have said about the Book of Mormon since its first publication. During this time, I have been able to gather, review, and categorize examples of what others claimed were anachronisms in the text. That experience suggests to me that the Book of Mormon has fared rather well over time. This study provides a point-by-point report card to share where things stand at the moment.<sup>2</sup>

#### Anachronisms in the Book of Mormon

From its publication in 1830 until today, there have been readers who have proclaimed, sometimes with no little amusement, that some thing or another in the text is at odds with known facts or widely held assumptions about the ancient world.

As one former neighbor of Joseph Smith wrote, "No intelligent or well-educated man would have been guilty of so many anachronisms . . . as characterize every part of the Book of Mormon." The book, stated an early European reader, is "so thoroughly absurd and puerile, that its gross anachronisms may be detected by a school-boy of the lowest form." Gordon Fraser, writing in the mid-twentieth century, thought the presentation of the book as an authentic history was a fatal mistake of Joseph Smith.

Joseph Smith made an unfortunate choice of a literary vehicle when he presented the Book of Mormon as sober history. Joseph's upbringing, in areas quite remote from adequate opportunities for formal study or research, can account for his ignorance of the necessity of choosing an appropriate vehicle for a work on philosophy or religion. . . . With the choice of either allegory or fiction, Smith legitimately could have conveyed his religious message without inviting the inevitable peril of having his doctrine judged by the standard of accuracy of historical statement.<sup>5</sup>

Fraser claimed that the modern origins of the book (which he considered to be fiction) would become apparent to any who would simply compare it with what was known about the culture and geography of the ancient Near East or pre-Columbian America on such matters as economy, agriculture, crafts, warfare, politics, and religion.<sup>6</sup> "One could proceed through the entire Book of Mormon and find some

gross blunder in discernment or fact on almost every page of the book, all of which betrays the fact that the writer was totally uninformed."

Over the years, believing Latter-day Saints have pushed back against such claims. Hugh Nibley, whose pioneering work on the Book of Mormon was the impetus for many subsequent scholarly studies, showed how the Book of Mormon accurately reflects many facets of the ancient Near Eastern culture from which Lehi and his family came, much of which would likely have been unfamiliar or completely unknown to Joseph Smith.<sup>8</sup> In his classic work, *Lehi in the Desert*, Nibley compared the account of Lehi's wilderness journey to other accounts of Bedouin culture. He revealed that some elements which were once the object of derision can be shown, upon closer examination, to accurately reflect the ancient world.

Writing in 1952, Nibley stated,

Such changing points of view, largely the results of the new discoveries, are very significant for Book of Mormon study. Their immediate result is to show for the first time on what extremely flimsy groundwork criticism of the Book of Mormon has rested in the past.<sup>9</sup>

Nibley further argued that confirmation of features that were once widely thought to be in error provides a useful measure of its ancient heritage.

It is the "howlers" with which the Book of Mormon abounds that furnish the best index to its authenticity. They show, first of all, that the book was definitely not a typical product of its time, and secondly, when they are examined more closely in light of present-day evidence, they appear very different indeed than they did a hundred years ago.<sup>10</sup>

In an address given at the commemoration of the 200th anniversary of the birth of Joseph Smith, John Clark, a Mesoamerican archaeologist, showed how over time, items that were once considered problematic in the Book of Mormon have trended toward confirmation, particularly when examined in a Mesoamerican setting.<sup>11</sup> In one study he reviewed sixty of these items as mentioned in three nineteenth-century publications. He found that over sixty percent of them had been resolved in favor of the Nephite record.<sup>12</sup>

Conceptually, methodologically, and informationally, this study builds and expands upon such previous efforts. I like to call this "accidental evidence" because it comes about as the unintended byproduct of our critics' efforts to discredit the Book of Mormon. They point us to look more closely at certain subjects and lead us inadvertently to new discoveries that can support the book.

# **Purpose**

There are many ways to approach the Book of Mormon, and not all of them are or need be concerned with issues of evidence and antiquity. The suitability of one's approach depends on the kinds of questions one would like to answer. This study focuses on a subcategory of evidence known as *anachronisms*. Its purpose is to evaluate the status of items in the text which many writers have considered as out of place if it is, indeed, a product of the ancient world. How, in other words, has the Book of Mormon fared over time in relation to these claims?

To answer this question, it is necessary to review what has been said in the past as well as what commentators have more recently claimed in regard to these issues. It should be understood that the state of collective knowledge and scholarly opinion often changes over time due to new research and discoveries. Thus, something in the text that was thought to be problematic in 1834 or 1857 may very well not be considered anachronistic today. While they do not encompass all that can be said for or against the Book of Mormon, anachronisms can be a useful measure of changing perspectives and the status of particular items over time. This information may also help inform future expectations.

This study is not intended to address all evidence which may be marshaled for or against the Book of Mormon. Nor does it discuss every item of culture, language, or environment that could relate to the book's claimed ancient origins. Moreover, just because some items remain anachronistic does not mean that there are no valid reasons for the current lack of evidence. At the same time, it also shouldn't be assumed that items no longer considered anachronistic require no further research, study, or scrutiny. In some cases, an issue may even be more a matter of textual interpretation than archaeological verification. Rather than providing the final word, this study offers a general picture of the state of alleged anachronisms during the nearly two centuries since the Book of Mormon first came off the press.

At the time of its publication and throughout much of the intervening history, many of its readers — including both believers and non-believers in its divine origins — have assumed that the Book of Mormon represents an account set within all of North and South America.

Furthermore, many have supposed that it purports to explain the origin of all or most of the native inhabitants of the Americas (a claim that the text itself does not actually make). These types of assumptions are often reflected in the charges of anachronism that have been made. Only more recently has a limited view of the Book of Mormon's geography and of its social history become more common, especially among scholarly readers. 13 Importantly, this study does not attempt to correct or contend with the geographic or demographic assumptions held by those who have proposed anachronisms. Rather, it aims to simply identify, categorize, and assess allegations on their own terms. based on whatever stated or implicit assumptions the authors bring to the table. Given the imprecision and variability of the claims involved. this requires the investigation of a broad swath of literature and scientific data. That is, when an alleged anachronism assumes a hemispheric model for the Book of Mormon's geography, evidence from the entire Western hemisphere is considered as relevant and valid for assessing the claim.

This study should therefore not be seen as expressing any type of favor for or against any specific geographic model or setting for the Book of Mormon. Nor is it primarily concerned with establishing whether all of the cultural, linguistic, or environmental features mentioned in the text are believable or historically accurate (although that is clearly a related issue). Instead, the key purpose of this study is to see how well alleged anachronisms themselves have held up over time. In the future, it may be useful to add approaches that compare and contrast evidence relevant to specific geographic models.

#### Method

After reviewing over 1,000 publications critical of the Book of Mormon and printed between 1830 and 2024, this study has identified a total of 226 features of the Book of Mormon that have, in those publications, been claimed as anachronisms. These have been divided into eight subcategories:

- Book of Mormon animals
- Warfare in the Book of Mormon
- Metals and metallurgy
- Ancient culture
- Book of Mormon names
- Old World journeys by land and sea
- Records, writing, and language

#### Events in Third Nephi

Each subcategory constitutes a chapter in this work. At the end of each of these there are charts that illustrate the state or status of anachronisms included in that chapter. These charts further divide the individual anachronisms into three main eras (1830–1844, 1845–1965, and 1966–2024), which can help track their status over time.<sup>14</sup>

In the chapters that make up this work, each alleged anachronism and its corresponding Book of Mormon data is briefly assessed. They are presented, in no particular order, in the eight subcategories just mentioned.

In contrast to John Clark's earlier research — which focused exclusively on items related to archaeology, culture, and history — this study adds items relating to languages and names. When an item from the Book of Mormon that was once thought to be out of place turns up in the historical, archaeological, or linguistic record, it is labeled as "confirmed." When the available data isn't conclusive but is trending towards confirmation, the item is labeled as "partially confirmed." And when no known data directly supports an identified feature of the text, it is labeled as "unconfirmed." The results for each subcategory are summarized at the end of each chapter.

It should be clarified that these labels ("confirmed," "partially confirmed," and "unconfirmed") do *not* refer to the claims or allegations of the anachronisms themselves. Rather, the labels describe the status of the *textual features* of the Book of Mormon (or, in a few cases, *assumed* textual features or related data<sup>15</sup>) which some have viewed to be anachronistic or lacking in evidence. The distinction is crucial because a misunderstanding on this point could drastically skew one's entire understanding of the findings of this study.

#### **Notes**

- Neal A. Maxwell, Plain and Precious Things (Salt Lake City: Deseret Book, 1983),
- 2. I would like to express heartfelt appreciation to those who offered support and encouragement and without whose help this research never would have seen fruition. This includes John Clark, Wade Ardern, Jack Welch, Lynne Wilson, Kirk Magelby, and Dave Jenkins. I am especially thankful for the remarkable research staff at Scripture Central, particularly Neal Rappleye, John Thompson, Ryan Dahle who provided constructive comments and suggestions, and Paul Bryner for help with source checking. Allen Wyatt, Jacie Mustard, and Raquel

- Angulo also deserve special thanks for their assistance with the charts that accompany this work.
- 3. John A. Clark, "Gleanings by the Way. No. VII," *Episcopal Recorder* (Philadelphia), 12 September 1840.
- 4. "Mormonism, or, New Mohammedanism in England and America," *Dublin University Magazine*, March 1843, 283.
- 5. Gordon H. Fraser, What Does the Book of Mormon Teach? (Chicago: Moody Press, 1964), 11.
- 6. See Fraser, What Does the Book of Mormon Teach?, 11-13.
- 7. Fraser, What Does the Book of Mormon Teach?, 32.
- 8. See Hugh Nibley, Lehi in the Desert / The World of the Jaredites / There Were Jaredites (Salt Lake City: Deseret Book; Provo, UT: Foundation for Ancient Research and Mormon Studies [FARMS], 1988). Nibley's book was first published in 1952. See also Hugh Nibley, An Approach to the Book of Mormon (Salt Lake City: Deseret Book; Provo, UT: FARMS, 1988); Hugh Nibley, Since Cumorah (Salt Lake City: Deseret Book; Provo, UT: FARMS, 1988); Hugh Nibley, The Prophetic Book of Mormon (Salt Lake City: Deseret Book; Provo, UT: FARMS, 1989).
- 9. Nibley, Prophetic Book of Mormon, 80.
- 10. Hugh Nibley, "'Howlers' in the Book of Mormon," *Millennial Star*, February 1963, 29.
- 11. See John E. Clark, "Archaeological Trends and Book of Mormon Origins," *BYU Studies Quarterly* 44, no. 4 (2005): 83–104, scholarsarchive.byu.edu/cgi/viewcontent.cgi?article=3732&context=byusq.
- 12. See Clark, "Archaeological Trends and Book of Mormon Origins," 93. See also John E. Clark, "Archaeology, Relics, and Book of Mormon Belief," Journal of Book of Mormon Studies 14, no. 2 (2005): 38-49, 71-74, scholarsarchive.byu .edu/cgi/viewcontent.cgi?article=1380&context=jbms; John E. Clark, Wade Ardern, and Matthew Roper, "Debating the Foundations of Mormonism: The Book of Mormon and Archaeology" (presentation, 7th Annual FAIR Conference, Sandy, UT, 4 August 2005), fairlatterdaysaints.org/conference/august-2005 /debating-the-foundations-of-mormonism-the-book-of-mormon-and -archaeology. For a sample of similar studies considering ancient Mesoamerican contexts, see John L. Sorenson, An Ancient American Setting for the Book of Mormon (Salt Lake City: Deseret Book, 1985); John L. Sorenson, Images of Ancient America: Visualizing Book of Mormon Life (Provo, UT: Research Press, 1998); John L. Sorenson, Mormon's Codex: An Ancient American Book (Salt Lake City: Deseret Book; Provo, UT: Neal A. Maxwell Institute for Religious Scholarship, 2013); Brant A. Gardner, Traditions of the Fathers: The Book of Mormon as History (Draper, UT: Greg Kofford Books, 2015).
- 13. For an example of this approach see Sorenson, Ancient American Setting.
- 14. Many relevant publications from 1830–1844 have been digitized and are available in the Harold B. Lee Library's 19th-Century Publications about the Book

- of Mormon (1829–1844) digital collection at lib.byu.edu/collections/19th -century-publications-about-the-book-of-mormon/. On this collection, see Matthew Roper, "Early Publications on the Book of Mormon," Journal of the Book of Mormon and Other Restoration Scripture 18, no. 2 (2009): 38–51, scholarsarchive.byu.edu/jbms/vol18/iss2/5/.Forpublicationsfrom1845–1965 and 1966–2024, sources were drawn from Special Collections at the Harold B. Lee Library in Provo, UT, and the Church History Library in Salt Lake City.
- 15. For example, critics assumed that if the Book of Mormon's claims about horses were valid, then the reader should expect to find oral or textual *traditions* about horse culture that could be traced back to pre-Columbian times. Thus, while the item is based on a feature of the text (horses), it specifically involves the critics' own assumptions about what type of evidence should be available if that feature of the text were historically authentic.

# Chapter 1: Book of Mormon Animals

One set of claimed anachronisms has to do with references to animals mentioned in the text. Fauna which were at one time thought to have been completely absent from the New World previous to the fifteenth century or to have become extinct long before the end of the Pleistocene era (circa 10,000 BC), did not, it has been argued, exist during the time in which the Book of Mormon is set. "When what is known of America since its discovery, is compared with the history of [the Book of] Mormon, it makes it appear just what it is, a complete fiction" wrote one British reader in 1839. Nephi, for instance, reports that his family encountered cows, oxen, horses, asses, goats, and wild goats (1 Nephi 18:25). "These kind of animals which are now in such abundance in that country," he continued, "have been introduced by Europeans, since its discovery. . . . Nor are these a kind of animals which would be likely to become extinct" had they been here. Other references to animals in the text that have been considered erroneous include the elephant, sheep, flocks and herds, swine, the honeybee, lions, and other wild animals. While there are still many questions about the nature of animals in the Nephite account, scientific advances and discoveries after 1830 have shed additional light on the history of animals in pre-Columbian times.2

The evaluation of status given to each animal mentioned in the text is based upon current archaeological evidence or the lack thereof. A plausible case can be made that some names of animals in the text could be examples of loan-shifting or semantic extension (in which a people apply terms from the Old World to similar but different varieties of animals in the New World, a well-attested cultural practice).<sup>3</sup> For example, while the Mesoamerican peccary is not a pig under a strict scientific nomenclature, the resemblance to swine is notable, and is commonly expressed as such by observers. A similar argument

could be made for a few of the other animals discussed in this chapter. Those which I find most persuasive I score as confirmed. However, others may differ on the validity of such evidence, so I have indicated that these are examples of loan-shift (LS) in my scoring.

#### 1. Pre-Columbian Horses

**Status: Confirmed** (1845–1966)

**Critics' Claim:** Horses are repeatedly mentioned in the Book of Mormon (1 Nephi 18:25; 2 Nephi 12:7; Enos 1:21; Alma 18:9–12; 3 Nephi 3:22, 4:4, 6:1, 21:14; Ether 9:19). Some early critics, however, claimed that there were never horses *at any point* in the Americas prior to the arrival of Columbus and other Europeans, and if they had ever existed before that time, they would not have become extinct.<sup>4</sup>

**Response:** Charles Darwin was among the first to discover fossils of extinct pre-Columbian horses (see figure 1). While in Argentina in 1833, he recovered molars from a Pleistocene species of horse. This species is known as *Equus (Amerhippus) neogeus* meaning "American horse of the New World." Many other prehistoric horse specimens have subsequently been recovered and identified throughout North, Central, and South America.

When they became aware of such discoveries, some Church members took note of these reports. In 1876 Moses Thatcher, a Latter-day Saint Apostle, observed, "When the Book of Mormon was first published, some fifty years ago, one of the strong arguments brought against it by its disbelieving opponents, was that it spoke of the primitive inhabitants possessing elephants, horses, asses, oxen and so on," which was the prevailing view of the time. "It does not appear that our elders at that time had any historical or scientific knowledge, with which to meet what was generally conceded to be the well-established fact that horses and elephants had been from the remotest periods unknown in this country." Thatcher then noted several examples of the existence of pre-Columbian elephants such as the mammoth and mastodon, as well as the horse at an early time.<sup>6</sup>

While "it may be objected that we have no evidence that the horse existed this side of these great fossil periods," noted another Latterday Saint writer, this emerging fossil evidence nevertheless refuted the earlier argument and helped "prove that the horse was once a native of America." In 1907, Latter-day Saint geologist Fred Pack notes, "When the Book of Mormon was published, in 1830, it was generally believed



Fossil tooth of horse, from Bahia Blanca.

**Figure 1.** Illustration of fossilized horse tooth from Bahia Blanca, discovered by Charles Darwin. (*Wikimedia Commons*, s.v. "Fossil tooth of horse from Bahia Blanca — Charles Darwin," commons.wikimedia.org/wiki/File:Fossil\_tooth \_of\_horse\_from\_Bahia\_Blanca\_-\_Charles\_Darwin.jpg.)

that the horses introduced by the Spanish were the only ones ever known to America, but it has since been proved that they appeared on the western continent ages ago."<sup>8</sup>

#### 2. Pre-Columbian Horses (Contemporary with Man)

**Status: Confirmed** (1845–1965)

**Critics' Claim:** After fossils of early pre-Columbian horses were discovered, establishing that they had once lived in the Americas, some critics then argued that while this was true, these earlier species died out long before the advent of humans. "While there is abundant evidence that the horse originally inhabited the American continent," wrote one author in 1906, "the most careful research of zoologists has failed to bring to light anything that would indicate the existence of the horse, as known to man, anywhere on the American continent earlier than the Spanish conquest." According to another writer, "There is no authentic record of either horses . . . having survived in America until the first appearance of man on this continent. So far as the fossil records go, the last of these animals disappeared from this continent at least twenty thousand years ago." <sup>10</sup>

**Response:** Evidence that some species of horse were contemporary with humans living in the Americas, at least during the Pleistocene, is now generally accepted.<sup>11</sup>

### 3. Pre-Columbian Horses (Native Traditions)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that if there had once been horses in ancient America, then traditions about their previous existence would be found among native peoples.<sup>12</sup>

**Response:** Native traditions of various tribes assert that they had knowledge of the horse before the arrival of Europeans and may thus reflect knowledge of pre-Columbian horses.<sup>13</sup>

#### 4. Pre-Columbian Horses (in Book of Mormon Times)

**Status: Partially Confirmed** (1966–2024)

**Critics' Claim:** More recently, critics of the Book of Mormon have claimed that while some Pleistocene species of horse were contemporary with early man, they had all died off by the end of that period (circa 10,000 BC) and therefore had become extinct many thousands of years before the time covered in the Book of Mormon.

Charles Shook, writing in 1910, states,

No one who had studied geology will deny that in the earlier epochs the horse was an inhabitant of this continent along with many other species now extinct. And it is also probable that the horse and man were coexistent for some time after the latter's arrival. This much I concede. But that the horse was here ... at the time when those cities which have been attributed to the Jaredites and Nephites were erected, I most emphatically deny.<sup>14</sup>

Another writes, "The American horse had at the time of the Jaredites' landing been extinct not less than sixteen thousand years, and at the time of the Nephites' coming not less than eighteen thousand years." According to L. Rumble, "The Pleistocene period came to an end at least 10,000 years B.C. From at least 10,000 years B.C. until the arrival of the Spaniards there were no living horses in America. How then, could the Book of Mormon's mythical band of Nephites have found horses there in 600 B.C.?" 16

**Response:** It is now becoming increasingly clear that while many early species became extinct by the end of the Pleistocene era, some animals—including a few species of the horse—did indeed survive into more recent historical times, although how long they

persisted continues to be a question of scientific interest and research. Supporting evidence comes from fossils, DNA, and associated carbon-based materials discovered and dated to several thousand years after the end of the Pleistocene.

In 2009, DNA from Pleistocene-era horses recovered from permafrost in the interior of Alaska showed that they survived in that region as late as 5600 BC.<sup>17</sup> Another study found evidence for the survival of horses in the Yukon as late as 3700 BC.<sup>18</sup> Researchers have noted that the icy arctic favors the preservation of fossils and DNA material, whereas such material may be less likely to be preserved in warmer climates.<sup>19</sup> In Argentina, species of horse may have persisted past the Pleistocene to as late as 5000 BC.<sup>20</sup>

At least three species of horse are known to have been present in Mexico until the end of the Pleistocene. These include a large horse (*Equus mexicanus*), a medium-sized horse (*E. conversidens*; see figure 2), and a smaller horse (*H. Francisci*). Recently archaeologists working at a site of Rancho Carabanchel, near Cedral, San Luis Potosi, Mexico, recovered remains of pre-Columbian horse bones, including *Equus mexicanus* and *E. conversidens*, as well as a smaller variety known as *Equus tau* which is comparable to *H. Francisci*. While collagen was no longer extant in the horse remains (a not uncommon challenge in obtaining reliable dates), they were all recovered from a well-established sequence of strata and the bones were dated in close association with relative carbon material from 1660–1508 BC, 1544–1424 BC, 548–400 BC, AD 73–226, AD 86–242, AD 253–542, and AD 1025–1165.

The researchers concluded.

The remains of *Equus* that we recovered from [Rancho Carabanchel] from multiple stratigraphic layers all with associated radiocarbon dates, all in a fair stratigraphic continuum and showing no mixing between geological units imply that horses may have persisted in this region of Mexico well after the classical late Pleistocene extinction time.

They further note that this evidence appears to add to "a growing set of data that the late Pleistocene extinction was more a process (over many thousands of years) rather than the typically accepted and presumed extinction event." Notably, some of the dates obtained correlate with the time of the Book of Mormon. As these dates were obtained from material in close association with the horse bones rather than



**Figure 2.** Skeleton of *Equus conversidens*. (*Wikipedia*, s.v. "*Equus conversidens*," en.wikipedia.org/wiki/Equus\_conversidens.)

collagen in the bone (which was not available), I have scored this item as partially confirmed since we cannot be entirely certain that the dating is correct. However, given the undisturbed state of the strata prior to excavation and the excellent chronological sequence established throughout the various layers, the accuracy of the dating seems likely.

#### 5. Pre-Columbian Asses

Status: Partially Confirmed (1966–2024)

**Critics' Claim:** The ass is mentioned as an animal known to the Nephites and the Jaredites in the New World (1 Nephi 18:25; Mosiah 5:14, 12:5, 13:24, 21:3; Ether 9:10). Some have claimed that this species did not exist in the Americas during pre-Columbian times.<sup>23</sup>

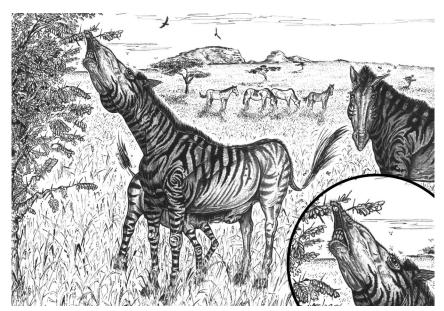
**Response:** Some smaller species of Pleistocene equids comparable to the ass are now attested in the Americas during the Pleistocene (see figure 3).<sup>24</sup>

# 6. Pre-Columbian Asses (Native Traditions)

**Status: Unconfirmed** 

**Critics' Claim:** Some critics have claimed that if there had once been ass species in pre-Columbian times, then traditions about their previous existence would be found among native peoples.<sup>25</sup>

**Response:** No known Indigenous traditions refer specifically to asses.



**Figure 3.** Reconstruction of South American Pleistocene equids. The function of the prehensile upper lip of hippidiforms during foraging is depicted in the foreground and in detail. The grazer *Equus* is shown in the background. (Camila Bernardes et al., "Rostral reconstruction of South American hippidiform equids: New anatomical and ecomorphological inferences," *Acta Palaeontologica Polonica* 58, no. 4: 675, fig. 5, app.pan.pl/archive/published/app58/app20110107.pdf.)

## 7. Pre-Columbian Asses (in Book of Mormon Times)

**Status: Partially Confirmed** (1966–2024)

**Critics' Claim:** Some critics have more specifically claimed that the ass was unknown during Book of Mormon times.<sup>26</sup>

**Response:** It is possible that smaller species of horse such as *Equus conversidens* were considered an ass by Book of Mormon peoples. Remains of this smaller form of horse were found at San Luis Potosi, Mexico, in association with material that was carbon dated to 1300–1240 BC.<sup>27</sup>

#### 8. Pre-Columbian Cows

Status: Confirmed Bison Loan Shift (1845–1965)

**Critics' Claim:** Cows are mentioned in the Book of Mormon (1 Nephi 18:25; Ether 9:18). Some have claimed that they were not present in the Americas in pre-Columbian times.<sup>28</sup>

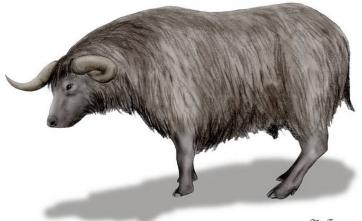
**Response:** It is not clear from the text if the terms *cow* and *ox* in the Book of Mormon refer to one species of bovine or two distinct animals. In either case, several species of bovine were present during the Pleistocene period.<sup>29</sup> The shrub ox (figure 4) lived until at least the end of that period in parts of Mexico, where their bones are sometimes found in caves. Few of these have been dated, however.<sup>30</sup> When Europeans first encountered American bison, they often referred to them as "cows," "cattle," and "oxen," and the association has never fully disappeared.<sup>31</sup> It therefore follows that bovine species sometimes referred to as "cows" did in fact exist in pre-Columbian times.

#### 9. Pre-Columbian Cows (in Book of Mormon Times)

**Status: Confirmed Bison Loan Shift** (1966–2024)

**Critics' Claim:** Some critics have more specifically claimed that there were no cows in Book of Mormon times.<sup>32</sup>

**Response:** As noted, early European settlers sometimes referred to the bison as "cow," and this is in fact the proper term for the females of the species. Bison are known to have been present for thousands of years in many parts of North America, including the period covered by the Book of Mormon. Questions about the extent of their range at various times is less clear.



N. Jamura, 2008

Figure 4. Artist's rendering of a shrub ox. (N. Tamura, "Euceratherium," 2008, deviantart.com/ntamura/art/Euceratherium-87828403.)

#### 10. Pre-Columbian Oxen

Status: Confirmed Bison Loan Shift (1845–1965)

**Critics' Claim:** The Book of Mormon mentions oxen (1 Nephi 18:25; Ether 9:18). Some have claimed that they were not present in the Americas in pre-Columbian times.<sup>33</sup>

**Response:** It is not clear from the text if the terms *ox* and *cow* in the Book of Mormon refer to one species of bovine or two distinct animals. In either case, the term *ox* can refer to domesticated bovine or to wild animals such as shrub ox, musk ox, or American bison.<sup>34</sup> For example, a text from 1744 makes reference to "the *American* Oxen, or Beeves" which "have a large Bunch upon their Backs."<sup>35</sup> Several species of bovine were present during the Pleistocene and one species of the American bison survives today.

#### 11. Pre-Columbian Oxen (in Book of Mormon Times)

Status: Confirmed Bison Loan Shift (1966–2024)

**Critics' Claim:** Some critics have more specifically claimed that there were no oxen in Book of Mormon times.<sup>36</sup>

**Response:** American bison have sometimes been referred to as oxen. Bison have been present in the Americas for thousands of years including the time covered by the Book of Mormon, although questions remain about the extent of their range at various times.<sup>37</sup>

#### 12. Pre-Columbian Cattle

**Status: Confirmed** (1845–1965)

**Critics' Claim:** Cattle are mentioned in the Book of Mormon (Enos 1:21; 3 Nephi 3:22, 4:4, 6:1; Ether 9:18). Some have claimed that there were no cattle in pre-Columbian times.<sup>38</sup>

**Response:** Hebrew words rendered as *cattle* by translators can refer to any large or small quadrupeds.<sup>39</sup> Thus, the the use of this term in the Book of Mormon could refer to animals used for food, but they could also refer to animals that could be exploited for other useful purposes. In addition to the American bison, there was a variety of such animals known in ancient Mesoamerica such as deer and peccary that were raised, husbanded, exploited for food, or used for other purposes.<sup>40</sup> While current evidence does not confirm the existence and use of all

of the forms of cattle mentioned in the Book of Mormon text, enough evidence now exists to consider cattle to be generally confirmed.

#### 13. Pre-Columbian Goats

**Status: Confirmed Deer Loan Shift** (1845–1965)

**Critics' Claim:** Goats are mentioned in the Book of Mormon (1 Nephi 18:25; Alma 14:29; Ether 9:18). Some have claimed that they were not present in pre-Columbian times.<sup>41</sup>

**Response:** Partial confirmation of pre-Columbian goats may be found in the native wild goat of North America (*Oreamnos americanus*), only known from southwestern Alaska into the northwestern United States. Archaeological evidence is known for an extinct species (*Oreamnos harringtoni*), which is related to it and was known during Pleistocene times to have lived as far south as the North American southwest and northern Mexico, but evidence for its survival past the Ice Age is currently lacking. Early Spanish observers of Mesoamerican wildlife sometimes characterized species such as the small brocket deer (figure 5) as "goats" and "wild goats."



Figure 5. A Yucatan brown brocket deer. (Bernard Dupont, Wikimedia Commons, s.v., "Yucatan Brown Brocket Deer (Mazama pandora) male, captive specimen, Chiapas," commons.wikimedia.org/wiki/File:Yucatan\_Brown\_Brocket \_Deer\_%28Mazama\_pandora%29\_male,\_captive\_specimen,\_Chiapas.jpg.)

#### 14. Pre-Columbian Wild Goats

Status: Confirmed Deer Loan Shift (1845–1965)

**Critics' Claim:** Wild goats are mentioned in the Book of Mormon (1 Nephi 18:25; Enos 1:21). Some have claimed that there were no wild goats in pre-Columbian times.<sup>44</sup>

**Response:** At least one species of goat (*Oreamnos harringtoni*) was known as far south as the North American southwest, but there is currently no evidence for their existence during Book of Mormon times. <sup>45</sup> As discussed under #13, Spanish observers of Mesoamerican wildlife sometimes characterized species such as the small brocket deer as "goats" and "wild goats."

#### 15. Pre-Columbian Sheep

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Sheep are mentioned in the Book of Mormon (Ether 9:18). Some have claimed there were no sheep in pre-Columbian times.<sup>46</sup>

**Response:** Mountain sheep (*Ovis canadensis*; see figure 6) are one possible candidate for sheep in the Book of Mormon. While some have claimed that these animals are incapable of domestication, <sup>47</sup> according to Valerius Geist, "It is hard to imagine a wild animal more readily tamed than mountain sheep." <sup>48</sup> According to Charles A. Reed,

Bighorn sheep can become so accustomed to humans that one can feed them by hand while fitting them with radio-collars or eartags; I once had such an adult male Bighorn at a road intersection in the western United States stick his head partially through the open car window begging for food like a Yellowstone bear. If his horns had been smaller he would have climbed into the car.<sup>49</sup>

Mountain sheep currently range as far south as northern Mexico, but in pre-Columbian times their range was more extensive. <sup>50</sup> Mexican archaeologists in the 1980s working at an Epiclassic site in Tula Hidalgo (AD 750–900) discovered a pot under the floor of a residential dwelling with the remains of two mountain sheep (*Ovis canadensis*). Some of the bones showed signs of having been cut and apparently had been used as ritual food; part of the animal had been eaten and part had been placed as an offering under the floor. <sup>51</sup> The



**Figure 6.** Bighorn mountain sheep. (Cheryl Prince, "Bighorn Sheep Standing on Mountain Area," *Pexels*, pexels.com/photo/bighorn-sheep-standing-on -mountain-area-7824754/.)

presence of this species of sheep in central Mexico in pre-Columbian times and its apparent ritual use is noteworthy.

#### 16. Flocks and Herds

**Status: Confirmed** (1845–1965)

**Critics' Claim:** The Book of Mormon mentions flocks and herds (Enos 1:21; Mosiah 22:2; Alma 7:27; Ether 10:12). Some have claimed that these were in reference to sheep and that there were no flocks of sheep in pre-Columbian times.<sup>52</sup>

**Response:** Archaeological evidence for exploitation of mountain sheep is now attested from central Mexico (see Item #15), however the term *flocks* could also have been applied to other animals. The same is true for the term *herds*.

Domestication is a process of changing animals genetically (often through intentional breeding practices) to make them more beneficial to humans. *Taming* is a process in which animals simply become accustomed to humans over time, which does not require genetic alteration. Animals that are not domesticated may often be tamed or

managed in ways that benefit humans.<sup>53</sup> Under these circumstances, people may cultivate or manage flocks and herds of various kinds.

There are many examples of taming in Native American culture that are believed by some scholars to have been practiced in pre-Columbian times. <sup>54</sup> The evidence suggests a solid trend of confirmation that a variety of herds and flocks of pre-Columbian animals were raised and exploited. If the word translated *flocks* in the text is derived from Hebrew, then the flocks would likely have referred to quadrupeds, but it is not known if that assumption is correct. If the word translated *flocks* was based on some other word, it could possibly then include birds and fowl for which there were abundant species in pre-Columbian times.

#### 17. Pre-Columbian Elephants

**Status: Confirmed** (1845–1965)

**Critics' Claim:** The Jaredites are reported to have had elephants (Ether 9:19). Some have claimed that there were no elephants in the Americas in pre-Columbian times. "The elephant is not a native of America and never was its inhabitant." Another critic wrote, "Scientific men are unanimously agreed that elephants never existed on this continent."

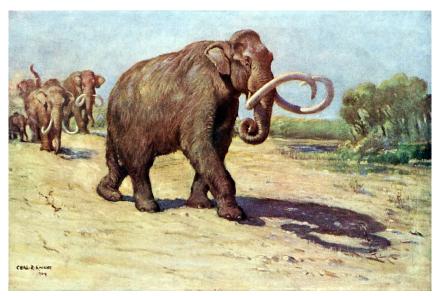
**Response:** By the latter half of the nineteenth century, readers of the Book of Mormon could point to discoveries of fossil evidence of pre-Columbian elephants, mammoths (figure 7), mastodons, and related species showing that, though now extinct, such creatures once inhabited the Americas in an earlier age.<sup>57</sup>

# 18. Pre-Columbian Elephants (Contemporary with Man)

Status: Confirmed (1845–1965)

**Critics' Claim:** When it became clear that some elephants and elephant-like species did, indeed, once inhabit the Americas, critics of the Book of Mormon then claimed that fossil evidence for such creatures became extinct long before the advent of man: "There is no authentic record of . . . elephants having survived in America until the first appearance of man on this continent. So far as fossil records go, the last of these animals disappeared from this continent at least twenty thousand years ago." <sup>58</sup>

Response: Traditions of native peoples of North America (including



**Figure 7.** 1909 restoration of a hybrid between a Columbian and woolly mammoth. (Charles R. Knight, *Wikipedia*, s.v. "Columbian mammoth," en.wikipedia.org/wiki/Columbian\_mammoth#/media/File:Columbian\_mammoth.jpg.)

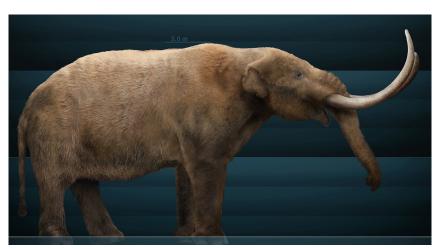
Mexico), which seem to describe the elephant or related species, suggest that humans and elephants were once contemporaries in ancient America. Moreover, mammoth and mastodon remains (figure 8) have been found at many locations, including in Mexico, in connection with human artifacts, demonstrating that some of these species were indeed contemporary with man. For instance, remains of an American mastodon were found on the Olympic Peninsula in Washington with a projectile point embedded in one of the creature's ribs. It dates to around 10,000 BC.

# 19. Pre-Columbian Elephants (in Book of Mormon Times)

**Status: Partially Confirmed** (1966–2024)

**Critics' Claim:** Some critics have more specifically claimed that there were no elephants during Book of Mormon times. <sup>62</sup>

**Response:** Growing evidence suggests that pre-Columbian species of mammoth, mastodon, and gomphothere (such as *Cuiveronius*) survived in various parts of the Americas past the end of the Pleistocene into the Holocene period. The Wooly Mammoth, once thought to have been extinct by the end of the Ice Age, survived in the Arctic, including



**Figure 8.** Reconstruction of *Mammut americanum* based on bony structure and paleontological texts. (*Wikimedia Commons*, s.v. "Mammut americanum Sergiodlarosa," commons.wikimedia.org/wiki/File:Mammut\_americanum \_Sergiodlarosa.jpg.)

parts of Alaska and Canada, thousands of years longer than had been previously accepted. 63

A team of researchers working on Wrangel Island in the Siberian arctic announced in 1993:

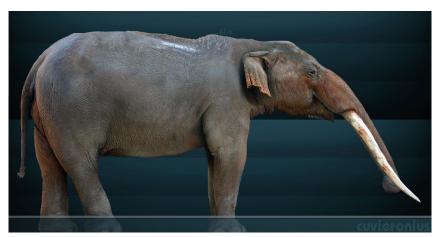
hardly anyone has doubted that mammoths had become extinct everywhere by around 9,500 years before present (BP). We report here new discoveries on Wrangle island in the Arctic Ocean that force this view to be revised. Along with normal-sized mammoth fossils dating to the end of the Pleistocene, numerous teeth of dwarf mammoth dated 7,000–4,000 yr BP [circa 5000–2000 BC] have been found there.<sup>64</sup>

Additional remains of this species found on Pribilof Island, Alaska, have also yielded a date of 5,700 BP (3700 BC).<sup>65</sup> Mammoth and horse DNA from the mainland interior of Alaska have been dated to 7,600 years BP (5600 BC),<sup>66</sup> and as late as 5,700 BP (3700 BC) in the Yukon of northwestern Canada.<sup>67</sup>

It was long thought that mammoths had become extinct by the Pleistocene-Holocene transition around 12,000–10,000 years before present (yr BP). However, recent radiocarbon data indicate a prolonged survival in some areas, including a few islands where mammoths persisted into the Holocene. ... It is likely that the final extinction of mammoths happened later than the most recently dated mammoth specimen.<sup>68</sup>

Evidence also suggests that some of the larger Columbian Mammoth may have survived past the Pleistocene as well. A collagen sample from a mammoth bone found in Sandy, Utah, yielded a date of 5,985 BP (3985 BC). Mastodon remains found in Mexico were dated to 7150 BC, and other fossils recovered from Huntington, Utah, were dated to 5080 and 5590 BC.

Cuvieronius, another related elephant-like species that once lived in parts of North and South America (figure 9), is known to have survived into the Late Pleistocene period in parts of Mexico and Central America, although the details of its extinction there are unclear. According to one group of researchers, during the Late Pleistocene in Mexico, Cuvieronius, mammoth, and mastodon may have been contemporaneous with each other. At some Mexican sites Cuvieronius and mammoth have been found together. A review of all of the specimens held in museums is warranted to allow a complete understanding of the Mesoamerican proboscideans. Stratigraphic and radiometric-controlled excavations are required to enhance the proboscidean records for Mesoamerica as well. This species also survived past the Pleistocene and into the Holocene period in Guatemala. Remains from La Estanzuela have been dated to around 7500 BC. Researchers concluded, These extremely young ages from the



**Figure 9.** Life restoration of *Cuvieronius*. (Sergio De La Rosa, *Wikimedia Commons*, s.v. "Cuvieronius," commons.wikimedia.org/wiki/File:Cuvieronius.jpg.)

Montagua river in south-central Guatemala suggest that a local population of *Cuvieronius* may have survived into the Early Holocene."<sup>75</sup> Furthermore,

The area, located in the Rio Montagua valley at only 200 m altitude, today presents a tropical climate. *Cuvieronius* is known to have adapted to temperate and tropical temperatures and high humidity; a survival of these adaptive mixfeeders into the Early Holocene therefore appears plausible. We are aware, however, that all fossils reported here were dated based on apatite and not collagen due to preservation issues. Biopatite is known to have a greater exchange with the environment, but it is an accepted technique and in this case the only material available to be dated.<sup>76</sup>

## 20. Pre-Columbian Swine

**Status: Confirmed Peccary Loan Shift** (1845–1965)

**Critics' Claim:** The Jaredites are said to have possessed swine (Ether 9:18). Later, Mormon uses the term *sow* (an adult female swine) negatively in a proverbial sense (3 Nephi 7:8, 14:6). Some critics have claimed that references to swine in the Book of Mormon are anachronistic.<sup>77</sup>

**Response:** Although there is at present no archaeological evidence for swine in pre-Columbian times, a New World species known as peccaries have often been considered swine. Peccaries, shown in figure 10, are not true pigs in terms of modern scientific classification, but they are part of a closely related family and resemble them greatly in both appearance and behavior. The Spanish conquistadors, explorers, and historians considered them pigs. Lyle Sowls observes,

When one travels within range of the peccaries, one hears references to "wild pigs" or "wild hogs." In Spanish-speaking countries these are "los puercos," "los cerdos," or "los cochinos," while in Portuguese-speaking countries the country people talk of "porcos." German settlers in South America refer to "the schwein." All of these names have been given to peccaries by people who first knew domestic hogs and equated them with peccaries in the New World.<sup>78</sup>

The collared peccary is known to live in herds of up to 20–30 animals. It has "characteristically hog-like jowls, protruding snout, thick neck, and delicate, skinny legs. Gray to black hair covers its heavy-set



Figure 10. Collarared peccaries. (Brian Gratwicke, Wikimedia Commons, s.v. "Collared Peccaries," commons.wikimedia.org/wiki/File:Collared\_Peccaries.jpg.)

body, with longer, stiffer hairs cresting the spine. A collar of pale hair rings the neck. Like pigs, it grunts, or when frightened makes a doggish bark ... They roll in mud or dust to cool and clean off."79

Despite their gentle appearance, wild peccaries can be fierce when they feel threatened or cornered. One observer in northern Mexico observed.

Many dogs are killed by peccaries, being torn open or gashed by their long, sharp-edged canine teeth. When about to attack, the peccary lowers its head, champs its teeth, and advances sideways with its mouth open and under jaw turned to one side, ready for an upward lunge to rip up its enemy.80

The white-lipped peccary behaves much like the collared peccary, but favors swampy regions with thick vegetation. "This animal is more gregarious than the collared peccary, and hundreds of individuals may travel or wallow together; when this occurs, the low rumbling noise made can be heard for almost a kilometer."81

Peccaries, as an important source of meat in ancient Mesoamerica. were likely hunted and eaten from at least Olmec times (1200-400) BC). They were also valued for their hides. Some scholars believe that peccaries may have sometimes been tamed and husbanded for use. According to Sowls, "the collared peccary tames quickly if removed from the mother and handled at an early age. This readiness to taming has been described by many writers." Dillon, based on ethnographic evidence, concluded that the taming of peccaries was likely a pre-Columbian practice and that these and other animals may have been kept in stone enclosures, which have been identified at some Maya sites. Kitty Emery argues that both white-tailed deer and peccaries were husbanded by the Maya for food and other uses and finds support for this in analysis from soil samples.

Given their resemblance to wild pigs in both its appearance and behavior, as well as their usefulness as a resource for food and other commodities, it requires no stretch of credulity to see peccaries as an appropriate fit for the swine mentioned in the Book of Mormon.<sup>85</sup>

# 21. Honeybees

**Status: Confirmed** (1845–1965)

**Critics' Claim:** The Jaredites are said to have kept bees during their travels in the wilderness of the Old World (Ether 2:3). Some have claimed that the honeybee was unknown in the Americas during pre-Columbian times.<sup>86</sup>

**Response:** Honeybees are not mentioned among the animals which the Jaredites brought across the sea from the Old World to the land of promise (Ether 6:4). Be that as it may, honeybees of a stingless variety were well known in Mesoamerica from an early period.<sup>87</sup>

#### 22. Lions

Status: Confirmed Puma Loan Shift (1830-1844)

**Critics' Claim:** Lions are mentioned multiple times in the text (see, for example, Mosiah 20:10 and Alma 14:29). As early as 1838, critics claimed that lions never inhabited the Americas.<sup>88</sup>

**Response:** There are several pre-Columbian animals that fit the textual description of lions. One obvious correlation is the mountain lion (*Felix concolor*), also known as a panther, puma, or cougar. The mountain lion is the most widely distributed species of the genus (*Felis*), extending from Canada south to Patagonia. According to A. Starker Leopold, The puma, or mountain lion, is one of the few animals that range literally throughout Mexico. Other predatory cats known to Mesoamerica, such as jaguars, may also have been characterized as

lions. Spanish accounts of the Conquest and early histories frequently refer to South American and Mesoamerican feline predators as "lions and tigers." 92

## 23. Wild Animals

Status: Confirmed (1830-1844)

**Critics' Claim:** Nephi states that there were "all manner of wild animals" in the land of promise (1 Nephi 18:25). At least one critic has claimed that references to wild animals are anachronistic.<sup>93</sup>

Response: Many examples of wild animals are known.94

## 24. Moths

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Jesus refers to the moth in his teachings at Bountiful (3 Nephi 13:19, 20; 27:32). Some critics have claimed that moths were unknown in the Americas in pre-Columbian times.<sup>95</sup>

Response: Various species of moth are known.96

# 25. Dragons

**Status: Confirmed** (1966–2024)

**Critics' Claim:** The Book of Mormon refers to dragons (2 Nephi 23:22; Mosiah 20:11; Alma 43:44). Some have claimed that the term *dragon* is an entirely inappropriate term for any animal which might have existed in the Americas.<sup>97</sup>

**Response:** The people of Nephi would have been familiar with the concept of *tannin* or *dragon* from their cultural heritage. "Biblical references to the dragon can be regarded as symbolic — that is, the writer using the dragon in a fictional way. These references are a kind of shorthand evocation of the evil forces of the cosmos that are in conflict with man." This is the context of passages like Mosiah 20:11 and Alma 43:44, where Nephite and Lamanite forces fight fiercely under desperate conditions and are compared to dragons.

This dragon-like image would also have been understandable in ancient Mesoamerica where the cosmos was sometimes conceived of as a fierce reptilian caiman. According to Mary Miller and Karl Taube,

in both Central Mexican and Yucatec Maya thought, the earth could be viewed as a great caiman floating upon the

sea. The Aztecs considered it too as a monstrous devouring being, with a huge gaping maw, talons, and gnashing mouths placed on joints of the limbs.99

Another pair of scholars explains, "Among the Olmec, Earth was pictured as a great dragon floating on the sea, whose body sustained and nourished a vast array of plants."100 Caimans, a species of alligator (figure 11), are described in one Spanish source as

very ferocious, and greatly feared by the people. . . . Some of the caimans are from twenty to thirty feet and upwards in length, with large bodies and big feet, and covered with scales through which a musket ball cannot pierce. Their tails are very powerful and dangerous; and their mouths are large, with three rows of formidable teeth.<sup>101</sup>

The nineteenth-century traveler and explorer John Lloyd Stephens was amazed at these creatures when he encountered them and described them as "hideous monsters." 102 Nicholas Helmuth, who discussed the role that these creatures played in Mesoamerican mythology and art, observes that "actually, 'dragon' is a term that is not always inappropriate" in describing such creatures. 103



Figure 11. American crocodile, La Manzanilla, Jalisco, Mexico. (Wikimedia Commons, s.v. "Crocodylus acutus mexico," commons.wikimedia.org/wiki /File:Crocodylus\_acutus\_mexico\_08.jpg.)

## 26. Chickens

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Jesus refers to chickens in his teachings to the Nephites (3 Nephi 10:5–6). Some have claimed that references to chickens are out of place in pre-Columbian times.<sup>104</sup>

**Response:** Chickens were known to pre-Columbian peoples and were present in the Americas during Book of Mormon times.<sup>105</sup> The term *chicken*, however, can also simply refer to "the young of the domestic fowl" and can be "extended to the young of any bird."<sup>106</sup> When the Europeans arrived in the New World, they categorized turkeys as chickens.<sup>107</sup> Turkeys were domesticated from early pre-Columbian times.<sup>108</sup> Some fowl were raised for food, while others were kept for their feathers.

According to one conquistador,

They have many large fowl in the manner of peacocks, which are very tasty; also, four or five species of quail, some of which are like partridges. They have many geese and ducks of all kinds, domesticated as well as wild, from whose feathers they make their battle and ceremonial dress. These feathers are used for many things, because they are of diverse colors, and every year they pluck them from these fowl.<sup>109</sup>

Thus, the metaphor used by the resurrected Jesus would have been easily understood by his audience.

# 27. Dogs

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Several passages in the Book of Mormon make reference to dogs that could feed on remains of the dead (Mosiah 12:2; Alma 16:10; Helaman 7:19) and prey on flocks (Alma 5:59–60). They are also mentioned negatively in proverbial passages (3 Nephi 7:8, 14:6). It has been claimed that dogs were unknown in ancient America. 110

**Response:** Several species of dogs were known in pre-Columbian times. The coyote and the wolf were known in ancient Mexico. They were significant predators that often feed on carrion.<sup>111</sup> Moreover, "During the Preclassic, the Maya relied extensively on the domestic

dog (*Canis lupus familiaris*), which they used for both dietary and ritual purposes." As reported by one group of researchers,

Remains of the domestic dog (*Canis lupus familiaris*) can be found at virtually every site in pre-Columbian Mesoamerica, from the burial mounds of ancient nobles, to the ritual caches of ceremonial temples, to the kitchen middens of low-status households. Their images appear in ancient codices, on elaborately decorated ceramic pottery and murals, and in the chronicles of the Spanish conquerors.<sup>113</sup>

## 28. Snake Behavior

**Status: Confirmed** (1845–1965)

**Critics' Claim:** In the book of Ether, it is mentioned that serpents caused serious problems during a famine and prevented the Jaredites at that time from freely moving into the land southward (Ether 9:30–33). Some critics have dismissed the account as ridiculous.<sup>114</sup>

**Response:** Events analogous to those in the book of Ether—involving snake infestations that caused serious problems for people and soldiers—have been described by ancient historians. The Greek historian, Herodotus, described a people known as the Neuri:

A generation before the campaign of Darius they were forced to quit their country by snakes, which appeared all over the place in great numbers, while still more invaded them from the uninhabited region to the north, until life became so unendurable that there was nothing for it but to move out and take up their quarters with the Budini.<sup>115</sup>

The Roman historian, Plutarch, stated that in one of Pompey's military campaigns in the East, the general wanted to invade the region of Hyrcania near the Caspian Sea. Yet, "he was compelled to go back again for the infinite number of deadly venomous serpents which he met with, being come within three days journey of it." Snakes have caused similar disruptions to human activities in modern times."

# **Summary of Results**

As shown in figure 12, between 1830–1844, twelve anachronistic items related to animals in the Book of Mormon had been mentioned by writers. By 1844, two of these had been confirmed and ten were

unconfirmed. During the next 120 years, 1845–1965, the number of animal-related items rose to twenty-four. By 1965, sixteen of these items had been confirmed (figure 13). During the next fifty-nine years, 1966–2024, the total number of items had risen to twenty-eight, but twenty-three have now been confirmed (eight confirmed LS), and four of these have been partially confirmed, while one remains unconfirmed (figure 14).

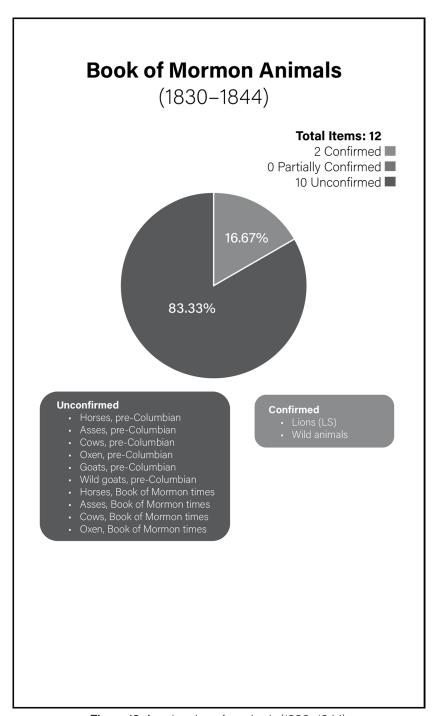


Figure 12. Anachronisms for animals (1830-1844).

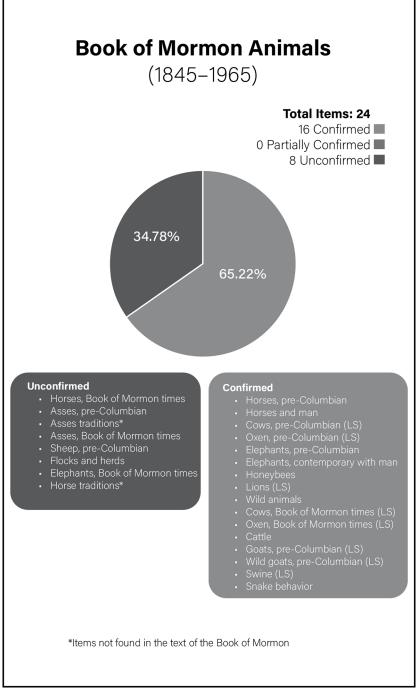


Figure 13. Anachronisms for animals (1845–1965).

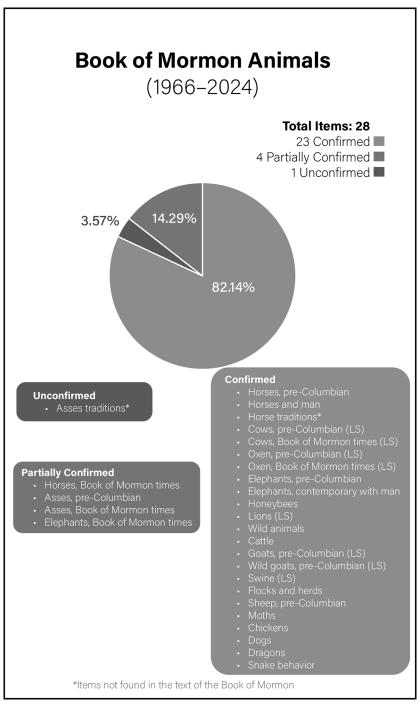


Figure 14. Anachronisms for animals (1966-2024).

# **Notes**

- H. Stevenson, A Lecture on Mormonism Delivered at the Wesleyan Methodist Chapel, Alston, December 7th, 1838 (Newcastle, UK: J. Blackwell, 1839), 9–10.
- For a general discussion of the challenges relating to the study of animals in the Book of Mormon, see Wade E. Miller and Matthew Roper, "Animals in the Book of Mormon: Challenges and Perspectives," BYU Studies Quarterly 56, no. 4 (2017): 133–75, scholarsarchive.byu.edu/byusq/vol56/iss4/7/.
- 3. Loan-shift may be less of a translation issue and more of a cultural one since the name of the unfamiliar species that is an example of loan-shift may have been adopted within a culture long before a record of that people was rendered into English by a translator.
- SeeStevenson, Lectureon Mormonism, 9–10; John Mason, Latter-day Saints: The Dupes of a Foolish and Wicked Imposture (Cape Town, ZA: Saul Solomon, 1853), 18; see also John Hyde Jr., Mormonism: Its Leaders and Designs (New York: W. P. Fetridge, 1857), 224–27; J. H. Beadle, Life in Utah, or, the Mysteries and Crimes of Mormonism (Philadelphia: National Publishing, 1870), 299; T. B. H. Stenhouse, The Rocky Mountain Saints (New York: D. Appleton, 1873), 532–33; M. T. Lamb, The Golden Bible, or, The Book of Mormon: Is It From God? (New York: Ward & Drummond, 1887), 306–8; Thomas Gregg, The Prophet of Palmyra (New York: John B. Alden, 1890), 93; M. L. Oswalt, Pen Pictures of Mormonism (Philadelphia: American Baptist Publication Society, 1899), 35; Enos T. Hall, The Mormon Bible (Columbus: Fred J. Heer, 1899), 17; Edgar E. Folk, The Mormon Monster (Chicago: Fleming H. Revell, 1900), 177; G. Townshend, Why I Am Not A Mormon (Denver: Alexander & Meyer, 1907), 14; C. Sheridan Jones, The Truth About the Mormons: Secrets of Salt Lake City (London: William Rider & Son, 1920), 5.
- 5. Adrian Lister, *Darwin's Fossils: The Collection That Shaped the Theory of Evolution* (Washington, DC: Smithsonian Books, 2018), 60–63. This discovery was not published until 1859, in Charles Darwin, *On the Origin of the Species* (London: John Murray, 1859), 318–19. In an article published in 1847, Joseph Leidy observed that "the existence of fossil remains of the horse in America has been received with a good deal of incredulity" and then noted additional fossils that had been discovered in North America. Joseph Leidy, "On the Fossil Horse of America," *Proceedings of the Academy of Natural Sciences of Philadelphia* 3, no. 11 (1847): 262. See also O. C. Marsh, "Fossil Horses in America," *American Naturalist* 8, no. 5 (1874): 288–94, jstor.org /stable/2447952.
- 6. See Moses Thatcher, "Divine Origin of the Book of Mormon," Contributor 2, no. 11 (1881): 321–24, archive.bookofmormoncentral.org/sites/default/files/archive-files/pdf/thatcher/2023-07-19/ms\_43.28\_moses\_thatcher\_divine\_origin\_of\_the\_book\_of\_mormon\_11\_july\_1881\_433-435.pdf. See also Orson Pratt, "Discovery of an American Mastodon," Latter-day Saints' Millennial Star, 8 December 1866, 776–77, google.com/books/edition/The\_Latter\_Day\_Saints\_Millennial\_Star/3m4tAAAAYAAJ?hl=en&gbpv=0; W. W. B., "The Horse in Ancient America," The True Latter Day Saints' Herald, 15 January 1875, 33–35; G. M. O., "The Mastodon and the Horse," Juvenile

Instructor, 1 June 1876, 128–29; R. Etzenhouser, *The Book Unsealed, Revised and Enlarged* (Independence, MO: Ensign Publishing, 1894), 10, 54–60; William Woodhead, "Myths of the New World—No. 8. Extinct Animals," *Saints Herald*, 6 June 1900, 369; Fred J. Pack, "Revelation Ante-Dating Scientific Discovery—An Instance," *Improvement Era*, February 1907, 245; John A. Widtsoe and Franklin S. Harris Jr., *Seven Claims of the Book of Mormon: A Collection of Evidences* (Independence, MO: Zion's Printing and Publishing, 1937), 74–75; E. V. Shute, "The Horse in Pre-Columbian America," *Saints' Herald*, 13 December 1941, 1583–85.

- 7. W. W. B., "Horse in Ancient America," 34-35.
- 8. Pack, "Revelation Ante-dating Scientific Discovery," 596.
- 9. Daniel M. Helmick, *Claims of the Book of Mormon Critically Examined* (Salt Lake City: printed by the author, 1906), 18.
- Samuel W. Traum, Mormonism against Itself (Cincinnati: Standard Publishing, 1910), 148.
- 11. See, for example, Michael R. Waters et al., "Late Pleistocene Horse and Camel Hunting at the Southern Margin of the Ice-Free Corridor: Reassessing the Age of Wally's Beach, Canada," Proceedings of the National Academy of Sciences 112, no. 14 (2015): 4263–67. See also Leo Deuel, Conquistadors Without Swords: Archaeologists in the Americas (New York: St. Martin's, 1967), 537–38; Mario Pichardo, "Review of Horses in Paleoindian Sites of the Americas," Anthroplogischer Anzeiger 62, no. 1 (2004): 28; Carl E. Gustafson, Delbert Gilbow, and Richard D. Daugherty, "The Manis Mastodon Site: Early Man on the Olympic Peninsula," Canadian Journal of Archaeology 3 (1979): 157; Joaquin Arroyo-Cabrales, Oscar J. Polaco, and Eileen Johnson, "A Preliminary View of the Coexistence of Mammoth and Early Peoples of Mexico," Quaternary International 142–43 (2006): 79–86; Joaquin Arroyo-Cabrales et al., "The Distribution of the Genus Mammuthus in Mexico," DEINSEA 9 (2003): 27–39.
- 12. See Hyde, Mormonism: Its Leaders and Designs, 225; Helmick, Claims of the Book of Mormon Critically Examined, 19; Traum, Mormonism against Itself, 146.
- 13. See Eugene R. Craine and Reginald C. Reindrop, trans. and eds., *The Chronicles of Michoacan* (Norman: University of Oklahoma Press, 1970), 63–64; Hugh Thomas, *Conquest: Montezuma, Cortes, and the Fall of Old Mexico* (New York: Simon & Schuster, 1993), 178; Yvette Running Horse Collin, "The Relationship between the Indigenous Peoples of the Americas and the Horse: Deconstructing a Eurocentric Myth" (PhD diss., University of Alaska, Fairbanks, 2017), 73–101; Scripture Central Staff, "Horse and Elephant," Evidence 243, 2 May 2022, scripturecentral.org/evidence/horse-and-elephant.
- 14. Charles A. Shook, Cumorah Revisited (Cincinnati: Standard Publishing, 1910), 381.
- 15. Traum, Mormonism against Itself, 151.
- 16. L.Rumble, *A Reply to the Mormon Counter-Attack* (St. Paul, MN: Fathers Rumble & Carty, 1956), 20–21.
- 17. See James Haile et al., "Ancient DNA Reveals Late Survival of Mammoth and

Horse in Interior Alaska," *Proceedings of the National Academy of Sciences* 106, no. 52 (2009): 22352–57. They observe,

the youngest dated macrofossil (usually a bone or tooth) of an extinct species is commonly taken to represent the approximate time of its disappearance. In practice, however, there is a very low probability of discovering fossil remains of the last members of any species, so ages for extinction based on dated macrofossil finds will likely be older than the true ages (raising the possibility of 'ghost ranges' of unknown direction). (p. 22352)

According to David Meltzer, "LADs [last available dates] are just a Last Date, not a Last Appearance. Given the vagaries of preservation and sampling, and the proposition that rare animals disappear from the fossil record before they go extinct (the Signor-Lipps Effect), the last mammoth dated was almost certainly not the last mammoth standing." David J. Meltzer, "Pleistocene Overkill and North American Mammalian Extinctions," *Annual Review of Anthropology* 44 (2015): 43.

- See Tyler J. Murchie et al., "Collapse of the Mammoth-Steppe in Central Yukon as Revealed by Ancient Environmental DNA," *Nature Communications* 12 (2021): 10.
- 19. See Todd A. Surovell and Spencer R. Pelton, "Spatio-Temporal Variation in the Preservation of Ancient Faunal Remains," Biology Letters 12, no. 2 (2015): 1–4, royalsocietypublishing.org/doi/10.1098/rsbl.2015.0823. "While bone preservation in Arctic regions is aided by cold temperatures and the presence of permafrost, considerably more bone has been lost over time in regions farther south—in fact, at a faster rate than the sediments in which they were deposited have eroded," says Surovell. "That means researchers must adjust for those differences as they estimate the numbers of these animals, many of which are now extinct, across the Americas." Todd A. Surovell, "Fossil Record Disappears at Different Rates," Science Daily, 10 February 2016, sciencedaily. com/releases/2016/02/160210110638.htm. This may be relevant to the issue of animals mentioned in the Book of Mormon, especially if its events took place in a much warmer southern region of the Americas (no known geography proposal currently places the text's primary events in an arctic setting).
- 20. See Pichardo, "Review of Horses in Paleoindian Sites of the Americas," 28.
- 21. "Three horse species inhabited the territory that now constitutes the states of Chiapas and Oaxaca during the Late Pleistocene: the largest is *Equus mexicanus*, the medium-sized is *E. conversidens*, and the smallest is *H. francisci*. The dating of several fossiliferous localities indicate that in Oaxaca, *E. conversidens* and *E. mexicanus* were present since at least 44,510–43,030 Cal BP, they were common between 30,123 and 19,584 Cal BP, and that *E. conversidens* persisted until 12,620–11,380 years BP. *Haringtonhippus francisci* was present in the Mixteca region of Oaxaca between 19,584 and 20,180 Cal BP. By the same token, the three identified equid species were present in Chiapas at least until 12,720 Cal BP." Eduardo Jimenez-Hidalgo et al., "Species Diversity and Paleoecology of Late Pleistocene Horses from Southern Mexico," *Frontiers in Ecology and Evolution* 7 (2019): 13.

Remains of Pleistocene horses (Equus conversidens, E. Tau) have been found in caves in northwestern Yucatan, some in apparent association with human artifacts and most of which were never dated. Anthony Andrews and Fernando Robles Castellanos state that it is possible that "the extinct horse may have survived into Holocene times"; however, there may have been mixing between the layers of some of these deposits, making their association with man uncertain. Anthony P. Andrews and Fernando Robles Castellanos, "The Paleo-American and Archaic Periods in Yucatan," in Pathways to Complexity: A View from the Maya Lowlands, ed. M. Kathryn Brown and George J. Bey III (Gainesville: University Press of Florida, 2018), 25. "Since the horse also survived into post-Pleistocene times in the Old World, the possibility of its survival into Archaic times in the American tropics may also need to be considered." Andrews and Castellanos, "Paleo-American and Archaic Periods in Yucatan," 26. John L. Sorenson, "Once More: The Horse," in Reexploring the Book of Mormon: A Decade of New Research, ed. John W. Welch (Salt Lake City: Deseret Book, 1992), 98-100; John L. Sorenson, "Out of the Dust," Journal of Book of Mormon Studies 10, no. 1 (2001): 76-77, scholarsarchive.byu.edu /jbms/vol10/iss1/16/; John L. Sorenson, Mormon's Codex: An Ancient American Book (Salt Lake City: Deseret Book; Provo, UT: Neal A. Maxwell Institute for Religious Scholarship, 2013), 315–19; Miller and Roper, "Animals in the Book of Mormon," 159-65.

- 22. Wade Miller et al., "Post-Pleistocene Horses (*Equus*) from México," *Texas Journal of Science* 74, no. 1 (2022): article 5, meridian.allenpress.com/tjs/article/74/1/Article%205/487323/POST-PLEISTOCENE-HORSES-EQUUS-FROM-MEXICO. This research was previously presented at the 2021 conference of the Geological Society of America. See Wade Miller et al., "Post-Pleistocene, Pre-Columbian Horses from a Site in San Luis Potosi, Mexico," *Geological Society of America Abstracts and Programs* 53, no. 6 (2021); see also Scripture Central Staff, "When Lehi's Party Arrived in the Land, Did They Find Horses There?," *KnoWhy* 649, 17 October 2022, scripturecentral.org /knowhy/when-lehis-party-arrived-in-the-land-did-they-find-horses-there.
- 23. See Stevenson, Lecture on Mormonism, 9–11; Mason, Latter-day Saints, 18. See also Hyde, Mormonism, 225; Beadle, Life in Utah, 299; Oswalt, Pen Pictures of Mormonism, 35; Hall, Mormon Bible, 17; Folk, Mormon Monster, 177.
- 24. Hippidion Owen, a small Pleistocene horse, was present in the Patagonia region of South America as late as 6500 BC. See Mario T. Alberdi and Jose L. Prado, "Review of the Genus Hippidion Owen, 1869 (Mammalia Perissodactyla) from the Pleistocene of South America," Zoological Journal of the Linnean Society 108 (1993): 19. Note that the apparent similarity between this species and the traditional ass is commonly recognized, as can be seen in the Wikipedia article on this topic: "It stood approximately 1.4 metres (4.6 ft) (also 13.2 hh) high at the shoulders and resembled a donkey." Wikipedia, s.v. "Hippidion," last edited 30 December 2024, en.wikipedia.org/wiki/Hippidion. In addition, medium and smaller species of horse (Equus. Conversidens, and Equus Francisci) were present in parts of Mexico during the Late Pleistocene. These could also plausibly be described as asses by foreign settlers. See Jimenez-Hidalgo et al., "Species Diversity and Paleoecology of Late Pleistocene Horses from Southern Mexico," 13–16; Maria Teresa Alberdi et al., "Study of El Cedral

- Horses and their Place in the Mexican Quaternary," *Revista Mexicana de Ciencias Geologicas* 31, no. 2 (2014): 221–37; Peter D. Heintzman et al., "A New Genus of Horse from Pleistocene North America," *eLife* 6 (28 November 2017), elifesciences.org/articles/29944.
- 25. See Hyde, Mormonism, 225; see also Helmick, Claims of the Book of Mormon Critically Examined, 19; Traum, Mormonism against Itself, 146.
- 26. See Stevenson, Lecture on Mormonism, 9–11; Stenhouse, Rocky Mountain Saints, 532–33; Folk, Mormon Monster, 177; Traum, Mormonism against Itself, 148.
- 27. Miller et al., "Post-Pleistocene, Pre-Columbian Horses."
- 28. Stevenson, *Lecture on Mormonism*, 9–11; Mason, *Latter-day Saints*, 18. See also Hyde, *Mormonism*, 225.
- 29. Eduardo Jimenez-Hidalgo et al., "First Record of *Bison antiquus* from the Late Pleistocene of Southern Mexico," *Journal of South American Earth Sciences* 42 (2013): 83–90, sciencedirect.com/science/article/abs/pii /S0895981112001046.
- 30. OscarCarranza-CastenedaandWadeE.Miller, "RediscoveredTypeSpecimens and Other Important Published Pleistocene Mammalian Fossils from Central Mexico," *Journal of Vertebrate Paleontology* 7, no. 3 (1987): 339–40; Joaquin Arroyo-Cabrales and Oscar J. Polaco, "Caves and the Pleistocene Vertebrate Paleontology of Mexico," in *Ice Age Cave Faunas of North America*, ed. Blaine W. Schubert, Jim I. Mead, and Russell William Graham (Bloomington: Indiana University Press, 2003), 287–88.
- 31. Donald D. Brand, "The Status of Ethnozoologic Studies in Mesoamerica," XXXV Congreso Internacional de Americanistas: Mexico (Mexico City: Editorial Libros de Mexico, 1962), 3:133; Doris Stone, Pre-Columbian Man Finds Central America (Cambridge, MA: Peabody Museum Press, 1972), 21–22; Alan L. Bryan, "New Light on Ancient Nicaraguan Footprints," Archaeology 26, no. 2 (1973): 147.
- 32. Stevenson, Lecture on Mormonism, 9-11; Traum, Mormonism against Itself, 147.
- 33. See Stevenson, Lecture on Mormonism, 9-11.
- 34. See The Compact Edition of the Oxford English Dictionary (Oxford: Oxford University Press, 1971), s.v. "ox." For an early account of "a kind of Ox, called the Musk Ox," see Arthur Dobbs, An Account of the Countries Adjoining to the Hudson Bay (London: J. Robinson, 1744), 18–19. For information on the shrub ox, see Carranza-Casteneda and Miller, "Rediscovered Type Specimens," 339–40.
- 35. Dobbs, *Account of the Countries*, 41. In addition to mentions of wild oxen in different contexts (pp. 20, 62–63), the text also gives a second-hand account of south-bound voyage from Peru along the coast of South America. Among other discoveries, the voyagers came into contact with Indigenous people who "said they had cows and oxen" (p. 145).
- 36. Stevenson, Lecture on Mormonism, 9-11.
- 37. See Brand, "Status of Ethnozoologic Studies in Mesoamerica," 3:133; Stone,

- Pre-Columbian Man Finds Central America, 21–22; Bryan, "New Light on Ancient Nicaraguan Footprints," 147.
- 38. Helmick, Claims of the Book of Mormon Critically Examined, 17–19; Traum, Mormonism against Itself, 145, 147–49; William Edward Biederwolf, Mormonism under the Searchlight (Chicago: Glad Tidings, 1915), 21.
- 39. Francis Brown, S. R. Driver, and Charles A. Briggs, eds., A Hebrew and English Lexicon of the Old Testament (Oxford: Clarendon Press, 1974), 96–97, 961–62.
- 40. See under the sections for goats, sheep, and swine.
- 41. Stevenson, Lecture on Mormonism, 9–11; Mason, Latter-day Saints, 18; Lamb, Golden Bible, 306–8; Hall, Mormon Bible, 17; Helmick, Claims of the Book of Mormon Critically Examined, 17–19; Traum, Mormonism against Itself, 144–52.
- 42. Miller and Roper, "Animals in the Book of Mormon," 157-58.
- 43. MatthewRoper, "Deer as 'Goat' and Pre-Columbian Domesticate," *Insights: The Newsletter of the Neal A. Maxwell Institute for Religious Scholarship* 26, no. 6 (2006): 2–3, scholarsarchive.byu.edu/insights/vol26/iss6/3/.
- 44. Helmick, Claims of the Book of Mormon Critically Examined, 17–19.
- 45. Roper, "Deer as 'Goat' and Pre-Columbian Domesticate," 2–3; Dobbs, *Account of the Countries*, 33, 144–45.
- 46. Hyde, Mormonism, 226; Lamb, Golden Bible, 306-7; Gregg, Prophet of Palmyra, 93; John Fiske, The Discovery of America, 2 vols. (Boston: Houghton Mifflin, 1892), 1:3; Townshend, Why I Am Not a Mormon, 14; Traum, Mormonism against Itself, 149; Daniel H. C. Bartlett, The Mormons or, Latter-Day Saints. Whence Came They? (London: James Nisbet, 1911), 15; Biederwolf, Mormonism under the Searchlight, 21; Alva A. Tanner, A Key to the Book of Mormon (Oakley, ID: printed by the author, 1916), 3; Frank Ballard, Why Not Mormonism? (London: Epworth, 1922), 12; George Bartholomew Arbaugh, Revelation in Mormonism: Its Character and Changing Forms (Chicago: University of Chicago Press, 1932), 55; Fawn M. Brodie, No Man Knows My History: The Life of Joseph Smith the Mormon Prophet, 2nd ed. (New York: Alfred A. Knopf, 1993), 72; Arthur Budvarson, The Book of Mormon Examined (La Mesa, CA: Utah Christian Tract Society, 1959), 36; Larry Jonas, Mormon Claims Examined (Grand Rapids, MI: Baker Book House, 1965), 14; Gordon H. Fraser, What Does the Book of Mormon Teach? (Chicago: Moody Press, 1964), 90; J. Roy H. Paterson, Meeting the Mormons: A Study of the Mormon Church in Scotland and Elsewhere (Edinburgh: Home Board of the Church of Scotland, 1965), 40.
- 47. Hall, Mormon Bible, 17.
- 48. Valerius Geist, *Mountain Sheep: A Study in Behavior and Evolution* (Chicago: University of Chicago Press, 1971), 41.
- 49. Charles A. Reed, "Wild Animals Ain't So Wild, Domesticating Them Not So Difficult," *Expedition* 28, no. 2 (1986): 12, penn.museum/sites/expedition/wild-animals-aint-so-wild-domesticating-them-not-so-difficult/.
- 50. E. Raymond Hall and Keith R. Kelson, *The Mammals of North America* (New York: Ronald Press, 1959), 1031–32.

- 51. Raul Valadez Azua and Bernardo Rodriguez Galicia, "Uso de la fauna, estudios arqueozoologicos y tendencias alimentarias en culturas prehispanicas del centro de México," *Anales de Antropologia* 48, no. 1 (2014): 150, 153.
- 52. Hyde, Mormonism, 226; Helmick, Claims of the Book of Mormon Critically Examined, 17–19.
- See Eugene Shanklin, "Sustenance and Symbolic Anthropological Studies of Domesticated Animals," *Annual Review of Anthropology* 14 (1985): 380–81. Charles Reed wrote,

In my own experience, the young of wild sheep, goats, and gazelles (as also wolves) are born docile, and remain docile if fed and treated well. I believe from accounts in the literature that this docility is a near universal trait among many if not most young mammals and birds, even if expressed to different degrees in different species. . . . Many adult wild mammals and birds can be taken into captivity or induced to remain in a given area by artificial feeding, and become tame; the flight or fight reaction is diminished by experience.

He also notes the successful domestication of musk oxen in North America. Reed, "Wild Animals Ain't So Wild," 11–12. See also Nerissa Russell, "The Wild Side of Animal Domestication," *Society and Animals* 10, no. 3 (2002): 285–302, researchgate.net/publication/233575117\_The\_Wild\_Side\_of\_Animal\_Domestication.

54. "Although neither the peccary nor the white-tailed deer was truly domesticated, they may have been husbanded in various places. Archaeological and soil analysis suggests that animals were penned for accessibility, while dietary studies document corn-feeding in some regions." Kitty Emery, "Fauna," in Archaeology of Ancient Mexico and Central America: An Encyclopedia, ed. Susan Toby Evans and David L. Webster (New York: Routledge, 2010), 257. Throughout Mesoamerica, a number of animals—including birds (quail, doves, pigeons, turkeys), rabbits, deer, and so forth—provided an economic resource as well as food. Azua and Galicia, "Uso de la fauna," 139-66. The Jaredites, who were not under the restrictions of the law of Moses, may have exploited peccaries (see item #20). Victoria Schlesinger, Animals and Plants of the Ancient Maya: A Guide (Austin: University of Texas Press, 2001), 157-58; Brian D. Dillon, "Meatless Maya? Ethnoarchaeologicial Implications for Ancient Subsistence," Journal of New World Archaeology 7 (1988): 63; Lyle K. Sowls, The Peccaries (Tucson: University of Arizona Press, 1984); A. Starker Leopold, Wildlife of Mexico (Berkeley: University of California Press, 1959), 497. Dogs were raised in large numbers and eaten by the Aztecs, a practice that may go back to Olmec times. Richard A. Diehl, The Olmecs: America's First Civilization (London: Thames & Hudson, 2004), 78; Michael D. Coe and Rex Koontz, Mexico: From the Olmecs to the Aztecs, 7th ed. (London: Thames & Hudson, 2013), 43. Among the later Aztecs, several species of dog were domesticated for food. "Of these large herds were kept, the females for breeding, the males for eating and for sacrificial purposes." J. Eric Thompson, Mexico before Cortez (New York: Scribner, 1933), 68. The American pronghorn has been suggested by anthropologists as a candidate for semidomestication. Herds of these were present in northern and central Mexico in recent pre-Columbian

times. Eugene Hunn, "Did the Aztecs Lack Potential Domesticates?," *American Ethnologist* 9 (1982): 579, faculty.washington.edu/hunn/vitae/comment\_on \_Harner\_AE.pdf. Evidence suggests that pre-Columbian peoples exploited herds of deer through a process of taming or animal husbandry. See Roper, "Deer as 'Goat' and Pre-Columbian Domesticate," 2–3; John L. Sorenson, *An Ancient American Setting for the Book of Mormon* (Salt Lake City: Deseret Book, 1985), 299. Archaeologists have recently argued that herds of deer at Mayapan were raised and exploited on a large scale:

The larger enclosures at Mayapan could have corralled turkeys, peccaries, dogs, or tethered deer . . . We argue that white-tailed deerraising or management was a major production industry for the site based on the high proportions of full-sized subadults—these deer provided a staple food source for the city's residents and surplus meat and bone products for exchange. Ethnohistoric evidence suggests that women were heavily involved in many aspects of animal exchange, including selling dogs in the marketplace, providing birds for tribute, and delivering peccaries and deer destined for sacrifice.

Marilyn A. Masson, Carlos Peraza Lope, "Animal Use at the Postclassic Maya Center of Mayapán," *Quaternary International* 191 (2008): 180–81, sciencedirect.com/science/article/abs/pii/S1040618208000232. Herds of bison and mountain sheep could have been another important animal resource in certain parts of Mexico. Azua and Galicia, "Uso de la Fauna," 150, 153. See also Arianne Boileau, Nicolas Delsol, and Kitty F. Emery, "Human-Animal Relations in the Maya World," in *The Maya World*, ed. Scott R. Hutson and Traci Ardren (New York: Routledge, 2020), 164–82. It is believed that the turkey was domesticated in ancient America. See Erin Kennedy Thornton, "Turkey Husbandry and Domestication: Recent Scientific Advances," *Journal of Archaeological Science: Reports* 10 (2016): 514–19, sciencedirect.com/science/article/abs/pii/S2352409X16304011.

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# Chapter 2: Warfare in the Book of Mormon

Accounts of warfare in the Book of Mormon have also been the focus of criticism. In 1834, Eber Howe dismissed the accounts in the book of Alma as entirely overblown and lacking any historical credibility or authenticity. According to Howe,

The knight errantry of Don Quixote bears no parallel, nor does the history of the Peloponnesian wars speak of such generals, nor of such brave achievements, as the Book of Alma.—Besides, in the sixty-nine years, many large cities were founded and built, fortifications were erected, military costumes of great splendor were manufactured and worn.—Their implements of war consisted of swords, spears, scimitars, javelins, bows and arrows, slings, etc. We can see no propriety in the omission by the author of the use of guns and ammunition. We think it would have been as credible as most of the events of the narrative.<sup>1</sup>

It is not clear what Howe meant by "military costumes of great splendor." Presumably, this refers to the headplates and breast-plates introduced on a wider scale by Captain Moroni, which Howe assumed must have been made of metal (Alma 43:38, 44). Another writer, who had clearly never read the Book of Mormon, dismissed it because (as he mistakenly claimed) the text mentions "gunpower" and "pistols and other fire-arms" in an ancient American setting.<sup>2</sup> The numbers of battle deaths have been seen by some as unrealistic and too high.<sup>3</sup> Others claim that the kinds of weapons mentioned in the text were never used in pre-Columbian times.<sup>4</sup> For years, accounts of large-scale, high-stakes warfare in ancient America were considered entirely out of place and rejected by many mainstream archaeologists.<sup>5</sup> Thus, for a time, some readers echoed the once-popular view

that the ancient Maya were essentially peaceful and did not engage in significant warfare until a few centuries before the Spanish Conquest.<sup>6</sup>

Subsequent research and new discoveries about pre-Columbian culture and history required these earlier views to be revised, substantially modified, or abandoned altogether. For warfare, the degree of confirmation is judged based on known historical and cultural precedent or archaeological discoveries.

## 1. Fortifications

**Status: Confirmed** (1966–2024)

**Critics' Claim:** The Book of Mormon indicates that various kinds of fortifications were constructed (Alma 48:8–9; 49:2–4; 50:1–4). Some critics have claimed that the descriptions of fortifications in the Book of Mormon are implausible or inconsistent with evidence from ancient America.<sup>7</sup>

**Response:** Archaeological discoveries now show many examples of Mesoamerican fortifications that are similar to those described in the Book of Mormon text (figure 15).8 Some examples date to the time of the Book of Mormon.9

# 2. Early Warfare

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Warfare was common in the Book of Mormon from an early period and throughout much of its history (2 Nephi 5:34; Enos

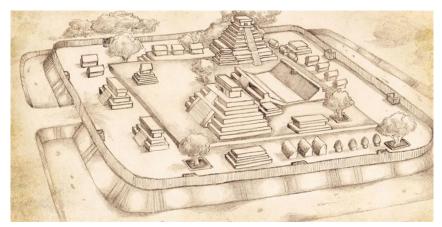


Figure 15. Mesoamerican fortification.

1:24; Jarom 1:3; Omni 1:3, 10; Alma 16:1; 62:44; Helaman 4:4; Mormon 1:8). Some critics have claimed that warfare in any meaningful sense was never practiced in ancient America until just a few centuries before the arrival of the Europeans. According to one writer, "Warfare in any recognizable pattern did not have any prominence until several hundred years after the Book of Mormon is supposed to have finished, and then it certainly was not the warfare that is portrayed in the Book of Mormon in either purpose or method." According to the same author,

The whole concept of warfare in the Book of Mormon is foreign to known patterns. Wars of conquest were unknown for the simple reason that the gaining of new territory for occupation was unknown. There was plenty of room for all. When warfare for conquest did emerge, it was during the Aztec period when these strange people started to prey upon their neighbors for the purpose of capturing prisoners to serve as human sacrifices.<sup>11</sup>

"Archaeologists," states another, "assert that, during the Book of Mormon period, warfare was almost totally unknown in the Americas, except for ceremonial purposes (as practiced by the Aztecs)." Another describes the Book of Mormon's accounts of warfare as being "diametrically opposed" to the evidence from Mesoamerican archaeology. As late as 1989, one writer claims,

Although the Maya are believed, on the evidence of wall paintings, to have made occasional raids on other people, possibly to obtain sacrificial victims, they were on the whole a peaceful people. Their ceremonial centres had no fortifications, and were for the most part located in places incapable of defence.<sup>14</sup>

**Response:** Research shows that the ancient Maya—once thought by scholars to have been relatively peaceful—were extremely warlike. Warfare, sometimes very serious and socially altering warfare, was a significant part of their culture.<sup>15</sup>

In 2005, Mayan archaeologist David Webster wrote,

Right up through the late 1960s most archaeologists still bought heavily into the 'peaceful Maya' perspective. Classic Mesoamerican societies (AD 250–900) were more generally envisioned as both peaceful and theocratic, and no

one thought about Preclassic (2500 BC-AD 250) war at all. Leaving aside those pugnacious Mexicans and Maya who lived in the few centuries prior to the arrival of the Spaniards, ancient Mesoamerica seemed to be singularly free of conflict (except for a bit of raiding for sacrificial victims), thus contrasting strongly with virtually every other early civilization.<sup>16</sup>

Then a major shift in these views occurred. "Today, in a startling turnabout, warfare is all the rage. The Maya are often portrayed as compulsively warlike." In other words, "The 'peaceful Maya' were not peaceful at all" and "prove to have been warlike to their deepest Preclassic roots." Reasons for this change include archaeological evidence for ancient fortifications, research on monumental art illuminating Mesoamerican weaponry, and the decipherment of Mayan inscriptions, which include many words associated with warfare.

# 3. Wars of Conquest

**Status: Confirmed** (1966–2024)

**Critics' Claim:** The text speaks of wars of conquest in the Book of Mormon (Alma 43:4–8; 44:8). Some critics have claimed that wars of conquest were unknown to ancient Americans.<sup>20</sup>

**Response:** It is now known that wars of conquest were a common element of Mesoamerican culture.<sup>21</sup> According to Mayanist Simon Martin, warfare could take various forms in Mesoamerica. The objectives of combatants could include simply "making a show of force and testing the strength of a rival, to efforts at their complete conquest or annihilation."<sup>22</sup>

#### 4. Armor

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Armor became an important component of Jaredite and Nephite warfare (Mosiah 21:7; Alma 3:5; 43:21; 46:13, 21; 3 Nephi 3:26; 4:7). Some critics have claimed that reference to armor in pre-Columbian times is erroneous.<sup>23</sup>

**Response:** Various types of native armor are described in Spanish historical sources of battles and shown in Mesoamerican art going back to the Preclassic period.<sup>24</sup> According to Ross Hassig, "quilted cotton armor (*ichcahuipilli*) was a common element of battle attire in Mesoamerica...it was constructed of unspun cotton tightly stretched

between two layers of cloth and sewn to a leather border." Extending to the mid-thigh, this armor "was so thick (one and a half to two fingers) that neither an arrow nor an atlatl dart could penetrate it."<sup>25</sup>

## 5. Pre-Columbian Swords

**Status: Confirmed** (1966–2024)

**Critics' Claim:** The Book of Mormon has numerous references to "swords" (Omni 1:2; Mosiah 9:16; 10:8; Alma 2:12; 43:18, 20; 60:2; Helaman 1:14; Mormon 6:9). Some critics have claimed that swords were unknown in pre-Columbian times, or that the ancient sword-like weapons shouldn't really be identified as true "swords." <sup>26</sup>

**Response:** The Mesoamerican sword—known to the Aztecs as the *macuahuitl* (see figure 16) and labeled by the Maya as the *hadzab*—was described by many Spanish witnesses who encountered its deadly effectiveness. This was a flat piece of hardwood with edges on both sides into which sharp pieces of obsidian were set. Representations of this weapon sometimes portray the blades with staggered placement along both sides of the wood, and in other representations closely fit together. In such cases "there can be no doubt that the intention . . . was to make a *continuous blade* (or edge), and not a *row of teeth*."<sup>27</sup> Such swords could inflict serious wounds and could dismember or even decapitate an opponent.<sup>28</sup> Spaniards who fought against the Aztec and the Maya frequently called it a "sword" and modern scholars also regularly label this weapon as such.<sup>29</sup> Sharp wood-bladed swords were also used by some South American



**Figure 16.** Aztec warriors led by an eagle knight, each holding a macuahuitl. (*Wikimedia Commons*, s.v. "Florentine Codex IX Aztec Warrior," commons.wikimedia.org/w/index.php?curid=2923185.)

Andean peoples<sup>30</sup> and were also known to some cultures of the North American southwest<sup>31</sup> and the southeastern Woodland.<sup>32</sup>

## 6. Swords (in Book of Mormon Times)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some commentators have more specifically claimed that there is no evidence for pre-Columbian swords during the period covered by the Book of Mormon.<sup>33</sup>

**Response:** Although some scholars believed that Mesoamerican swords were not used until just a few centuries before the Spanish arrival, Olmec and Maya art not discovered until the twentieth century shows that this weapon was known much earlier, dating back as early as 1200 BC.<sup>34</sup>

## 7. Steel Swords (OW)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** The Book of Mormon states that Laban, a military leader living in Jerusalem around 600 BC, had a sword with a blade made of "precious steel" (1 Nephi 4:9). Critics have claimed there were no steel swords in the ancient Near East until centuries after Lehi would have left Jerusalem. According to one commentator, "This is the earliest account of steel to be found in history." Another states, "Laban's sword was steel, when it is a notorious fact that the Israelites knew nothing of steel for hundreds of years afterwards." Even as late as the 1960s, an author boldly declares, "No one believes that steel was available to Laban or anyone else in 592 B.C."

**Response:** Archaeologists have recovered steel swords from several sites in the land of Israel dating to the Pre-exilic period. These include a meter-long sword from Vered Jericho from the time of King Josiah, shown in figure 17. "Metallurgic analysis of a sample taken from the blade proves that it was made of 'mild steel,' and that the iron was



**Figure 17.** Israelite sword, found at Vered Jericho, dating to the seventh-sixth century BC. (Photo by Lauren Perry, used with permission.)

deliberately hardened into steel, attesting to the technical knowledge of the blacksmith."38 Other examples have subsequently been found.39

# 8. Steel Swords (NW)

**Status: Unconfirmed** 

**Critics' Claim:** Steel swords are mentioned among the Jaredites (Ether 7:9), and may possibly have been had among the Nephites (2 Nephi 5:14).<sup>40</sup> Many commentators have claimed that steel swords were unknown in pre-Columbian times.<sup>41</sup>

**Response:** There is currently no evidence for steel swords in the Americas during pre-Columbian times.<sup>42</sup>

## 9. Scimitars (OW)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** The "cimeter" (or scimitar) was used by the Nephites and Lamanites as a weapon of war (Enos 1:20; Mosiah 9:16; 10:8; Alma 2:12; 27:29; 43:18, 20, 37; 44:8; 60:2; Helaman 1:14). Some have claimed that scimitars would have been unknown to the Nephites and Lamanites because this weapon was not invented until centuries after Lehi and his family left Jerusalem. "The cimeter, a Turkish weapon, [was] not known until after the time of Mohommed." "The use of the word 'scimiter' does not occur in other literature before the rise of the Mohammedan power and apparently that peculiar weapon was not developed until long after the Christian era. It does not, therefore appear likely that the Nephites or the Lamanites possessed either the weapon or the term."

**Response:** Cimeters (or scimitars), were swords with a curved blade (see figure 18). According to one Old Testament scholar, it is likely that the "typical early Israelite sword was a sickle sword, which had a handle attached to a straight shaft that continued into a curved blade. The instrument was shaped somewhat like a harvesting sickle—thus the name—except that the sword was sharpened on the outside of the blade rather than the inside."45 According to Charlie Trimm, "The most common sword in Egypt was the sickle-sword (*Khopesh* sword), which looked like a harvesting sickle (somewhat like a scimitar) and was used during the Middle and New Kingdom. However, the outer edge rather than the inner edge was sharpened for slashing their enemy. They tended to be rather short."46



**Figure 18.** Khopesh sword dedicated to Ramasses II. (Louvre Museum, *Wikimedia Commons*, s.v. "Khopesh sword dedicated to Ramasses II-E 25689," commons .wikimedia.org/wiki/File:Khopesh\_sword\_dedicated\_to\_Ramasses\_II-E \_25689-IMG\_2660.JPG.)

Scholars routinely refer to this weapon as a "scimitar" in commentary and translations.<sup>47</sup> Similar weapons were known and used by the Hittites and armies of Mesopotamia.<sup>48</sup> An Egyptian cylinder seal discovered in 1925 at Beth Shean portrays a Canaanite god presenting a "scimitar sword" to Ramesses II.<sup>49</sup>

Some biblical scholars hold that the Hebrew term *kidon* found in the Hebrew Bible and the Dead Sea Scrolls actually refers to a scimitar. This has led some to translate David's words to Goliath as: "You come against me with a sword [hereb] and spear [hanit] and scimitar [kidon], but I come against you with the name of Yahweh Sabaoth, god of the ranks of Israel" (1 Samuel 17:45). Trimm also notes "a set of six swords taken as plunder in Sennacherib's relief of his conquest of Lachish are slightly curved (more like a scimitar than the sickle sword) while another set of swords taken as plunder are straight." The evidence suggests that several kinds of curved swords, which scholars have characterized as scimitars, were known in the ancient Near East and ancient Israel in Pre-exilic times and would have been part of the cultural heritage of Lehi and his family.

# 10. Scimitars (NW)

Status: Confirmed (1966–2024)

**Critics' Claim:** Some critics have claimed that there were no "cimeters" (or scimitars) in pre-Columbian times in the Americas (see Enos 1:20; Alma 2:12; Helaman 1:14).<sup>54</sup>

Response: Curved knives and swords, which would reasonably

qualify as "cimeters" (scimitars), are shown in pre-Columbian art.<sup>55</sup> A Mayan monument dating to AD 613 from Tonina, Mexico portrays a warrior posing with a curved "scimitar-like flint blade."<sup>56</sup> Ross Hassig, a specialist on Mesoamerican warfare, has discussed a Toltec weapon portrayed on Mayan monuments and codices, which he calls a "short sword." It was a curved weapon inset with sharp obsidian blades along the edge that could be characterized as a scimitar.<sup>57</sup> A similar weapon appears to be portrayed on Olmec monuments at San Lorenzo (1200 BC).<sup>58</sup>

# 11. Daggers

Status: Confirmed (1966–2024)

**Critics' Claim:** The prophet Jacob mentions "daggers" in the Book of Mormon (Jacob 2:9). Some have claimed that daggers were unknown in pre-Columbian times.<sup>59</sup>

**Response:** Daggers of various kinds are well attested in pre-Columbian times and they are often portrayed in Mesoamerican art.<sup>60</sup>

#### 12. Battle Axes

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that battle axes (Enos 1:20; Mormon 6:9) were unknown in pre-Columbian times.<sup>61</sup>

**Response:** Evidence from archaeology and pre-Columbian art attests to the existence of the battle ax as an important weapon among the Classic Maya (figure 19).<sup>62</sup> According to Francis Robicsek,

The battle axes of the Classic Maya were of two main varieties, those made of a single piece of stone, usually flint, and wooden hafted axes spiked with either a single heavy head or with two or three separate blades of obsidian. Besides being a regular attribute of the armor of the common warrior, axes were also often depicted as ceremonial implements of the priest-sacrificer and were probably used in ritual decapitations. . . . Axes which may have been used either in battle, sacrifice, or simply as insignia of office, are frequently shown on painted vases of northern Peten and the Usumacinta Vallev. 63

Robicsek further notes that "most of these axes seem to be



Figure 19. Tlahuizcalpantecuhtli, wielding an axe (tepoztli), in a scene from plate 19 of the pre-Hispanic Borgia Codex. (Mario E. Fuente Cid, Wikimedia Commons, s.v. "Tlahuizcalpantecuhtli Codex Borgia," commons.wikimedia.org /wiki/File:Tlahuizcalpantecuhtli\_Codex\_Borgia.svg.)

composite weapons, some of them highly decorated with separate wooden handles and blades of flint or obsidian as inserts. Very rare, unique findings are the full size battle axes, flaked of a single piece of stone, which represent the height of ancient Maya weaponry."<sup>64</sup>

#### 13. Javelins

Status: Confirmed (1966-2024)

**Critics' Claim:** Some critics claim that javelins (Jaron 1:8; Alma 51:34; 62:36) were unknown in pre-Columbian times.<sup>65</sup>

**Response:** Mesoamerican javelins of various kinds were known throughout Mesoamerican history. Among the Aztecs the javelin sometimes had two or three branches with points, so as to strike several wounds at once. Javelins are also shown on Classic Maya vase paintings.

# 14. Spears

**Status: Confirmed** (1966–2024)

Critics' Claim: Some critics have claimed that spears (Alma 17:7) were

unknown in pre-Columbian times.69

Response: Pre-Columbian peoples had spears (see figure 20).70

# 15. Bow and Arrow (in Book of Mormon Times)

**Status: Partially Confirmed** (1966–2024)

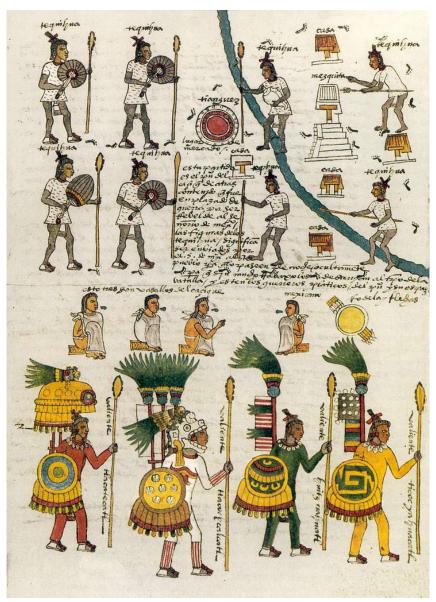


Figure 20. Codex Mendoza folio 67r showing warriors with spears. (Bodleian libraries, University of Oxford, garystockbridge617.getarchive.net /media/codex-mendoza-folio-67r-91e91c.)

**Critics' Claim:** The "bow" (Enos 1:20; Mosiah 9:16; 10:8; Alma 2:12; 3:5; 17:7; 43:20; 44:8; 49:2, 4, 19, 22, 24; 50:4; Helaman 1:14; 16:2, 6; Mormon 6:9) and "arrow" (Jarom 1:8; Mormon 6:9) were a significant component

of the armament of the Nephites and Lamanites. Some have claimed that the bow and arrow were unknown in ancient America during the time in which the Book of Mormon took place.<sup>71</sup>

**Response:** Archaeological evidence suggests that the bow and arrow were known much earlier in Mesoamerica than was once thought. According to archaeologist Kazua Aoyama, "notched and un-notched prismatic blade points made from Pachuca green obsidian were present in the Valley of Oaxaca beginning in the Middle Formative period." He found evidence of arrow points at the site of Aguateca during the Late Classic Maya period. Aguateca was destroyed in AD 810. He also discovered additional evidence for the weapon even earlier, during the Early Classic (AD 400–600) at Copan. This evidence led him to conclude that "the bow and arrow could have existed in the Maya Lowlands earlier than has been previously suggested."

#### 16. Quivers

Status: Confirmed (1966-2024)

Critics' Claim: Some critics claimed that "quivers" (Jarom 1:8) were

unknown in ancient America.76

**Response:** Quivers were known and used in pre-Columbian warfare. In fact, "Maya warriors were reported to carry two quivers" in some historical sources.<sup>77</sup>

# 17. Bow of Fine Steel (OW)

**Status: Partially Confirmed** (1966–2024)

**Critics' Claim:** Many critics have claimed that Nephi's reference to a bow of "fine steel" (1 Nephi 16:18) is out of the place in the ancient world.<sup>78</sup>

**Response:** There is no evidence for the existence of bows made *entirely* of steel in the ancient Near East, but on several occasions the King James translation mentions a "bow of steel" without qualification (2 Samuel 22:35; Psalms 18:34; Job 20:24). The word translated as "steel" in these passages is the Hebrew *nhwsh*, which actually means "bronze" (as it is rendered in more modern translations). Moreover, the bronze bow in these passages does not refer to a weapon made completely of metal, but rather to a composite bow decorated with metal or reinforced at the nock and grip of the weapon with bronze.<sup>79</sup> In the older English of the King James translation, "steel" had a broader

range of meaning than it does today and could refer not only to carburized iron, but also to bronze, which is a hardened or "steeled" alloy of copper and tin.<sup>80</sup>

Thus, if the Book of Mormon followed KJV idiom in its discussion of Nephi's "steel bow," then the status of this item would actually be confirmed. Yet because of uncertainty regarding the meaning of "of" (whether the text means "partially of" or "completely of" steel) and also the ambiguity regarding the meaning of "steel" (whether it refers to "modern steel" or to another hardened-metal alloy like "bronze"), this item has been designated as only partially confirmed.

## 18. Fiery Darts (OW & NW)

Status: Confirmed (1966-2024)

**Critics' Claim:** Nephi makes reference to the "fiery darts of the adversary" (1 Nephi 15:24). Some have claimed that such a reference would have been out of place in pre-Columbian times. 81

**Response:** Nephi's reference to fiery projectiles appears in a sermon that took place during Nephi's journey in the wilderness in the Old World. Thus, technically speaking, the text doesn't necessitate the existence of fiery darts in a New World setting. The distinction is irrelevant, however, because fiery projectiles were used anciently in both Near Fastern and Mesoamerican warfare.<sup>82</sup>

## 19. Slings

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Nephites and Lamanites made use of slings during their battles (Mosiah 9:16; 10:8; Alma 2:12; 3:5; Alma 17:7, 36, 38; 18:16; 43:20; 49:20). Some have claimed that slings were not used in pre-Columbian warfare.<sup>83</sup>

**Response:** Slings were used in both Mesoamerica and South America. In Mesoamerica the sling was used as a weapon at least as early as Olmec times, and the Maya had a word for sling by at least 1000 BC.<sup>84</sup>

#### 20. Shields

Status: Confirmed (1966–2024)

Critics' Claim: Warriors in the Book of Mormon had many kinds of

shields (Alma 43:19, 21; 44:9; 46:13; 49:6, 24; 3 Nephi 3:26; Ether 15:15, 24). Some have claimed that such references are anachronistic.<sup>85</sup>

**Response:** A variety of shields are attested in Mesoamerican art (figure 21) and known from later historical sources (figure 22).<sup>86</sup> Shields were also used by pre-Columbian peoples of South America<sup>87</sup> and North American southwest.<sup>88</sup>



**Figure 21.** Warrior figure with shield, classic Maya, Jaina style. (The Cleveland Museum of Art, Gift of Mr. and Mrs. James C. Gruener, 1990.178, clevelandart.org/art/1990.178.)



**Figure 22.** Aztec figure with two feathered shields. (Wolfgang Sauber, National Museum of Anthropology, Teotihuacán, *Wikimedia Commons*, s.v. "Teotihuacán - Figur mit Federschilden," commons.wikimedia.org/wiki/File:Teotihuac%C3 %A1n\_-\_Figur\_mit\_Federschilden.jpg.)

#### 21. Arm Shields

**Status: Confirmed** (1966–2024)

**Critics' Claim:** The Nephites had arm shields to protect themselves in battle (Alma 43:19, 38). Later, they are said to have had bucklers which are also a form of arm shield (3 Nephi 3:26). Some have claimed that pre-Columbian peoples never had arm shields.<sup>89</sup>

**Response:** Arm Shields are described in Spanish accounts of battles with the Maya and the Aztecs and are shown in pre-Columbian art.<sup>90</sup>

# 22. Headplates

**Status: Confirmed** (1966–2024)

**Critics' Claim:** The Nephites and Jaredites had headplates or helmets (Alma 43:38, 44; 46:13; 49:24; Helaman 1:14; 3 Nephi 4:7; Ether 15:15),

but such were allegedly unknown in pre-Columbian times, according to some critics.<sup>91</sup>

**Response:** Just as a breastplate is designed to shield the chest, a headplate is essentially armor. They are never said to have been made of metal in the Book of Mormon, so headplates of any material would suffice. Battle accounts in the Nephite record show that this piece of headgear could be broken into pieces by a fierce and determined opponent (Alma 43:44).

Various kinds of headgear are portrayed in Mesoamerican art dating from the Postclassic back to Preclassic times. <sup>93</sup> Some warriors wore quilted woolen caps while others (elite warriors) wore helmets made from pieces of wood or bone. <sup>94</sup> Helmets could also be ornamented with feathers, precious metal, gems, and other regalia, depending on the status of the individual. While more ostentatious forms shown in pre-Columbian art were likely used for ceremonial purposes, the helmet was "not primarily decorative but was a functional, protective piece of the combat uniform." <sup>95</sup> It was "proof against sling-stones and offered some protection against atlatl darts and shock weapons."

## 23. Breastplates

Status: Confirmed (1966-2024)

**Critics' Claim:** The Book of Mormon says warriors had breastplates (Alma 43:19, 21, 38, 44; 44:9; 46:13; 49:6, 24; Helaman 1:14; Ether 15:15). Some critics have claimed that breastplates were unknown in pre-Columbian times.<sup>97</sup>

**Response:** Breastplates were an important component of Nephites and Jaredite warfare, although they were not universally used. While they afforded some protection, they could be pierced by a fierce and determined attack (Alma 43:44). Various kinds of breastplates were known and used in pre-Columbian warfare in Mesoamerica.<sup>98</sup>

# 24. Breastplates (of Copper and Brass)

Status: Partially Confirmed (1845–1965)

**Critics' Claim:** When they encountered the ruins of the Jaredites, the people of King Limhi found "breastplates, which are large, and they are of brass and of copper, and are perfectly sound." (Mosiah 8:10). Some claim that metallic breastplates of copper and/or brass were unknown in pre-Columbian times.<sup>99</sup>

**Response:** These metal breastplates may have been uncommon and possibly elite objects, but it is not clear from the account whether they were ornamental or functional. Their undamaged condition and their discovery in association with the gold plates of Ether suggests they may not have been used in battle. The fact that the search party brought them back as a testimony to the king of what they had seen indicates that metal breastplates were unusual.

According to one Spanish chronicler, some Inca warriors wore decorative defensive gear and "would usually wear the most attractive and rich adornments and jewels; this included wearing fine plumes of many colors on their heads and large gold and silver plates on their chests and backs; however, the plates worn by poorer soldiers were copper." 100

The Spanish conquistadors described decorative armor, which included a breastplate that was ornamented with precious metal. According to Juan Diaz, an "Indian dressed him [their leader, Juan de Grijalva] with a breastplate and bracelets of gold, lace-shoes ornamented in gold, and on his head he placed a gold crown which was of very delicate leaves of gold." Another source reports that "they began by giving him gilded shoes; afterwards leggings, and cuirasses [i.e. breastplates], and all the parts of the iron and steel armor a cuirassier ordinarily wears when going into battle, only these were made of gold, beautifully worked; this done the cacique paid homage to Grijalva." 102

These items may have been made of wood that was then covered with gold.

Some of the armor in use among the Tabascans must have been exceedingly rich, judging by that which was presented to Juan de Grijalva by the cacique of that province. It consisted of greaves for the knees and legs made of wood and covered with sheets of gold, head pieces covered with gold plates and precious stones, among which was a visor, of which the upper half was of jewels linked together, and the lower half of gold plates; then there were cuirasses of solid gold, besides a quantity of armor-plates sufficient to cover the whole body.<sup>103</sup>

Daniel Brinton observes.

Nowhere else do we find such complete defensive armor. It consisted of helmet, body pieces, and greaves for the legs

and arms, all of wood, covered neatly with copper or gold plates, so well done that the pieces looked as if they were of solid metal.<sup>104</sup>

#### 25. Armies

Status: Confirmed (1966–2024)

**Critics' Claim:** Some critics have claimed that actual armies (Mormon 6:7) were unknown in pre-Columbian times.<sup>105</sup>

**Response:** Armies were ubiquitous in pre-Columbian Mesoamerica. 106

## 26. Large Armies

Status: Confirmed (1966-2024)

**Critics' Claim:** Some critics claim that, contrary to the Book of Mormon, large armies (Alma 2:27; Mormon 1:11; 2:9, 25; 6:11–15) in pre-Columbian times were unknown.<sup>107</sup>

**Response:** Critics have often exaggerated the size of armies mentioned in the Book of Mormon. The Book of Mormon mentions armies numbering in the thousands (Alma 2:19; 3:26; 28:11; 56:28; 57:6; 58:8; 62:12–13) and tens of thousands (Alma 3:26; 28:2; 56:28; Mormon 1:11; 2:9, 25) and on one exceptional occasion an army of 23 groups of ten thousand units each, or 230,000 (Mormon 6:10–15).

Ether indicates that during a lengthy war of many years over two million men, women, and children had been killed (Ether 15:2), but this seems to include civilians and not only combatants. While it is possible that these numbers, like those found in other ancient accounts of warfare, may be exaggerated, historical accounts of Mesoamerican warfare contain comparable numbers that are consistent with what is found in the Book of Mormon.<sup>108</sup> Furthermore, recent discoveries made possible via LiDAR technology have demonstrated that the overall population in ancient Maya settlements was much larger than previously suspected.<sup>109</sup>

# 27. Large Battle Casualties

**Status: Confirmed** (1966–2024)

**Critics' Claim:** In addition to large armies, critics have claimed that the reported number of battle casualties in the Book of Mormon are unbelievably high.<sup>110</sup>

**Response:** The book of Mormon mentions battle deaths in the thousands (Alma 2:19; 28:11; 60:22) and on rare occasions in the tens of thousands (Alma 3:26; 28:2; Mormon 6:10–15). Mormon reports that after one exceptional battle over 230,000 Nephites combatants, including their families, were killed. This compares favorably with some evidence from Mesoamerica which report similar numbers.<sup>111</sup>

#### 28. Millions of War Deaths

**Status: Partially Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that the report of millions of war deaths (Mormon 6:10-15; Ether 15:2) in the Book of Mormon are impossible.<sup>112</sup>

**Response:** During a lengthy Jaredite war over a period of many years over, "two millions of mighty men, and also their wives and children" were slain (Ether 15:2). By way of comparison, during the An Lushan Rebellion in China, during the Tang Dynasty, it is estimated that over a period of just ten years between 13 and 36 million people may have died. Mormon recorded that the Nephites at the battle of Cumorah had twenty-three units of ten thousand each (Mormon 6:10–15). Assuming that the victorious Lamanite armies had comparable numbers, the war deaths during this conflict would have also been substantial. Historical accounts describing pre-Columbian examples of war deaths in the millions are known. In the millions are known.

# 29. Fainting for Loss of Blood

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Helaman recounts how some 200 of his young warriors "fainted because of the loss of blood" following battle (Alma 57:25; cf. Ether 14:30; 15:9, 29, 32). It has been claimed that this account is unlikely based upon scientific evidence.<sup>115</sup>

**Response:** Helaman and his men viewed the survival of these wounded warriors as miraculous. Gregory Smith, a medical doctor and researcher, has also documented examples of individuals who fainted after blood loss and thereafter recovered showing, contrary to what some have argued, that such recovery is also scientifically attested.<sup>116</sup>

## 30. Prearranged Battles

**Status: Confirmed** (1966–2024)

**Critics' Claim:** It has been claimed that Mormon's request of the Lamanite king to allow his people time to gather for battle at a prearranged time and location (Mormon 6:2–3) was absurd and would not make sense militarily.<sup>117</sup>

**Response:** The native historian Fernando Alva Ixtlilxochitl related that the Toltec people of Mexico on one occasion agreed to a set time for battle ten years in advance. The timing of Mesoamerican battles was sometimes based on astronomical calculations and dates that were believed to hold religious or cosmic significance. The Maya looked to the gods for the exact time to launch a war, and the gods expressed their will by the movements of the stars. . . . Priests, consulting their books, could predict the time of eclipses and their first nighttime appearance of planets such as Venus and Mercury; such astronomical events were taken to represent the divine mandate to begin a war.

#### 31. Wars of Extermination

**Status: Partially Confirmed** (1966–2024)

**Critics' Claim:** The Book of Mormon recounts how the Jaredites destroyed themselves as a people through endemic warfare (Ether 15:29). Centuries later, the Lamanites and the Nephites engaged in decades of warfare resulting in the extinction of the Nephites as a nation (Mormon 6). Some critics have claimed that wars of extermination (Alma 45:11) never happened in pre-Columbian times.<sup>120</sup>

**Response:** There is growing evidence that Mesoamerican warfare has resulted in the destruction and even the extinction of different groups at various times, lending plausibility to descriptions of similar events in the Book of Mormon. Simon Martin suggests that ancient Maya armies may have sometimes been large enough to enact complete annihilation. This would certainly conform to comparative historical data worldwide, where engagements range from minor skirmishes to major campaigns, and objectives can vary from merely making a show of force and testing the strength of a rival, to efforts at their complete conquest or annihilation. There is no reason not to assume similar variation among the Maya.

Archaeological evidence for this kind of warfare may be found at

some sites in the Maya Lowlands (although not yet on the scale cited in the Book of Mormon). Bruce Dahlin, discussing the abandonment of some Late Classic Maya sites, suggests that "these site abandonments were caused by military defeat in wars of annihilation. In addition to pillaging, such catastrophic abandonments almost certainly imply massacres, running off, or enslaving and forcibly removing entire urban populations, plus rendering the site itself physically (and probably spiritually) uninhabitable." Buildings were likely burned and stormed as portrayed in the mural of Chichen Itza. "It is reasonable to ask why the victors would want to do such a thing. Ethnic hatred, enslavement, desperation in capturing and holding an enemy's material resources (specifically cultivable land), or simply providing a terrifying object lesson to other potential enemies come immediately to mind." He thinks that "Chunchucmil, by virtue of its rich environmental diversity and especially its strategic location, had a near-monopoly over regional trade which its defeat and annihilation was intended to break."123 Although they date centuries after the time of the Book of Mormon. Dahlin's analysis of archaeological evidence at a series of abandoned Mayan sites in the northern Yucatan is interesting and may provide insight into Lamanite motivations in the destruction of the Nephites.124

# 32. Post-Decapitation Movement and Breathing

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics of the Book of Mormon have claimed that the account of the beheading of Shiz and his subsequent movements and apparent attempts to breath (Ether 15:30–31) is unlikely.<sup>125</sup>

**Response:** The account of Shiz's death—though surprising to most readers—is actually consistent with a neurological phenomena known as decerebrate rigidity. This physiological reaction that was not documented scientifically until 1898—sixty-eight years after the Book of Mormon was published.<sup>126</sup>

#### 33. Remains of Book of Mormon Battles

Status: Unconfirmed

**Critics' Claim:** Some critics have claimed that if the kinds of battles recounted in the Book of Mormon actually took place, that scholars would have identified remains of such battles.<sup>127</sup>

**Response:** No such remains have been identified as being associated with the battles mentioned in the Book of Mormon. However, it is not clear how a reader would definitively identify such battle remains, even if one could determine where such conflicts took place. Nor is it clear what one could reasonably expect to survive from such battles. The challenge of identifying battle remains is not merely a challenge for archaeology relating to the Book of Mormon, but for the archaeology of warfare more generally. This includes the issue of human remains <sup>128</sup> as well as the recovery and identification of weapons and other archaeological evidence of pre-modern warfare. <sup>129</sup>

## 34. Trumpets

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Trumpets are mentioned in the Book of Mormon sometimes in connection with battle (Mosiah 26:25; Alma 29:1; Ether 14:28). Some critics have claimed that trumpets were unknown in pre-Columbian times.<sup>130</sup>

**Response:** Various kinds of horns and trumpets were known in pre-Columbian times. Some that were used for battles are shown in Mesoamerican art.<sup>131</sup>

#### 35. Cords

Status: Confirmed (1966-2024)

**Critics' Claim**: Nephite armies made use of cords for various purposes (Alma 62:21, 23, 36). Some critics have claimed that cords were unknown in pre-Columbian times.<sup>132</sup>

**Response:** Fiber from maguey, agave, and rushes were used to make cords and ropes in pre-Columbian Mesoamerica.<sup>133</sup>

#### 36. Ladders

**Status: Confirmed** (1966–2024)

**Critics' Claim:** The Nephites made strategic use of ladders (Alma 62:21, 23) in capturing cities. Some have claimed that ladders were unknown in pre-Columbian warfare.<sup>134</sup>

**Response:** Ladders were known and sometimes used in ancient American warfare. Diego Duran stated that when besieging enemy cities the Aztecs prepared "many kinds of ladders... some of wood,

some of rope" in order to scale the walls. 136 Battle scenes portrayed on the murals of the Temple of the Jaguars at Chichen Itza show "scaling ladders" 137 and ladders are also represented on Classic Maya art at Bilbao and Piedras Negras in Guatemala. 138

#### 37. Tents

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Jaredite, Nephite, and Lamanite armies had tents (Alma 2:20, 26; 51:34; 52:1; Ether 9:3). Some critics have claimed that references to tents in the Book of Mormon are anachronistic in ancient America. <sup>139</sup>

**Response:** Several kinds of tents were known and used by Mesoamerican armies.<sup>140</sup> According to the Spanish historian Fuentes y Guzman, the Quiche Maya of highland Guatemala during their pre-Columbian wars with other Maya groups had "tiendas de algodon" or cotton tents for their officers.<sup>141</sup>

#### 38. Rations

Status: Confirmed (1966–2024)

**Critics' Claim:** It has been claimed that references to rations in the Book of Mormon (Alma 55:1) are out of place in an ancient American context.<sup>142</sup>

**Response:** Rations were an essential element in organized Mesoamerican warfare. Ross Hassig discusses various kinds of foods that were used for rations in Aztec armies.<sup>143</sup>

#### 39. Bands of Raiders and Plunderers

**Status: Confirmed** (1966–2024)

**Critics' Claim:** It has been claimed that the idea of raiders and plunderers (Helaman 11:27–31) in pre-Columbian times is out of place.<sup>144</sup>

**Response:** Raiding and plundering was a common practice in Mesoamerican warfare in pre-Columbian times. Hassig mentions "guerilla style fighting during periods of political upheaval which setpiece conventional armies were poorly suited to counter."<sup>145</sup>

# **Summary of Results**

During the first fourteen years following the publication of the Book of Mormon (1830–1844), seventeen problematic items relating to ancient warfare and the Book of Mormon were noted by critics, none of which could be confirmed (figure 23). During the second period (1845–1965), that number had risen to twenty-seven (figure 24). From 1966 to 2024, however, while the number of items rose to thirty-nine, by 2024 thirty-two had been confirmed, five partially confirmed, and two remained unconfirmed (figure 25).

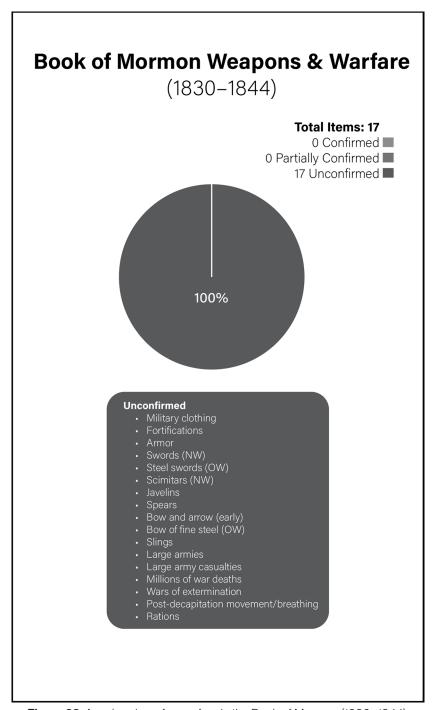


Figure 23. Anachronisms for warfare in the Book of Mormon (1830–1844).

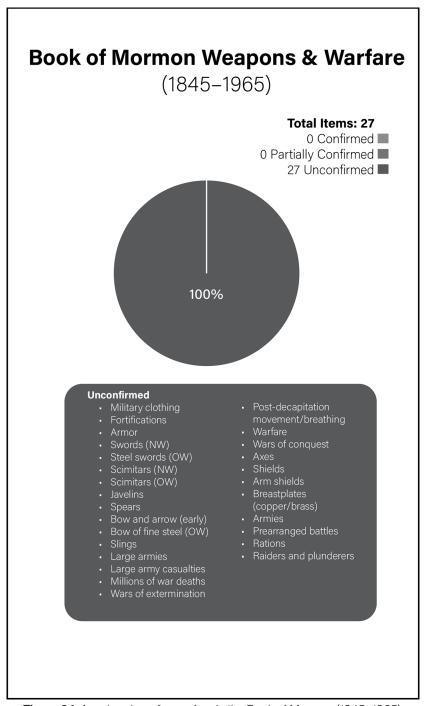


Figure 24. Anachronisms for warfare in the Book of Mormon (1845–1965).

Figure 25. Anachronisms for warfare in the Book of Mormon (1966–2024).

## **Notes**

- 1. E. D. Howe, *Mormonism Unvailed* (Painesville, OH: printed by the author, 1834), 71.
- 2. Z—a, "Mormonism: Sceneina Stage Coach," *Christian Watchman* (Boston), 5 May 1837.
- 3. J. M. Peck, A Gazeteer of Illinois [...] (Jacksonville, IL: R. Goudy, 1834), 53; Tyler Parsons, Mormon Fanaticism Exposed [...] (Boston: printed by the author, 1841), 26; William Sheldon, Mormonism Examined [...] (Brodhead, WI: printed by the author, 1876), 118–19; W. G. Marshall, Through America: or, Nine Months in the United States (London: Sampson Low, Marston, Searle, and Rivington, 1881), 156.
- 4. Some readers have assumed that many or most of the weapons mentioned by the Nephite writers were metallic, a claim that is not directly supported by the text. See, for example, Gordon H. Fraser, What Does the Book of Mormon Teach? (Chicago: Moody Press, 1964), 60–61; Gordon H. Fraser, Is Mormonism Christian? (Chicago: Moody Press, 1977), 142. A more careful reading suggests that metal may have been associated with only a few of the weapons mentioned, which can be plausibly understood to have been unusual or rare elite items. See 2 Nephi 5:14; Mosiah 8:10–11; Ether 7:9. Most other weapons were likely made of other materials.
- Fraser, What Does the Book of Mormon Teach?, 60, 63; Gordon H. Fraser, Joseph and the Golden Plates: A Close Look at the Book of Mormon (Eugene, OR: Industrial Litho, 1978), 58, 60; Latayne Colvette Scott, The Mormon Mirage: A Former Mormon Tells Why She Left the Church (Grand Rapids, MI: Zondervan, 1979), 83; Rick Branch, "Fortification," Utah Evangel 30, no. 7 (1983): 3; Peter Bartley, Mormonism: The Prophet, the Book and the Cult (Dublin: Veritas, 1989), 53.
- 6. Sylvanus Griswold Morley, The Ancient Maya, 2nd ed. (Stanford, CA: Stanford University Press, 1947), 262; Julian H. Steward, "Cultural Causality and Law: A Trial Formulation of the Development of Early Civilizations," American Anthropologist 51, no. 1 (1949): 20; Charles Gallenkamp, Maya: The Riddle and Rediscovery of a Lost Civilization (New York: David McKay, 1959), 95; J. Eric S. Thompson, The Rise and Fall of Maya Civilization, 2nd ed. (Norman: University of Oklahoma Press, 1966), 98.
- Peck, Gazeteer of Illinois, 53: "Their ceremonial centres had no fortification, and were for the most part located in places incapable of defence." Bartley, Mormonism, 53.
- 8. JustinBracken, "PreclassicMayaFortificationatMuralladeLeon,Peten:Deducing Assets, Military Strategies, and Specific Threats through Analysis of Defensive Systems," *Ancient Mesoamerica* 34, no. 1 (2023): 216–40; Marcello A. Canuto et al., "Ancient Lowland Maya Complexity as Revealed by Airborne Laser Scanning of Northern Guatemala," *Science* 361, no. 6409 (28 September 2018): 1–17; David Webster, "The Not So Peaceful Civilization: A Review of Maya War," *Journal of World Prehistory* 14, no. 1 (2000): 84; Dennis E. Puleston and Donald W. Callender Jr., "Defensive Earthworks at Tikal," *Expedition* 9, no. 3

- (1967): 40–48; David L. Webster, *Defensive Earthworks at Becan, Campeche, Mexico: Implications for Warfare* (New Orleans: Tulane University Middle American Research Institute, 1976). This report was based upon Webster's 1972 doctoral dissertation.
- 9. Scripture Central Staff, "Fortifications," Evidence 175, 30 March 2021, scripturecentral.org/evidence/book-of-mormon-evidence-fortifications; Scripture Central Staff, "4 Ways the New Maya Discoveries May Relate to the Book of Mormon," Scripture Central blog, 5 February 2018, scripturecentral.org /blog/4-ways-the-new-maya-discoveries-may-relate-to-the-book-of-mormon; "Ancient American Warfare," Book of Mormon Resources (blog), 1 August 2020, bookofmormonresources.blogspot.com/2020/08/ancient-american-warfare.html; Scripture Central Staff, "Watch Towers," Evidence 38, 19 September 2020, scripturecentral.org/evidence/book-of-mormon-evidence-watch-towers; John L. Sorenson, *Mormon's Codex: An Ancient American Book* (Salt Lake City: Deseret Book; Provo, UT: Neal A. Maxwell Institute for Religious Scholarship, 2013), 90, 98, 405–10, 673–74; John Sorenson, "Fortifications in the Book of Mormon Account Compared with Mesoamerican Fortifications," in *Warfare in the Book of Mormon*, ed. Stephen D. Ricks and William J. Hamblin (Salt Lake City: Deseret Book, 1990), 425–44.
- 10. Fraser, What Does the Book of Mormon Teach?, 60; Fraser, Joseph and the Golden Plates, 58.
- 11. Fraser, What Does the Book of Mormon Teach?, 63; Fraser, Joseph and the Golden Plates, 60.
- 12. Scott, Mormon Mirage, 83.
- 13. Branch, "Fortification," 3.
- 14. Bartley, Mormonism, 53.
- 15. See Scripture Central Staff, "Views of Warfare," Evidence 209, 28 June 2021, scripturecentral.org/evidence/views-of-warfare.
- 16. David Webster, "Mesoamerica: The Not So Peaceful Civilization?," *Cambridge Archaeological Journal* 15, no. 1 (2005): 127–28.
- 17. Webster, "Review of Maya War," 68.
- 18. Webster, "Review of Maya War," 112.
- 19. Ross Hassig, War and Society in Ancient Mesoamerica (Berkeley: University of California Press, 1992). See also relevant essays in M. Kathryn Brown and Travis W. Stanton, eds., Ancient Mesoamerican Warfare (Walnut Creek, CA: AltaMira, 2003); Axel E. Nielson and William H. Walker, eds., Warfare in Cultural Context: Practice, Agency, and the Archaeology of Violence (Tucson: University of Arizona Press, 2009); Andrew K. Scherer and John W. Verano, eds., Embattled Bodies, Embattled Places: War in Pre-Columbian Mesoamerica and the Andes (Washington, DC: Dumbarton Oaks Research Library and Collection, 2014); Shawn G. Morton and Meaghan M. Peuramaki-Brown, eds., Seeking Conflict in Mesoamerica: Operational, Cognitive, and Experiential Approaches (Louisville: University Press of Colorado, 2019). See also Dirk Van Tuerenhout, "Maya Warfare: Sources and Interpretations," Revue

- internationale d'anthropologie et de sciences humaines 50 (2002): 129–52; Simon Martin, Ancient Maya Politics: A Political Anthropology of the Classic Period 150–900 CE (Cambridge: Cambridge University Press, 2020), 196–236; Omar Andres Alcover Firpi and Charles Golden, "The Politics of Conflict: War before and beyond the State in Maya Society," in The Maya World, ed. Scott R. Hutson and Traci Ardren (Milton Park, UK: Routledge, 2020), 477–95; Akira Ichikawa, "Warfare in Prehispanic El Salvador," Annual Papers of the Anthropological Institute 12 (2021): 178–96; Christopher Hernandez and Justin Bracken, "Unleashing Maya Warfare: Inquiry into the Practical Aspects of War-Making," Ancient Mesoamerica 34, no. 1 (2023): 185–97; Bracken, "Preclassic Maya Fortification at Muralla de Leon, Peten," 216–40.
- 20. "Wars of conquest were unknown for the simple reason that the gaining of new territory for occupation was unknown. There was plenty of room for all." Fraser, What Does the Book of Mormon Teach?, 63.
- 21. See Jesper Nielsen, "Hearts and Torches: Possible Teotihuacan Military Entradas in North-Central and Western Mesoamerica," in Seeking Conflict in Mesoamerica, 145–64; Martin, Ancient Maya Politics, 196–236; Scripture Central Staff, "Views of Warfare."
- 22. Martin, Ancient Maya Politics, 229.
- 23. Arthur Budvarson, *The Book of Mormon Examined* (La Mesa, CA: Utah Christian Tract Society, 1959), 36; Walter Martin, *The Kingdom of the Cults* (Bloomington, MN: Bethany House, 1968), 161–63; John A. Price, "The Book of Mormon vs. Anthropological Prehistory," *Indian Historian* 7, no. 3 (1974): 38; Walter Martin, *The Maze of Mormonism* (Santa Ana, CA: Vision House, 1978), 56–57; Scott, *Mormon Mirage*, 83–84; Philip Jackson, "More on the Nephites and the Book of Mormon," *Biblical Archaeology Review* 14, no. 16 (1988): 14–15. While some readers have assumed that all Jaredite, Nephite, and Lamanite armor was made of metal, the only armor said to have been made of metal was the Jaredite breastplates discovered by the people of King Limhi (Mosiah 8:10), and those appear to have been unusual.
- 24. Hassig, *War and Society in Ancient Mesoamerica*, 252; Ross Hassig, *Aztec Warfare: Imperial Expansion and Political Control* (Norman: University of Oklahoma Press), 85–90. For Inca armor, see Terence N. D'Altroy, *The Incas*, 2nd ed. (Malden, MA: Wiley-Blackwell, 2015), 411, 447; Scripture Central Staff, "Mesoamerican Armor," Evidence 193, 18 May 2021, scripturecentral.org/evidence/book-of-mormon-evidence-mesoamerican-armor.
- 25. Hassig, Aztec Warfare, 88.
- 26. See Howe, Mormonism Unvailed, 71. Brent Metcalfe claims that the work of those who consider the macuahuitl a sword lacks methodological rigor. Brent Lee Metcalfe, "Apologetic and Critical Assumptions about Book of Mormon Historicity," *Dialogue: A Journal of Mormon Thought* 26, no. 3 (1993): 161, dialoguejournal.com/wp-content/uploads/sbi/articles/Dialogue\_V26N03 \_163.pdf. According to James White, the macuahuitl was not a sword but merely "a war club with sharp rocks embedded in it!" James White, "Of Cities and Swords," *Christian Research Journal* 19, no. 1 (1996): 35.

- 27. AD. F. Bandelier, "On the Art of War and Mode of Warfare of the Ancient Mexicans," *Peabody Museum Annual Reports* 2 (1877): 108n52.
- 28. Hassig, Aztec Warfare, 83–85; Hassig, War and Society in Ancient Mesoamerica, 138.
- 29. Scripture Central Staff, "Pre-Columbian Swords," Evidence 195, 25 May 2021, scripturecentral.org/evidence/book-of-mormon-evidence-pre-columbian -swords; Matthew Roper, "Swords and Cimeters in the Book of Mormon," *Journal of Book of Mormon Studies* 8, no. 1 (1999): 34–43, 77–78, scholars archive.byu.edu/jbms/vol8/iss1/7/; Matthew Roper, "Eyewitness Descriptions of Mesoamerican Swords," *Journal of Book of Mormon Studies* 5, no. 1 (1996): 150–58, scholarsarchive.byu.edu/cgi/viewcontent.cgi?article =1134&context=jbms; Matthew Roper, "On Cynics and Swords," *FARMS Review of Books* 9, no. 1 (1997): 151–52, scholarsarchive.byu.edu/msr/vol9 /iss1/16/; William J. Hamblin and A. Brent Merrill, "Swords in the Book of Mormon," in *Warfare in the Book of Mormon*, 329–51.
- 30. "Another favorite [weapon of the Incas] was a hard, double-edged, palmwood club shaped like a sword." D'Altroy, *Incas*, 345. Archaeologists found swords made of hardwood among graves in a cave in the Titicaca basin dating to the Late Intermediate Period (AD 1000–1450). Elizabeth Arkush, "Warfare, Space, and Identity in the South-Central Andes," in *Warfare in Cultural Context*, 200.

The *macana* is a stick made of *chonta* palm wood about one *braza* long, four fingers wide, thin, and with two sharp edges; it ends in a rounded hilt and a pommel like a sword. It is held with both hands like a broadsword, and a blow with it is so effective that if a man gets hit on the head, it will crack his skull.

Bernabe Cobo, *Inca Religion and Customs*, trans. Roland Hamilton (Austin: University of Texas Press, 1990), 218; Ann Kendall, *Everyday Life of the Incas* (New York: G.P. Putnam's Sons, 1973), 104.

- 31. Steven A. LeBlanc, *Prehistoric Warfare in the American Southwest* (Salt Lake City: University of Utah Press, 1999), 97–98, 104–6; Ross Hassig, "Anasazi Violence: A View from Mesoamerica," in *Deciphering Anasazi Violence: With Regional Comparisons to Mesoamerican and Woodland Cultures*, ed. Peter Y. Bullock (Santa Fe: HRM Books, 1998), 61; David R. Wilcox and Jonathan Haas, "The Scream of the Butterfly: Competition and Conflict in the Prehistoric Southwest," *Themes in Southwest Prehistory*, ed. George J. Gumerman (Santa Fe: School of American Research Press, 1994), 224; Earl H. Morris, "Burials in the Aztec Ruin: The Aztec Ruin Annex," *Anthropological Papers of the American Museum of Natural History* 26, nos. 3–4 (1924): 194–95.
- 32. During the Middle Mississippian Period (AD 1100–1350), "handheld weapons such as war clubs proliferated into several forms by this time, ranging from sticks and staffs to swords and hatchets.... Flint knives, possibly used for scalping, are often found in elite burials. Long versions of these knives, 'swords,' are also found in elite graves." David H. Dye, "The Transformation of Mississippian Warfare: Four Case Studies from the Mid-South," *Archaeology of Warfare: Prehistories of Raiding and Conquest*, ed. Elizabeth N. Arkush and Mark W. Allen (Gainesville: University Press of Florida, 2006), 131. See also

- Wayne William Van Horne, "The Warclub: Weapon and Symbol in Southeastern Indian Societies" (PhD diss., University of Georgia, 1993), 60–106; Wayne W. Van Horne, "Warclubs and Falcon Warriors: Martial Arts, Status, and the Belief System in Southeastern Mississippian Chiefdoms" (paper, Annual Meeting of the Central States Anthropological Society, Beloit, WI, 20 March 1993).
- 33. Deanne G. Matheny, "Does the Shoe Fit? A Critique of the Limited Tehuantepec Geography," in *New Approaches to the Book of Mormon: Explorations in Critical Methodology*, ed. Brent Lee Metcalfe (Salt Lake City: Signature Books, 1993), 293.
- 34. Ann Cyphers, Escultura Olmeca de San Lorenzo Tenochtitlan (Mexico City: Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, 2004), 145-46; Rubén Cabrera, "Conjunto Plaza Oeste," in Teotihuacán, 2 vols., ed. Beatriz de la Fuente, La pintura mural prehispánica en México 1 (Mexico City: Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, 1995), 1:48. The objects on the murals are shown on pages 49–51. Alfonso A. Garduno Arzave, "De las armas ofensivas en el arte y la arqueología de Teotihuacán," La pintura mural prehispánica en México 12, nos. 24-25 (2006): 59; David Yiro Cisneros Garcia, "Tres pinturas murales in situ en la sección sur del Conjunto del Sol N3E1, Teotihuacan," Fuimos peces, 25 April 2019, fuimospeces.mx/single-post/2019/04/24/murales -teotihua; Scripture Central Staff, "Swords in Book of Mormon Times," Evidence 194, 25 May 2021, scripturecentral.org/evidence/book-of-mormon -evidence-swords-in-book-of-mormon-times-1; Matthew Roper, "Book of Mormon Swords in Mesoamerican Antiquity," Insights: The Newsletter of the Neal A. Maxwell Institute for Religious Scholarship 28, no. 2 (2008): 2-3, scholarsarchive.byu.edu/insights/vol28/iss2/2/.
- 35. Howe, Mormonism Unvailed, 25.
- 36. E. L. Kelley and Clark Braden, *Public Discussion of the Issues between the Reorganized Church of Jesus Christ of Latter-day Saints and the Church of Christ [...]* (St. Louis: Clark Braden, 1884), 109.
- 37. William Whalen, The Latter-day Saints in the Modern Day World (South Bend, IN: University of Notre Dame Press, 1964), 48. "Laban is represented as killed by one Nephi, some six hundred years before Christ, with a sword 'of the most precious steel, hundreds of years before steel was known to man!" Daniel H. C. Bartlett, The Mormons or, Latter-Day Saints: Whence Came They? (London: James Nisbet, 1911), 15. "[The Book of Mormon] speaks of the most 'precious steel,' before the commonest had been dreamt of." C. Sheridan Jones, The Truth About the Mormons: Secrets of Salt Lake City (London: William Rider & Son, 1920), 4-5. "Nephi . . . wielded a sword 'of the most precious steel." But steel was not known to man in those days." Stuart Martin, The Mystery of Mormonism (London: Odhams Press, 1920), 44. "Laban had a steel sword long before steel came into use." George Bartholomew Arbaugh, Revelation in Mormonism: Its Character and Changing Forms (Chicago: University of Chicago Press, 1932), 55. "Every commentator on the Book of Mormon has pointed out the many cultural and historical anachronisms, such as the steel sword of Laban in 600 B.C." Thomas O'Dea, The Mormons (Chicago:

- University of Chicago Press, 1957), 39. See also Fraser, What Does the Book of Mormon Teach?, 60–61; "One Wonders," Inner Circle 2, no. 8 (1985): 3.
- 38. AvrahamEitan, "Rare Sword of the Israelite Period Found at Vered Jericho," *Israel Museum Journal* 12 (1994): 62.
- 39. Amihai Mazar and Shmuel Ahituv, "Tel Rehov in the Assyrian Period: Squatters, Burials, and a Hebrew Seal," in *The Fire Signals of Lachish: Studies in the Archaeology and History of Israel in the Late Bronze Age, Iron Age, and Persian Period in Honor of David Ussishkin, ed. Israel Finkelstein and Nadav Na'aman* (Winona Lake, IN: Eisenbrauns, 2011), 273; Herbert Maryon, "Early Near Eastern Steel Swords," *American Journal of Archaeology* 65, no. 2 (1961): 173–84. See also Aren Maeir, "The 'Judahite' Swords from the 'Lachish' Reliefs of Sennacherib," *Eretz Israel: Archaeological, Historical, and Geographical Studies* 25 (1996): 210–14.
- 40. The text doesn't clarify whether the swords modeled after Laban's sword (mentioned in 2 Nephi 5:14) were also made of steel (or even of any metal) or the resemblance pertained to other features. Even if these swords were made of metal, the record doesn't indicate how many were made or how prevalent they were throughout Nephite history.
- 41. Fraser, What Does the Book of Mormon Teach?, 90.
- 42. The text indicates that some Jaredites had steel swords, and the people of King Limhi found swords with rusted blades on the Jaredite battlefield and brought them back to the land of Lehi-Nephi (Ether 7:9; Mosiah 8:11). These rusted blades may have been steel, bronze, or even worked iron. Such swords would likely have been elite, uncommon items.
- 43. Samuel Hawthornthwaite, *Adventures among the Mormons [...]* (Manchester, UK: printed by the author, 1857), 69; John Hyde Jr., *Mormonism: Its Leaders and Designs* (New York: W. P. Fetridge, 1857), 235.
- 44. Brigham D. Madsen, ed., B. H. Roberts: Studies of the Book of Mormon, ed. (Urbana: University of Illinois Press, 1992), 36. "Cimeters were curved swords used by the Persians, Arabs, and Turks, half a world away from America and appearing a thousand years too late to enter the picture." Fraser, Joseph and the Golden Plates, 58. See also James Spencer, The Disappointment of B.H. Roberts (Boise: Through the Maze, 1991), 4; Earl Wunderli, An Imperfect Book: What the Book of Mormon Tells Us about Itself (Salt Lake City: Signature Books, 2013), 36; John Christopher Thomas, A Pentecostal Reads the Book of Mormon: A Literary and Theological Introduction (Cleveland, TN: CPT Press, 2016), 420.
- 45. Boyd Seevers, Warfare in the Old Testament: The Organization, Weapons, and Tactics of Ancient Near Eastern Armies (Grand Rapids, MI: Kregel Academic, 2013), 58; see also p. 121, fig. 4.2.
- 46. Charlie Trimm, Fighting for the King and the Gods: A Survey of Warfare in the Ancient Near East (Atlanta: SBL Press, 2017), 516, figs. 7.3 and 7.4.
- 47. See, for example, Amihai Mazar, Archaeology of the Land of the Bible: 10,000–586 BC (New York: Doubleday, 1990), 265; Donald B. Redford, Egypt, Canaan,

- and Israel in Ancient Times (Princeton, NJ: Princeton University Press, 1992), 79.
- 48. Trimm, Fighting for the King and the Gods, 519, 524, figs. 7.3, 7.4, 7.5.
- 49. Daphna Ben-Tor, "The God Presenting the Scimitar-Sword on the Cylinder Seal from Beth Shean: Baal-Seth or Resheph?," in *In the House of Heqanakht: Text and Context in Ancient Egypt. Studies in Honor of James P. Allen*, ed. M. Victoria Almansa-Villatoro, Silvia Stubnova Nigrelli, and Mark Lehner (Leiden: Brill, 2023), 18–28.
- 50. G.Molin, "What Is a Kidon?," *Journal of Semitic Studies* 1, no. 4 (1956): 336; Jeffrey R. Zorn, "Reconsidering Goliath: An Iron Age I Philistine Chariot Warrior," *Bulletin of the American Schools of Oriental Research* 360 (2010): 9–11.
- 51. P. Kyle McCarter Jr., 1 Samuel (New York: Doubleday, 1980), 285.
- 52. Trimm, Fighting for the King and the Gods, 528.
- 53. Scripture Central Staff, "Why Does the Book of Mormon Mention Cimeters?," KnoWhy 472, 2 October 2018, scripturecentral.org/knowhy/why-does-the-book-of-mormon-mention-cimeters; Matthew Roper, "Mesoamerican 'Cimeters' in Book of Mormon Times," *Insights: The Newsletter of the Neal A. Maxwell Institute for Religious Scholarship* 28, no. 1 (2008): 2, scholars archive.byu.edu/insights/vol28/iss1/3/; Paul Y. Hoskisson, "Scimitars, Cimeters! We have Scimitars! Do We Need Another Cimeter?," in *Warfare in the Book of Mormon*, 352–59.
- 54. Madsen, B. H. Roberts: Studies of the Book of Mormon, 36; Fraser, What Does the Book of Mormon Teach?, 60–61; Fraser, Is Mormonism Christian?, 142; Fraser, Joseph and the Golden Plates, 58. See also Spencer, Disappointment of B. H. Roberts, 4; Thomas Key, The Book of Mormon in the Light of Science, 15th ed. (Marlow, OK: Utah Missions, 1997), 69; Wunderli, Imperfect Book, 36; Thomas, Pentecostal Reads the Book of Mormon, 420.
- 55. Scripture Central, "Why Does the Book of Mormon Mention Cimeters?"; Roper, "Mesoamerican 'Cimeters'," 2.
- 56. MaryMillerandSimonMartin, Courtly Art of the Ancient Maya (New York: Thames & Hudson, 2004), 188, plate 106.
- 57. Hassig, War and Society in Ancient Mesoamerica, 112–13. See also Roper, "Swords and Cimeters in the Book of Mormon," 41–43; Roper, "Mesoamerican 'Cimeters," 2; Scripture Central Staff, "Why Does the Book of Mormon Mention Cimeters?"
- 58. Cyphers, Escultura Olmeca de San Lorenzo Tenochtilan, 145, referencing San Lorenzo Monuments 78 and 159.
- 59. James R. White, *Letters to a Mormon Elder* (Port St. Lucie, FL: Solid Ground Christian Books, 1990), 168–69.
- 60. Francis Robicsek, "The Weapons of the Ancient Maya," in Circumpacifica Bandl: Mittel und Sudamerika: Festschrift fur Thomas S. Barthel, ed. Bruno Illius and Matthew Laubscher (Frankfurt: Peter Lang, 1990), 372, figs. 3–5, 7; Hassig, War and Society in Ancient Mesoamerica, 47. On North American daggers, see LeBlanc, Prehistoric Warfare in the American Southwest, 98, 113–14.

- 61. Key, Book of Mormon in the Light of Science, 69.
- 62. Scripture Central Staff, "Axes," Evidence 170, 22 March 2021, scripturecentral. org/evidence/book-of-mormon-evidence-axes; Robicsek, "Weapons of the Ancient Maya," 372; Prudence M. Rice et al., "Defensive Architecture and the Context of Warfare at Zacpeten," in *The Kowoj: Identity, Migration, and Geopolitics in Late Postclassic Peten, Guatemala* (Denver: University Press of Colorado, 2009), 131–32.
- 63. Robicsek, "Weapons of the Ancient Maya," 372.
- 64. Robicsek, "Weapons of the Ancient Maya," 372.
- 65. Fraser, What Does the Book of Mormon Teach?, 59, 61; White, Letters to a Mormon Elder, 168–69.
- 66. See Scripture Central Staff, "Javelins," Evidence 180, 5 April 2021, scripture central.org/evidence/book-of-mormon-evidence-javelins; Bandelier, "Art of War and Mode of Warfare," 105; Rice et al., "Defensive Architecture," 131. On the use of the javelin in South America, see D'Altroy, *Incas*, 345.
- 67. Bandelier, "Art of War and Mode of Warfare," 105.
- 68. Robicsek, "Weapons of the Ancient Maya," 372.
- 69. Howe, Mormonism Unvailed, 71; Fraser, What Does the Book of Mormon Teach?, 59, 61.
- 70. Spears are frequently portrayed in Mayan art. Rice et al., "Defensive Architecture," 131. For spears in South America, see D'Altroy, *Incas*, 345.
- 71. Fraser, What Does the Book of Mormon Teach?, 62–63; Fraser, Joseph and the Golden Plates, 60; Scott, Mormon Mirage, 83; White, Letters to a Mormon Elder, 168–69.
- 72. Scripture Central Staff, "Bow and Arrow," Evidence 181, 12 April 2021, scripture-central.org/evidence/book-of-mormon-evidence-bow-and-arrow.
- 73. Kazuo Aoyama, Elite Craft Producers, Artists, and Warriors at Aguateca: Lithic Analysis (Salt Lake City: University of Utah Press, 2009), 121.
- 74. Kazuo Aoyama, "Classic Maya Warfare and Weapons: Spear, Dart, and Arrow Points of Aguateca and Copan," *Ancient Mesoamerica* 16 (2005): 291–304.
- 75. Aoyama, Elite Craft Producers, Artists, and Warriors, 121. The bow and arrow were also used by the Incas. D'Altroy, Incas, 345.
- 76. White, Letters to a Mormon Elder, 168.
- 77. Hassig, War and Society in Ancient Mesoamerica, 248nn6-7.
- 78. Martin, *Kingdom of the Cults*, 166; Mark D. Thomas, "Swords Cankered with Rust," *Sunstone* 15, no. 3 (1991): 62.
- 79. Frank Moore Cross Jr. and David Noel Freedman, "A Royal Song of Thanksgiving: II Samuel 22 = Psalm 18," Journal of Biblical Literature 72, no. 1 (1953): 31. According to Roland De Vaux, "the term refers to the metal coverings of certain bows." Roland De Vaux, Ancient Israel: Its Life and Institutions, trans. John McHugh (Grand Rapids, MI: Eerdmans, 1997), 243. Peter Craigie states, "The expression 'bow of bronze' may either indicate a wooden bow with bronze

decoration, or the bronze tipped arrows shot from large bows, or it may merely be a poetic way of describing the great strength of the warrior's bow." Peter C. Craigie, *Psalms 1–50* (Waco, TX: Word Press, 1983), 176. William Hamblin, a Latter-day Saint historian and specialist in warfare in the ancient Near East, observes.

Composite bows have a specific structural problem that leaves them susceptible to changes in temperature and climate, which may cause the bow to warp and break.... Thus, if Nephi's bow were of the composite type, his move from the more temperate climate of Palestine to the dry heat of the Arabian peninsula could have contributed to the risk that his bow might warp and break.

William J. Hamblin, "The Bow and Arrow in the Book of Mormon," in *Warfare in the Book of Mormon*, 374.

- 80. Scripture Central Staff, "Why Did Nephi's 'Fine Steel' Bow Break?," KnoWhy 548, 31 January 2020, scripturecentral.org/knowhy/why-did -nephis-fine-steel-bow-break.
- 81. Key, Book of Mormon in the Light of Science, 69.
- 82. See Scripture Central Staff, "Fiery Darts," Evidence 158, 1 March 2021, scripturecentral.org/evidence/book-of-mormon-evidence-fiery -darts; Stephen O. Smoot, "The 'Fiery Darts of the Adversary' in 1 Nephi 15:24," Interpreter: A Journal of Mormon Scripture 18 (2016): 5–9, journal .interpreterfoundation.org/the-fiery-darts-of-the-adversary-in-1-nephi-1524/; Hassig, Aztec Warfare, 79; Hassig, War and Society in Ancient Mesoamerica, 138. One native Mexican account describes a battle in which warriors "shot down some sort of smoking arrows." Richley H. Crapo and Bonnie Glass-Coffin, eds., Anónimo Mexicano (Logan: Utah State University Press, 2005), 39–40.
- 83. Howe, Mormonism Unvailed, 71; Key, Book of Mormon in the Light of Science, 69.
- 84. See Scripture Central Staff, "Slings," Evidence 179, 5 April 2021, scripture central org/evidence/book-of-mormon-evidence-slings; Hassig, *War and Society in Ancient Mesoamerica*, 28–31, 205n51. The sling was also used by the Incas in South America. D'Altroy, *Incas*, 345.
- 85. Gordon Fraser erroneously faults the Book of Mormon for referencing metal shields, although the text does not specify the material the shields were made of. Fraser, *What Does the Book of Mormon Teach?*, 59, 61; Fraser, *Is Mormonism Christian?*, 142; White, *Letters to a Mormon Elder*, 168–69.
- 86. Monument C from Tres Zapotes, which dates to the Late Formative period, portrays warriors with large rectangular shields. Hassig, *War and Society in Ancient Mesoamerica*, 31; see pp. 95–96. See also Thelma D. Sullivan, "The Arms and Insignia of the Mexica," *Estudios de Cultura Nahuatl* 10 (1972): 156; Scripture Central Staff, "Shields," Evidence 191, 3 May 2021, scripturecentral .org/evidence/book-of-mormon-evidence-shields.
- 87. D'Altroy, Incas, 347.

- 88. LeBlanc, *Prehistoric Warfare in the American Southwest*, 97–98, 106–12, 297–98.
- 89. Budvarson, *Book of Mormon Examined*, 36; White, *Letters to a Mormon Elder*, 168–69.
- 90. Scripture Central Staff, "Shields."
- 91. Key, Book of Mormon in the Light of Science, 69.
- 92. Royal Skousen, *The Nature of the Original Language*, part 3 of *The History of the Text of the Book of Mormon* (Provo, UT: Foundation for Ancient Research and Mormon Studies, 2018), 449–51.
- 93. Scripture Central Staff, "Headplates" Evidence 139, 19 January 2021, scripture-central.org/evidence/book-of-mormon-evidence-headplates; Prescott H. F. Follett, War and Weapons of the Maya (New Orleans: Department of Middle American Research, Tulane University, 1932), 394–409; Hassig, War and Society in Ancient Mesoamerica, 16, 31, 48, 83, 99, 140, 184–85n36; Hassig, Aztec Warfare, 90, 97, 116, 291nn119–20; Rice et al., "Defensive Architecture," 132. The Inca of South America sometimes wore cane helmets. D'Altroy, Incas, 347. Olmec helmets are represented on human figurines. David Cheetham, "Early Olmec Figurines from Two Regions: Style as Cultural Imperative," in Mesoamerican Figurines: Small-Scale Indices of Large-Scale Social Phenomena, ed. Christina T. Halperin et al. (Gainesville: University Press of Florida, 2011), 164–65.
- 94. Hassig, War and Society in Ancient Mesoamerica, 48, 83.
- 95. Hassig, Aztec Warfare, 291n119.
- 96. Hassig, War and Society in Ancient Mesoamerica, 83.
- 97. Budvarson, Book of Mormon Examined, 36; Fraser, What Does the Book of Mormon Teach?, 59, 61.
- 98. Follett, War and Weapons of the Maya, 395; Robicsek, "Weapons of the Ancient Maya," 374. Some Inca warriors "protected their chests and backs with plates of metal." D'Altroy, Incas, 347.
- 99. Fraser, What Does the Book of Mormon Teach?, 59,61; Fraser erroneously claims that all weapons and armor in the Book of Mormon were made of metal. Fraser, Is Mormonism Christian?, 142; John L. Smith, "What about Those Gold Plates?," Utah Evangel 33, no. 6 (1986): 8; White, Letters to a Mormon Elder, 168–69.
- 100. D'Altroy, Incas, 345.
- 101. Patricia de Fuentes, ed. and trans., *The Conquistadors: First-Person Accounts of the Conquest of Mexico* (Norman: University of Oklahoma Press, 1993), 10.
- 102. Francis Augustus MacNutt, *De Orbo Novo: The Eight Decades of Peter Martyr D'Anghera* (New York: G.P. Putnam's Sons, 1912), 2:16.
- 103. Hubert Howe Bancroft, *Native Races* (San Francisco: History Company, 1886), 2:408.
- 104. Daniel G. Brinton, The American Race: A Linguistic Classification and

- Ethnographic Description of the Native Tribes of North and South America (Philadelphia: David McKay, 1901), 138.
- 105. Fraser, Is Mormonism Christian?, 142-43.
- 106. Hassig, War and Society in Ancient Mesoamerica, 76, 85, 141. For South American armies, see D'Altroy, Incas, 321–50. Although not of the same size and scale as armies in South America and Mesoamerica, actual armies, not just small raiding parties, also likely existed in the North American Southwest. Christopher Hernadez, "Battle Lines of the North American Southwest: An Inquiry into Prehispanic and Post-Contact Pueblo Tactics of War," Kiva: Journal of Southwestern Anthropology and History 86, no. 1 (2020): 47–69.
- 107. Peck, Gazeteer of Illinois, 53.
- 108. For pre-Columbian armies numbering in the thousands and tens of thousands—and on rare occasions, hundreds of thousands—see Hassig, *Aztec Warfare*, 55–60; Thomas T. Veblen, "Native Population Decline in Totonicapan, Guatemala," *Annals of the Association of American Geographers* 67, no. 4 (1977): 484–99; Carmelo Saenz de Santa Maria, ed., *Obras historicas de Don Francisco Antonio de Fuentes y Guzman* (Madrid: Real Academia Espanola, 1972), 2:24–25, 27–34, 290–91; Martin, *Ancient Maya Politics*, 228–29; Morgan Deane, "Nephite Ten Thousand," in *From Sinners to Saints: Reassessing the Book of Mormon* (North Las Vegas, NV: Arsenal of Venice Press, 2018), 153–72; Scripture Central Staff, "Army Sizes," Evidence 212, 5 July 2021, scripture central.org/evidence/army-sizes. On the possible exaggeration of battle numbers, see Scripture Central Staff, "How Could So Many People Have Died at the Battle of Cumorah?," KnoWhy 231, 15 November 2016, scripturecentral.org/knowhy/how-could-so-many-people-have-died-at-the-battle-of-cumorah.
- 109. See Scripture Central Staff, "4 Ways the New Maya Discoveries May Relate to the Book of Mormon."
- 110. "Those who are particularly desirous of information concerning the millions of warriors, and the bloody battles in which more were slain than ever fell in all the wars of Alexander, Caesar, or Napoleon . . . would do well to read the 'Book of Mormon." Peck, Gazeteer of Illinois, 53; Parsons, Mormon Fanaticism Exposed, 26. See Sheldon, Mormonism Examined, 118–19. Marshall, Through America, 157, wrote,
  - There is an account given in the work of perhaps the most disastrous battle on record, one in which we are told that 2,000,000 men were slain! Two hundred and thirty thousand had been killed in a previous engagement! Talk of our battle of Hastings, our Crecy, Poitiers, Waterloo, and other famous battles of modern times, why, they are mere a bagatelle compared with some of these (fictitious) civil engagements of the primitive Americans.
- 111. See Saenz de Santa Maria, Obras historicas de Don Francisco Antonio de Fuentes y Guzman, 2:26, 28, 30, 32, 35; Diego Duran, The History of the Indies of New Spain, trans. Doris Heyden (Norman: University of Oklahoma Press, 1994), 282, 439; Alfredo Chavero, ed., Obras historicas de Don Fernando de Alva Ixtlilxochitl (Mexico: Editora Nacional, 1952), 1:58–59; Scripture Central

- Staff, "War Deaths," Evidence 213, 12 July 2021, scripturecentral.org/evidence /war-deaths.
- 112. Peck, Gazeteer of Illinois, 53; Parsons, Mormon Fanaticism Exposed, 26.
- 113. Ann Paludan, *Chronicle of the Chinese Emperors* (London: Thames & Hudson, 1998), 112; Johan Norberg, *Progress: Ten Reasons to Look Forward to the Future* (London: Oneworld Publications, 2016), 95.
- 114. Chavero, Obras historicas de Don Fernando de Alva Ixtlilxochitl, 1:58-59.
- 115. Robert Patterson, "Helaman's Stripling Warriors and the Principles of Hypovolemic Shock," *Dialogue: A Journal of Mormon Thought* 35, no. 4 (2002): 135–41, dialoguejournal.com/wp-content/uploads/sbi/articles/Dialogue\_V35N04\_149.pdf.
- 116. Gregory Smith, "'All Bleeding Stops . . . Eventually': Helaman's Warriors and Modern Principles of Trauma Revisited," in *Steadfast in Defense of Faith:* Essays in Honor of Daniel C. Peterson, ed. Shirley S. Ricks, Stephen D. Ricks, and Louis C. Midgley (Orem, UT: Interpreter Foundation; Salt Lake City: Eborn Books, 2023), 223–43.
- 117. "Imagine Kaiser Wilhelm making such a request of the Allies, or vice versa!!" William Edward Biederwolf, *Mormonism Under the Searchlight* (Chicago: Glad Tidings Publishing, 1915), 19.
- 118. Scripture Central Staff, "Prearranged Battles," Evidence 182, 19 April 2021, scripturecentral.org/evidence/book-of-mormon-evidence-prearranged -battles.
- 119. Lynn V. Foster, *Handbook to Life in the Ancient Maya World* (New York: Oxford University Press, 2002), 156.
- 120. Origen Bacheler, *Mormonism Exposed, Internally and Externally* (New York: printed by the author, 1838), 22.
- 121. John L. Sorenson, "Last-Ditch Warfare in Ancient Mesoamerica Recalls the Book of Mormon," *Journal of Book of Mormon Studies* 9, no. 2 (2000): 44–53, 82–83, scholarsarchive.byu.edu/jbms/vol9/iss2/8/; Bruce H. Dahlin, "The Barricade and Abandonment of Chunchucmil: Implications for Northern Maya Warfare," *Latin American Antiquity* 11, no. 3 (2000): 283–98; David Wahl et al., "Palaeoenvironmental, Epigraphic, and Archaeological Evidence of Total Warfare among the Classic Maya," *Nature Human Behavior* 3 (2019): 1049–54; Scripture Central Staff, "Total Warfare," *Evidence* 51, 19 September 2020, scripturecentral.org/evidence/book-of-mormon-evidence-total-warfare.
- 122. Martin, Ancient Maya Politics, 229.
- 123. Dahlin, "Barricade and Abandonment of Chunchucmil," 295-96.
- 124. "These sites give no indication of the real frequency of wars: first, because battles were probably fought in rural areas and, second, because fortifications around site centers could not protect vulnerable and necessary sustaining areas outside their walls" without large storage facilities. "Moreover, wars that did not result in the annihilation of the losing side's site center would probably be archaeologically invisible, for, presumably, sites that were successful in repelling an invasion would remove the barricade, repair the damage

its construction would have entailed, and restore public access to their site center. Similarly, survivors of a defeated population who were subsequently subjugated for tribute payments and the like would presumably have removed all traces of a barricade after that population had been pacified. Thus, barricades that have survived the ravages of time all appear to have been last ditch—but vain—efforts to save their urban population from annihilation. There are many reasons for waging wars of annihilation, but all require a sacrifice of future gains in the form of tribute, forced alliances, etc. . . . In the case of Chunchucmil, the most likely scenario is that its annihilation had something to do with eliminating its strategic advantage with respect to long-and medium-distance maritime trade and salt in relation to its many north coast and inland competitors who were further removed from the large consumption centers in highland and southern and central lowland Mesoamerica." Dahlin, "Barricade and Abandonment of Chunchucmil," 296; emphasis added.

- 125. Parsons, Mormon Fanaticism Exposed, 32.
- 126. Scripture Central Staff, "The Beheading of Shiz," Evidence 17, 19 September 2020, scripturecentral.org/evidence/book-of-mormon-evidence-the-behead ing-of-shiz; M. Gary Hadfield, "Neuropathology and the Scriptures," BYU Studies 33, no. 2 (1993): 325; M. Gary Hadfield, "My Testimony, as an Academician, of God and of the Church of Jesus Christ of Latter-day Saints," Latter-day Saint Scholars Testify, FAIR, April 2010, fairlatterdaysaints.org /testimonies/scholars/m-gary-hadfield; C. S. Sherrington, "Decerebrate Rigidity, and Reflex Coordination of Movements," Journal of Physiology 22 (1898): 319.
- 127. Jeremy T. Runnells, "CES Letter: My Search for Answers to Mormon Doubts," CES Letter, updated October 2017, read.cesletter.org/.
- 128. Ann Curry and Glenn Foard, "Where Are the Dead of Medieval Battles: A Preliminary Survey," *Journal of Conflict Archaeology* 11, nos. 2–3 (2016): 61–77. Slavomil Vencl reports.

The number of bodies with wounds, be they artificially mummified or buried in peat bogs, is limited in size, space and time. Skeletons, constituting a commonly accessible source, do not exhibit causes of death by wounds in soft tissues of the body. Again, those periods when cremation was practiced widely or those regions with acid soils (where skeletons have either completely disintegrated or have been substantially corroded) yield no data at all.

Slavomil Vencl, "War and Warfare in Archaeology," *Journal of Anthropological Archaeology* 3 (1984): 127. The identification of injuries in the archaeological record is

hindered by the fact that some unhealed (i.e., fatal) injuries are difficult to distinguish from secondary, post-mortem damage to the skeletal remains. Physical anthropology also fails to distinguish injuries sustained during combat from those acquired accidentally or as a result of violence not connected with warfare. The study of these injuries is further hampered by the fact that most wounds to soft body tissue are beyond archaeological recognition (those found on bog bodies

are not only unique, but difficult to date). Another complication arises from the periods when cremation was the prevalent burial practice, as this evidence is irretrievable. Arrowheads found embedded in calcified vertebrae are extremely rare. Moreover, archaeological sources fail to provide evidence of the large number of men lost in battle, and of the other war casualties that could not be buried.

Vencl, "Stone Age Warfare," in *Ancient Warfare: Archaeological Perspectives*, ed. John Carman and Anthony Harding (Gloucestershire, UK: Sutton, 1999), 57–58.

- 129. Vencl, "War and Warfare in Archaeology," 116-32; Vencl, "Stone Age Warfare," 57-70. David Webster observes that "identifiable weaponry is seldom, if ever, recovered in Maya graves, but only the lost durable parts (e.g. stone blades) would be recoverable in any case, and these would be difficult to distinguish between other tools and ritual objects." David Webster, "Ancient Maya Warfare," in War and Society in the Ancient and Medieval Worlds, ed. Kurt A. Raaflaub and Nathan Stewart Rosenstein (Cambridge, MA: Harvard University Press, 1999), 356n20. Webster, "Review of Maya War," 181–82. Few weapons from Aztec times have survived. Take, for example, the macuahuitl, the Aztec sword. According to Ross Hassig, "there are no known surviving examples of the macuahuitl." Hassig, Aztec Warfare, 85. According to another specialist, remains of this weapon are "practically non-existent" even though the weapon is frequently mentioned in historical accounts of Aztec battles. Marco Antonio Cervera Obregón, Guerreros Aztecas (Madrid: Nowtilus, 2011), 40. Obregon notes, "If it were just from Mexican archaeological evidence alone, we might think that this weapon was hardly used by this people. Very few archaeological objects have been recovered." Marco Antonio Cervera Obregón, "The Macuahuitl: An Innovative Weapon of the Late Post-Classic in Mesoamerica," Arms & Armour 3, no. 2 (2006): 137. The number of these weapons in Mesoamerica at the time of the Spanish conquest must have numbered in the tens of thousands at the least. If surviving examples of the Aztec sword from five hundred years ago are so rare, what should we reasonably expect for those from the time of the Book of Mormon?
- 130. Key, Book of Mormon in the Light of Science, 68.
- 131. Eduard Seler, "Musical Instruments of Central America," in *Collected Works in Mesoamerican Linguistics and Archaeology, 7 vols.* (Culver City, CA: Labyrinthos, 1991), 3:78; Roberto Velásquez Cabrera, "Virtual Analysis of Maya Trumpets," *Danzas Mexicanas*, 12 February 2018, danzas mexicanas.com/analisis-virtual-de-trompetas-mayas/; Anna Stacy, "Of the Same Stuff as Gods: Musical Instruments among the Classic Maya," *Collegiate Journal of Anthropology* 2 (2014): web.archive.org/web /20150211040438/http://anthrojournal.com/issue/may/article/of-the-same-stuff-as-gods-musical-instruments-among-the-classic-maya.
- 132. Key, Book of Mormon in Light of Science, 67.
- 133. Stephen F. De Borhegyi, "Archaeological Synthesis of the Guatemalan Highlands," in *Archaeology of Southern Mesoamerica, part 1, Handbook of Middle American Indians*, ed. Gordon R. Willey (Austin: University of Texas

- Press, 1965), 6; H. E. D. Pollock, "Architecture of the Maya Lowlands," in *Archaeology of Southern Mesoamerica*, 397.
- 134. Key, Book of Mormon in the Light of Science, 67.
- 135. Scripture Central Staff, "Ladders," Evidence 168, 15 March 2021, scripture central.org/evidence/book-of-mormon-evidence-ladders.
- 136. Duran, History of the Indies of New Spain, 399; see also p. 421.
- 137. William M. Ringle, "The Art of War: Imagery of the Upper Temple of the Jaguars, Chichen Itza," *Ancient Mesoamerica* 20 (2009): 23.
- 138. Kirk Magleby, "Light from Guatemala," *Book of Mormon Resources* (blog), 3 March 2019, bookofmormonresources.blogspot.com/2019/03/light-from -guatemala.html.
- 139. "Archaeological, ethnographic, and linguistic records from Mesoamerica provide no evidence of a tent-making or tent-using tradition and, even more problematic suggest no available material for making tents." Matheny, "Does the Shoe Fit?," 299. According to Dan Vogel and Brent Metcalfe, "tents are described as being 'pitched,' portable, and reusable. Only with increasing difficulty do apologists accept the Book of Mormon at face value." Dan Vogel and Brent Lee Metcalfe, *American Apocrypha: Essays on the Book of Mormon* (Salt Lake City: Signature Books, 2002), xiii
- 140. See Scripture Central Staff, "Tents," Evidence 173, 29 March 2021, scripture central.org/evidence/book-of-mormon-evidence-tents; Duran, *History of the Indies of New Spain*, 153–55, 161–62, 177–78, 183–84, 228, 279, 377, 412.
- 141. Saenz de Santa Maria, Obras historicas de Don Francisco Antonio de Fuentes y Guzman, 2:22.
- 142. Bacheler, Mormonism Exposed, 17.
- 143. Hassig, Aztec Warfare, 63.
- 144. Fraser, Is Mormonism Christian?, 142-43.
- 145. Hassig, War and Society in Ancient Mesoamerica, 103. See also Miguel Covarrubias, Mexico South: The Isthmus of Tehuantpec (New York: Alfred A. Knopf, 1946), 195–96. The military acquisition and control of material goods and sources of wealth was a major component of Aztec policy.

# Chapter 3: Metals and Metallurgy

Some readers have viewed references to metals and early metallurgy in the Book of Mormon as out of place. Alleged anachronisms include metal objects valued by Nephi in the Old World, as well as those possessed by the Nephites in the New World. These include references to iron, steel brass, copper, metal money, chains, the availability of ores, and general metallurgy.

## 68. Steel (OW)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Nephi stated that Laban had a sword of "most precious steel" (1 Nephi 4:9). Some critics have claimed that steel was unknown at this time in the ancient Near Fast.<sup>1</sup>

**Response:** "Wrought iron heated in contact with charcoal (carbon) at high temperature produces carburized iron or steel, which is more malleable than cast iron," write Philip King and Lawrence Stager. "Steel can be hardened by quenching (practiced as early as the tenth century B.C.E.), that is, cooling off red-hot steel by sudden immersion into a vat of cold liquid."<sup>2</sup>

Archaeological examples of steel swords have been discovered from the land of Israel that date to Nephi's day and show that steel was known much earlier in the ancient Near East than was once assumed. Nephi's description of Laban's steel sword is consistent with these discoveries which were made long after the Book of Mormon was published.<sup>3</sup> A chemical analysis was completed for over sixty objects (all badly corroded) found at Iron Age Israelite centers, including bracelets, tools, knives, and weapons. "The results showed that 'ghost structures' of pearlite, clearly indicating the presence of carbon, were

present in almost all the objects (excluding three), demonstrating that almost all were made of steel."4

## 69. Early Brass (OW)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Nephi states that Laban possessed plates of brass (1 Nephi 3:3). He also described a miraculous device that the Lord provided to guide Lehi's family on their wilderness journey that was made of "fine brass" (1 Nephi 16:10). According to one critic of the Book of Mormon, "Brass was unknown before Christ with very rare exceptions. The Romans were among the first to use it and used it in coins in 20 BC. It was several centuries before brass came into common use." 5

**Response:** Brass is an alloy of copper and zinc. Biblical scholars hold that the Hebrew word translated as brass in the King James Version likely refers to copper or the copper alloy bronze. So, it is possible that some of the references to brass in the Book of Mormon refer to bronze. New discoveries, however, have shown that actual brass was developed in the ancient Near East and fashioned into valuable objects. Brass artifacts have been recovered from archaeological sites dating before the seventh century BC.6 Chemical analysis of a brass bracelet and several other fragments from Tepe Yahva in southeastern Iran (1700 BC) and two finger rings from Nuzi in northern Iraq (1350 BC) show that they were the product of deliberate brass making, leading a team of researchers to conclude that "copper zinc alloys existed" almost two thousand years before the date generally accepted for the development of the cementation process, suggesting that the history of brass is longer and more complex than is generally believed." These discoveries (figure 26) show that ancient metallurgists were deliberately making brass long before the time of Lehi.8

# 70. Early Metallurgy (NW)

**Status: Partially Confirmed** (1966–2024)

**Critics' Claim:** The Book of Mormon indicates that during Book of Mormon times gold, silver, copper, and iron metallurgy was known to at least some craftsmen (2 Nephi 5:15; Helaman 6:11; Ether 10:7, 12, 23). Some have claimed that metallurgy was unknown in pre-Columbian times until just a few centuries before the European Conquest.<sup>9</sup>



Figure 26. Bronze Phoenician bowl with Egyptian motifs. (Wikimedia Commons, s.v. "Bowl with Egyptian motifs. Phoenician, ca. 9th-8th c. BCE. British Museum," commons.wikimedia.org/wiki/File:Bowl\_with\_Egyptian\_motifs.\_Phoenician, \_ca.\_9th-8th\_c.\_BCE.\_British\_Museum.jpg.)

**Response:** Non-ferrous metallurgy was known in the Andes of South America by the early Horizon (700–200 BC).<sup>10</sup> Dorothy Hosler has established that copper metallurgy which involved complex smelting technologies was established in western Mexico by 600 AD, where copper bells, needles, tweezers, awls, rings, and other ornaments have been found.<sup>11</sup> While this is after the time of the Book of Mormon, it is much earlier than had once been thought. There are additional indications that metallurgy was known in Mesoamerica even earlier, possibly introduced through trade from South America. Figurines recovered from shaft-tombs in western Mexico dating between 200 BC and AD 200 portray earrings in styles found in northwestern South America.<sup>12</sup> In addition, John Sorenson has noted several words for metal and metal objects dating to the Preclassic period in Mexico, including words for *bell*.<sup>13</sup>

## 71. Pre-Columbian Brass (NW)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Both the Nephites and the Jaredites are said to have had brass (1 Nephi 5:15; Mosiah 11:3; Ether 10:23). Some have claimed that brass was completely unknown in the Americas before the advent of Columbus. According to one critic, there is not the slightest evidence that the aborigines of this continent anywhere knew anything about the practical use of ... brass. Its

**Response:** Cortes stated that the Aztec marketplace sold items of brass. Actual Tarascan brass (copper with 15% zinc) has now been found in western Mexico dating to pre-Columbian times. To

## 72. Iron (NW)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Both the Nephites and the Jaredites are said to have had iron (2 Nephi 5:15; Mosiah 11:8; Ether 10:23). Some have claimed that iron did not exist in the Americas during the time of the Book of Mormon.<sup>18</sup>

**Response:** Various kinds of natural iron and meteoric iron were known in ancient America, and from as early as Olmec times in Mesoamerica.<sup>19</sup>

# 73. Iron Working (NW)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Book of Mormon peoples are said to have worked in all manner of iron (2 Nephi 5:15; Mosiah 11:8; Ether 10:23). Some critics have claimed that there is no evidence of iron working in pre-Columbian times.<sup>20</sup>

**Response:** Several kinds of iron were worked and crafted in various ways in pre-Columbian Mesoamerica.<sup>21</sup> During the Postclassic era, the highland Maya of Guatemala collected tribute iron and other metals. "They were worked into ornaments and employed in a variety of decorative manners."<sup>22</sup> Furthermore, some Aztec nobles possessed rare knives and daggers crafted from meteoric iron which were highly prized.<sup>23</sup> A Mexican tradition relates that Cuanomoat and Ceutarit, pre-Columbian ancestral cultural heroes of several west Mexican

tribes, "taught them to make fire and also gave them machetes or cutlasses of iron."<sup>24</sup>

## 74. Practical Use of Iron (NW)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that that there is no evidence that pre-Columbian peoples understood any of the practical uses of iron. According to one, "there is not the slightest evidence that the aborigines of this continent anywhere knew anything about the practical use of iron."<sup>25</sup>

**Response:** Research on Mesoamerican iron objects from Olmec (figure 27) and subsequent Maya and Aztec times indicate a clear awareness of the practical value and use of iron. Some examples of worked iron objects date to Olmec times. Pre-Columbian mirrors were crafted from iron hematite and iron pyrite and are among the most remarkable pre-Columbian objects that have survived (figure 28). These have been the subject of a recent detailed study by specialists. The earliest known examples are large round Olmec mirrors of polished hematite ore. "Words and photographs cannot convey a real feel for the technical quality and artistic power of these mirrors—they possess a remarkable appeal for both the eye and the mind."

Other examples, recovered from La Venta, "have a gracefulness, dignity, and perfection that makes it hard to think of them as . . . only ornamental." Even though apparently worked by hand, "the concavity on the front is as carefully ground as many modern optical lenses, and the optical qualities of some allow them to be used to ignite fires and project 'camera lucida' images on flat surfaces." Examples of similar iron mirrors are also known from Costa Rica, some of which date as early as 300 BC in that region.

Mayan artisans likewise skillfully worked pieces of iron pyrite into mosaic mirrors. Two prominent Mayanists described several rare specimens recovered from Nebaj Guatemala as "marvels of painstaking craftsmanship." An analysis by Emiliano Gallaga indicates that such mirrors represent a tremendous investment in time and effort. "We estimate an average of 900–1,300 hours, or 110–160 days, of work for a single artisan to make a single pyrite mirror.... This amount of time could be reduced if people were very skilled after lots of practice or if multiple people were working on the same object and divided the work of the steps of manufacture." Such objects would have



**Figure 27.** Olmec hematite mirror from Guerrero. (Linda Schele, s.v. "Guerrero," research.famsi.org/schele\_photos\_list.php?search=\*Guerrero\*.)

been rare but highly prized elite items, "probably restricted to nobles who had the power to commission such objects from royal artisans." <sup>34</sup>

Archaeologists working at Teotihuacan excavated thousands of objects from a tunnel underneath the Temple of the Feathered Serpent which had once been deposited there as offerings. Recent analysis has suggested that red and yellow substances found on the eyes of masks and disk-like ornaments (called *Tecazuitlapillis*) found there "are not pigments or adhesives as some researchers have mentioned, but may actually be decomposed iron-ore minerals originally used for their reflective qualities" which, through the long process of oxidation or hydration, were previously unrecognized as iron.<sup>35</sup>

Due to oxidation and other factors, many iron objects have not survived or have not been recognized and identified by archaeologists. Based upon what has been recovered so far, however, it is clear that pre-Columbian peoples were able to work and produce fine objects from iron ores for a variety of practical and religious uses, just as the Book of Mormon suggests.<sup>36</sup>



**Figure 28.** Olmec hematite seated dwarf figurine. (Elizabeth P. Benson and Beatriz de la Fuente, *Olmec Art of Ancient Mexico* (National Museum of Art, Washington, DC, 1996), figure 60.)

# 75. Iron Smelting (NW)

Status: Unconfirmed

**Critics' Claim:** References to the ability to make steel in the text suggest that Book of Mormon peoples could smelt iron (Ether 7:9). Some critics have claimed that there is no evidence for iron-smelting in pre-Columbian times.<sup>37</sup>

**Response:** There is currently no evidence for iron smelting in pre-Columbian times.<sup>38</sup>

## 76. Steel (NW)

**Status: Unconfirmed** 

**Critics' Claim:** Prince Shule, in the book of Ether, is said to have made steel swords (Ether 7:9). Critics have claimed that references to pre-Columbian steel are anachronistic for ancient America.<sup>39</sup>

**Response:** There is currently no evidence for pre-Columbian steel.

# 77. Abundance of Ores, Copper, Gold, Silver, and Iron Together (NW)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** The Book of Mormon indicates that its people had access to a variety of metals such as gold, silver, copper, and iron (1 Nephi 18:25; 2 Nephi 5:15; Mosiah 11:3, 8; Ether 10:23). Some have claimed that these metals are not found together anywhere in the Americas.<sup>40</sup>

**Response:** Gold, silver, copper, and iron were all known and valued in pre-Columbian Mesoamerica in contrast to many other regions in the New World. In fact, there were words for each of these metals in pre-Columbian languages. In Guatemala, the Maya "were well acquainted with several metals. Gold and silver were classed under the general name *puvak*, and distinguished as white and yellow; iron and copper were both known as *ghigh*, and distinguished also by their color. The metals formed an important element of their riches and are constantly referred to as part of the tribute paid to the rulers. They were worked into ornaments, and employed in a variety of decorative manners."

# 78. Forges or Furnaces (NW)

Status: Partially Confirmed (1966–2024)

**Critics' Claim:** The existence of metallurgy among the Nephites and the Jaredites implies that they would have had forges or furnaces of some kind. Some critics claim that pre-Columbian peoples did not have forges or furnaces of any kind.<sup>43</sup>

**Response:** Ancient furnaces used to smelt metal could be a relatively simple affair.<sup>44</sup> During the Postclassic period in Mexico, metal workers cast some metals in small crucibles. According to Warwick Bray, "for working metal the Aztec smith used a furnace heated by charcoal,

the draught being supplied by a man blowing through a tube into the embers."<sup>45</sup> As portrayed in an illustration from the Florentine Codex, these clay furnaces were rather small.<sup>46</sup> So while they clearly would have smelted metal somewhere, the small nature of such crucibles may not be easily located and identified by the archaeologist.

## 79. Metal Money (NW)

**Status: Confirmed** (1845–1965)

**Critics' Claim:** Pieces of metal money are mentioned in the Book of Mormon (Alma 11:4–19). Some have claimed that metal money of any kind was unknown in pre-Columbian times. "All the known media of exchange of the Maya have been identified, not only in their own land but also along the ancient trade routes, but never metallic money."<sup>47</sup>

**Response:** Several kinds of metal money were used in Mesoamerica and South America in pre-Columbian times (see figure 29).<sup>48</sup>



**Figure 29.** Axe-money from Mexico at the Prehistory Museum of Valencia. (*Wikipedia*, s.v. "Axe-monies," en.wikipedia.org/wiki/Axe-monies.)

## 80. Gold Money

**Status: Partially Confirmed** (1845–1965)

**Critics' Claim:** The Nephites are said to have had pieces of gold money (Alma 11:4–19). Some have claimed that gold was never used for money in pre-Columbian times.<sup>49</sup>

**Response:** Historical sources indicate that the Aztecs used quills filled with gold dust as one of several mediums of exchange.<sup>50</sup> Alberto Francisco Pradeau suggests that small gold planchets representing humans, animals, or deities may have also been used by Aztec merchants in trade.<sup>51</sup> There was a word for *money* in Proto-Mixtecan, a language spoken in central Mexico circa 1000 BC, which also meant *bright*, *shining*.<sup>52</sup> The word is related to other words meaning *coppercolored*, *yellow*,<sup>53</sup> or *precious metal*,<sup>54</sup> thus hinting at the possibility that gold was being used as a form of money from very early times.

## 81. Silver Money

Status: Unconfirmed

**Critics' Claim:** The Nephites are said to have had pieces of silver money (Alma 11:4–19). Some have claimed that there was no silver money in pre-Columbian times.<sup>55</sup>

**Response:** Silver was a valuable and utilized metal in ancient Mesoamerica, and at certain times was demanded as tribute.<sup>56</sup> There is currently no evidence that silver was used as money in pre-Columbian times. It should be noted, however, that "scholars have estimated that 95 percent of Aztec gold, silver, and copper objects were eventually melted to bullion."<sup>57</sup>

# 82. Copper (Early)

**Status: Partially Confirmed** (1966–2024)

**Critics' Claim:** The Nephites and the Jaredites worked in copper (1 Nephi 18:25; 2 Nephi 5:15; Jarom 1:8; Mosiah 8:10; 11:3, 8, 10; Ether 10:23). Some critics have claimed that there is no evidence for the early use of copper in pre-Columbian times before the Postclassic period.<sup>58</sup>

**Response:** Although still some 200 years late, copper metallurgy can now be dated to around AD 600 in western Mexico.<sup>59</sup>

#### 83. Chains

Status: Partially Confirmed (1966–2024)

**Critics' Claim:** The text refers to "chains" (Alma 5:7, 9–10; 12:6, 11; 26:14). Some have claimed that metal chains were unknown in pre-Columbian times.<sup>60</sup>

**Response:** First, it should be recognized that the Book of Mormon's discussions of chains in New World contexts is consistently symbolic. Rather than referencing items of material culture, "chains" represented the captivating powers of death and hell. It is thus possible that "chains" was a carry-over concept from the Nephites' Hebrew past, and that its basic meaning was preserved on the brass plates. Furthermore, the Book of Mormon doesn't specify the nature and composition of these chains, whether they are metallic links or simply restraining bands of some other material. In any case, archaeological examples of ornamental chains are attested from the Postclassic period in Mexico. 61

# **Summary of Results**

From 1830 until 1844, five items relating to metals and metallurgy were mentioned by writers and were unconfirmed (figure 30). From 1845 until 1965 the total number rose to twelve (figure 31), one of which was confirmed, three partially confirmed, and eight unconfirmed. By 2024 sixteen items had been mentioned, eight were confirmed, five partially confirmed, and three were unconfirmed (figure 32).

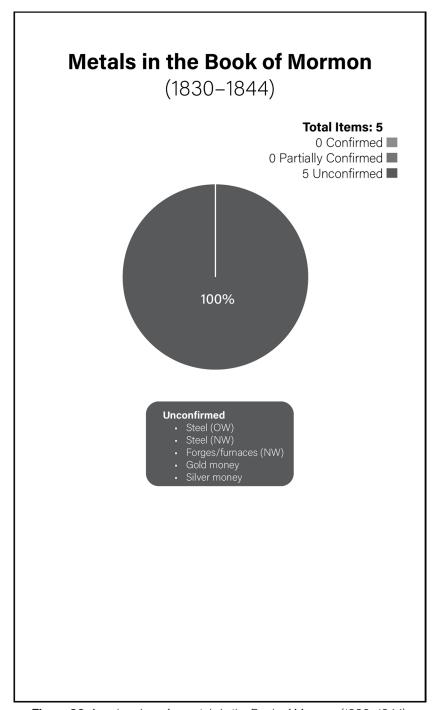


Figure 30. Anachronisms for metals in the Book of Mormon (1830–1844).

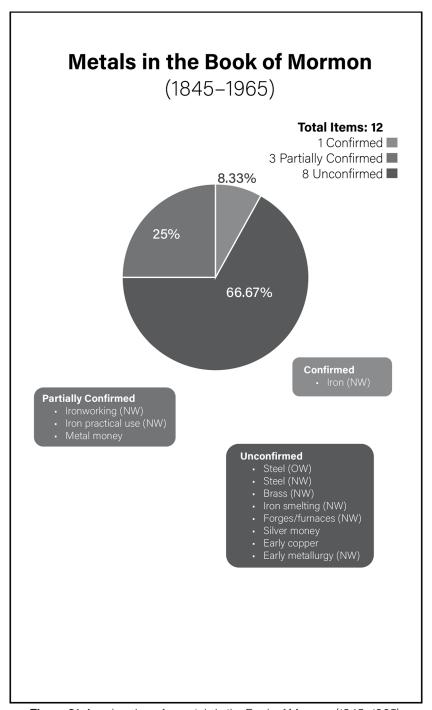


Figure 31. Anachronisms for metals in the Book of Mormon (1845–1965).

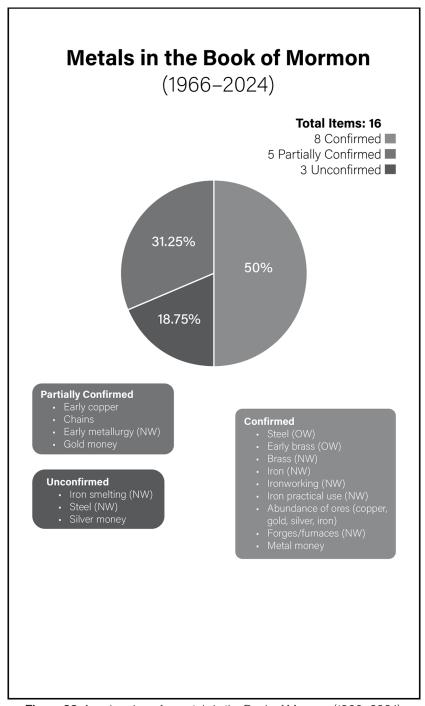


Figure 32. Anachronisms for metals in the Book of Mormon (1966–2024).

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- 18. M. T. Lamb, The Golden Bible, or, The Book of Mormon: Is It From God? (New York: Ward & Drummond, 1887), 300–302; G. Townshend, Why I Am Not A Mormon (Denver: Alexander & Meyer, 1907), 14; Kinney, Islam of America, 66; Biederwolf, Mormonism under the Searchlight, 21; Charles A. Sundberg, The Mysterious Book of Mormon (Sandy, UT: printed by the author, 1917), 8–9, 13; Arbaugh, Revelation in Mormonism, 17; Budvarson, Book of Mormon

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- 34. Emiliano Gallaga, "How to Make a Pyrite Mirror," in Gallaga and Blainey, Manufactured Light, 43.
- 35. Julie Gazzola, Sergio Gomez Chavez, and Thomas Calligaro, "Identification and Use of Pyrite and Hematite at Teotihuacan," in Gallaga and Blainey, *Manufactured Light*, 121.
- 36. For additional uses of iron, see Scripture Central Staff, "Decorative Iron," Evidence 356, 11 July 2022, scripturecentral.org/evidence/decorative-iron.
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- 38. Evidence of smelting is not always apparent in the archaeological record. Paul Craddock and Janet Lang observe,

The evidence for smelting often proved disappointing: by and large intact smelting installation do not survive, and at best the evidence is enigmatic and at worst non-existent. For much of the earliest periods of metal production, there is virtually no tangible evidence of the smelting processes, as exemplified here at sites in Britain, the Middle East and in the Balkans, leading to suggestion that the ores must have been smelted somewhere else. The problem is that this somewhere else never seems to materialize.

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- 46. Bray, Everyday Life of the Aztecs, 128, figure 52. For recent evidence of furnace smelting during the Post-Classic in west Mexico, see Maldonado and Rehren, "Early Copper Smelting at Itziparatzico, Mexico," 1998–2006.
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- 48. See Dorothy Hosler, Heather Lechtman, and Olaf Holm, *Axe-Monies and Their Relatives* (Washington, DC: Dumbarton Oaks Research Library and Collection, 1990); Hosler, *Sounds and Colors of Power*, 109–10, 121, 130–32, 156, 166–68, 171–74; Hosler, "Metal Production," 167–69; Kim Cullen Cobb et al., "The Craft, Use, and Distribution of Axe-Monies in Mesoamerica," in *Waves of Influence: Pacific Maritime Networks Connecting Mexico, Central America, and Northwestern South America*, ed. Christopher S. Beekman and Collin McEwan (Washington, DC: Dumbarton Oaks Research Library and Collection, 2022), 347–415.
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- 53. Calvin Rensch, *Comparative Otomanguean Phonology* (Bloomington, IN: Indiana University Publications, 1976): 266–67.
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- 55. Howe, Mormonism Unvailed, 72; Bacheler, Mormonism Exposed, Internally and Externally, 15.
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- of Mesoamerica Influenced the Socioeconomic Development of an Empire, from Its Emergence to Its Downfall," *Bulletin of the Geological Society of Greece, Special Publications* 7 (2019): 671: "In this research we... document how the Aztecs mined for or collected as tribute gold, silver, copper, turquoise, jadeite and obsidian, how the availability of such commodities shaped their civilization and how in the end lead to their demise."
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# Chapter 4: Ancient Culture

Another set of alleged anachronisms can be grouped under the category of ancient culture and cultural practices mentioned in the Book of Mormon. These include items relating to religious practices, institutions, physical structures, agriculture, tools and technologies, and law. These have been contrasted negatively with known cultural settings in ancient America and the ancient Near East.

#### 84. Jew as a Preexilic Term

**Status: Confirmed** (1845–1965)

**Critics' Claim:** Some critics have claimed that the term *Jew*, which Nephi uses in reference to the people of Jerusalem, is incorrect and that that term was not applied until several centuries later.<sup>1</sup>

**Response:** The term *Jew* can be traced to the Hebrew word *Yehudi*, and — contrary to the previously mentioned assumption — was actually used during preexilic times. It was originally applied to members of the tribe of Judah, but after the division of Solomon's Kingdom (into the northern kingdom of Israel and the southern kingdom of Judah), the term was applied more generally "to *all* residents of the Southern Kingdom, irrespective of their tribal status." The Prism of Sennacherib King of Assyria (figure 33) refers to "Hezekiah the Jew."

# 85. Sacrifice Outside the Temple

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that it would have been inappropriate for a righteous Israelite to offer sacrifices outside of the temple of Jerusalem in Lehi's day.<sup>4</sup>

Response: Documents discovered among the Dead Sea Scrolls

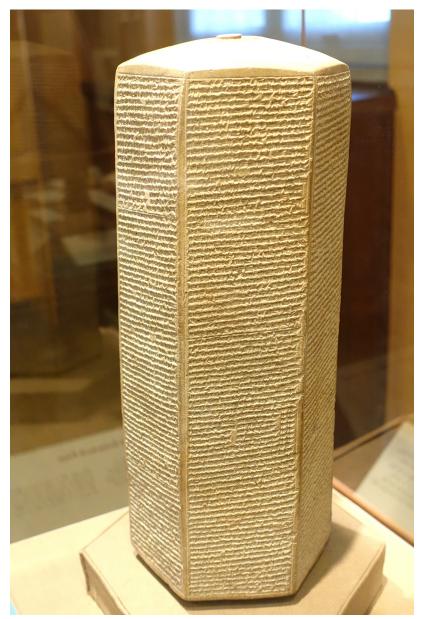


Figure 33. Side two of a six-sided clay prism, written on behalf of Sennacherib, king of Assyria. (Wikimedia Commons, s.v. "Six-sided clay prism, side 2, written on behalf of Sennacherib, king of Assyria, and containing narratives of his military campaigns, 704–681 BC," commons.wikimedia.org/wiki/File:Six-sided\_clay\_prism,\_side\_2,\_written\_on\_behalf\_of\_Sennacherib,\_king\_of\_Assyria,\_and\_containing\_narratives\_of\_his\_military\_campaigns,\_704-681\_BC\_-\_Oriental\_lnstitute\_Museum,\_University\_of\_Chicago\_-\_DSC07601.JPG.)

indicate that sacrifices were permitted outside the land of Israel if the children of Israel were more than three days from the Jerusalem temple. Significantly, Nephi indicates that when his family offered sacrifice they were more than three days journey from land of Jerusalem (1 Nephi 2:6), which is consistent with that stipulation.<sup>5</sup>

#### 86. No Pre-Columbian Christians

Status: Unconfirmed

**Critics' Claim:** Some have dismissed the Book of Mormon because no evidence for pre-Columbian Christianity has been identified by archaeologists.<sup>6</sup>

**Response:** There is currently no archaeological or historical evidence for pre-Columbian Christianity. One may ask, however, what exactly would constitute evidence for an ancient version of Christianity in the archaeological record if it once had existed in ancient America. As one scholar observes:

The history, especially of Southeast Asia, shows how easily religions may disappear or be submerged in local cults. Amongst the Cham of Annam, Hinduism and Buddhism had been firmly established for almost a millennium and a half from the second to fifteenth century. Yet Buddhism disappeared completely after the fall of the Cham kingdom in 1471 and Hinduisim declined so rapidly that its influence at present is hardly recognizable. Amongst the non-Musslim Badui and Tenggerese of Java, traces of Hinduism and Buddhism are exceedingly slight, although these must have been the predominant religions as late as the sixteenth century. The Batak of Sumatra were under Buddhist and Hindu influences from probably the third to fourteenth century, but in the nineteenth century they were pagans.<sup>7</sup>

Brant Gardner also observes that Old World Christians in antiquity adopted symbols from Greek and Roman culture to portray many Christian ideas in ancient art and architecture. New World Christians would not have used these in an ancient American setting but could only have used pre-Columbian cultural iconography and architecture, whose meaning may not be obvious to the modern observer. Hence "the absence of Old World Christian iconography is not evidence of the absence of Book of Mormon Christianity."<sup>8</sup>

## 87. Feasts, Customs, Festivals in the Text

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some claim that the Book of Mormon provides no evidence that its writers had a knowledge or understanding of any of the customs, feasts, and festivals of ancient Israelite culture.<sup>9</sup>

**Response:** Although the Book of Mormon is only an abridgment with a narrow purpose of leading people to Christ, there is abundant evidence that the ritual culture of ancient Israel provides the context for much of its teaching and history.<sup>10</sup>

## 88. 600 Year Chronology

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that the Book of Mormon prophecy that Christ would come 600 years after Lehi left Jerusalem does not fit the historical timeline. If Lehi left Jerusalem in the first year of the reign of Zedekiah (597–596 BC) it would be less than 600 years between Lehi's departure and the birth of Jesus.<sup>11</sup>

**Response:** If one assumes that Jesus was born around 5–4 BC, as many scholars today believe, Lehi's 600-year prophecy to his children fits remarkably well with the ancient Mesoamerican 360-day "year." <sup>12</sup>

# 89. Justification for Killing Laban

Status: Confirmed (1966–2024)

**Critics' Claim:** Some have claimed that Nephi's killing of Laban was an act of murder that would be inappropriate for an ancient prophet.<sup>13</sup>

**Response:** While the description of Nephi's killing of Laban would not be justified under modern Western legal standards, Nephi was an *ancient* Israelite prophet, not a modern one. Some killings, even some that occurred outside of warfare, were considered justified in ancient Israel. Scholarship on the laws of homicide indicate that Nephi's slaying of Laban was a justified killing under the Law of Moses.<sup>14</sup>

#### 90. Seantum's Confession

Status: Confirmed (1966–2024)

Critics' Claim: Some have claimed that the account of Seantum's

confession for the murder of his brother is inconsistent with proper jurisprudence.<sup>15</sup>

**Response:** John W. Welch has shown that Seantum's confession, although inadmissible under modern English law, would have been acceptable under the Law of Moses.<sup>16</sup>

## 91. Temples Outside Jerusalem

**Status: Confirmed** (1845–1965)

**Critics' Claim:** The idea of an Israelite, such as Nephi, building and constructing a temple outside Jerusalem (see 2 Nephi 5:16) seemed absurd to many early readers of the Book of Mormon.<sup>17</sup>

**Response:** We now know of several examples of Israelite temples that were constructed outside of Jerusalem including the Jewish Fortress at Tel Arad in southern Judah and Elephantine, which was built by a group of Jewish colonists in Egypt.<sup>18</sup> Perhaps most surprising is the recent discovery of a temple at Tel Moza, only a few miles from Jerusalem itself.<sup>19</sup>

#### 92. Non-Levitical Priests

Status: Confirmed (1966-2024)

**Critics' Claim:** Some have claimed that the idea of a non-Levitical priesthood, as represented in the Book of Mormon before the time of Christ (2 Nephi 5:26; Mosiah 29:42), is inaccurate.<sup>20</sup>

**Response:** Many scholars now recognize that, in addition to an Aaronic priesthood, there were also non-Levitical priests. <sup>21</sup> This can be seen in kings who sometimes functioned in a priestly role. Non-Levitical prophets also seem to adopt priestly roles or are described in priestly terms by biblical writers. <sup>22</sup>

# 93. Synagogues by 600 BC (OW)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that Nephi's reference to synagogues (2 Nephi 26:26) is historically inaccurate because the synagogue was unknown until several centuries later in the ancient Near East.<sup>23</sup>

**Response:** Scholarship currently indicates that early forms of what eventually became synagogue worship by the time of Christ actually

began before the destruction of the first temple in 587 BC. This would be consistent with Nephi's statement.<sup>24</sup>

## 94. Synagogues (NW)

Status: Unconfirmed

**Critics' Claim:** Some have claimed that no archaeological evidence for pre-Columbian synagogues have ever been found.<sup>25</sup>

**Response:** While it is true that no formally designated synagogues have been found in ancient America, there are many examples of buildings found by archaeologists that could easily have served in the capacity of a synagogue or non-sacrificial place of worship. Moreover, it is not clear how one would determine whether it was once a synagogue or not.<sup>26</sup> Without some inscription explicitly describing the location as a Hebrew-influenced place of worship, archaeologists would likely just label such a structure as a shrine or temple.

#### 95. Native Traditions

Status: Confirmed (1966–2024)

**Critics' Claim:** Some have claimed that there are not native American traditions that could be seen as supportive of the Book of Mormon.<sup>27</sup>

**Response:** There are many examples of traditions that can be viewed as supportive of the Book of Mormon.<sup>28</sup>

#### 96. Civilization

**Status: Confirmed** (1829–1844)

**Critics' Claim:** Some early critics claimed that the Book of Mormon was inconsistent with what was known about pre-Columbian cultures, which were widely believed to be uncivilized at the time.<sup>29</sup>

**Response:** In 1841 John Lloyd Stephens and Frederick Catherwood published *Incidents of Travel in Central America, Chiapas, and Yucatan*, which introduced many English readers to the Maya ruins of Mesoamerica.<sup>30</sup> The volumes included multiple illustrations, as shown in figure 34. As Stephen's biographer observed, "The acceptance of an 'Indian civilization' demanded, to an American living in 1839, an entire reorientation" as most Americans had never viewed native peoples in such a way.<sup>31</sup> Evidence for the sophistication of pre-Columbian civilization in ancient Mesoamerica is now widely acknowledged.<sup>32</sup>





Figure 34. Main temple at Tulum, by Frederick Catherwood. (Frederick Catherwood, Views of Ancient Monuments, en.wikipedia.org/wiki /Frederick\_Catherwood#/media/File:TulumCatherwood1844.jpg.)

## 97. Large Cities

Status: Confirmed (1829–1844)

**Critics' Claim:** Some early critics claimed that there is no evidence that large cities (Mosiah 27:6) existed in pre-Columbian times. 33

**Response:** Beginning with reports in the 1830s and the widely published works of Stephens and Catherwood, and continuing until the present day, there is now abundant evidence that cities, some of very significant size, existed in pre-Columbian times.34

#### 98. Book of Mormon Cities Identified

Status: Unconfirmed

Critics' Claim: No Book of Mormon cities have been identified. 35

**Response:** While this is true, the challenge is not the absence of ancient cities dating to the time of the Book of Mormon, but rather identifying cities in locations consistent with the description in text. For most cases, it is currently impossible to determine what cities were called during the time of the Book of Mormon. As archaeologist John Clark explains, many examples of Mesoamerican cities and artifacts

have been found, but they are masked by modern designations and labels such as Olmec, Maya, and so forth. "If we stumbled onto Zarahemla, how would we know? The difficulty is not with evidence but with epistemology."<sup>36</sup>

## 99. Temples

**Status: Confirmed** (1966–2024)

Critics' Claim: Some have claimed that temples (Alma 16:13) were

unknown in ancient America.37

Response: There are numerous examples of temples in ancient

America that have been identified by archaeologists. 38

## 100. Kings

**Status: Confirmed** (1966–2024)

Critics' Claim: Some have claimed that pre-Columbian peoples did

not have kings (1 Nephi 9:4).39

Response: There were kings in ancient Mesoamerica going back to

Book of Mormon times.<sup>40</sup>

#### 101. Palaces

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that palaces, which are mentioned in the Book of Mormon (Mosiah 11:9; Alma 22:2), did not exist in pre-Columbian times.<sup>41</sup>

**Response:** Many examples of ancient Mesoamerican palaces have been identified by archaeologists (see figure 35).<sup>42</sup>

#### 102. Prisons

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that prisons (Mosiah 7:7; Alma 21:13-15; 26:29; Helaman 5:21) were unknown in pre-Columbian times.<sup>43</sup>

**Response:** Evidence shows that there were various kinds of prisons in ancient Mesoamerica.<sup>44</sup>



**Figure 35.** Palenque palace and watch tower. (*Wikimedia Commons*, s.v. "The Palace and watch tower – Palenque – panoramio," commons.wikimedia.org /wiki/File:The\_Palace\_and\_watch\_tower\_-\_Palenque\_-\_panoramio.jpg.)

### 103. Barns

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that barns, which are mentioned by Jesus (3 Nephi 1:26), did not exist in pre-Columbian times.<sup>45</sup>

Response: Barns or buildings for storing grain and other agricultural products were known. Among the Aztecs, "One of the chief tasks of the native government was the accumulation of sufficient reserves in the granaries to cope with these disasters [swarms of locusts, rodents, and excessive rain and snow]."46 They were also known to the Maya. "Thatched and adobe storehouses have been excavated at Ceren, and each was associated with a home, suggesting household use. The storerooms contained bins for ears of maize, as well as baskets, ceramic pots, and gourds for storing maize kernels, beans, chili peppers, and other items. All these storage containers were kept off the floor to keep them dry; stones elevated pots, and baskets were hung from thatched roofs. Chili peppers, strung together in what today are called *ristras*, hung from kitchen rafters. In some regions today, grains often are stored in wooden lattice bins built into trees, where they are

kept dry and out of reach of many animals. Such storage bins would not survive from preconquest times."47

#### 104. Glass

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Moroni states that the sixteen stones that the Lord touched with his finger "were white and clear, even as transparent glass" (Ether 3:1). Some critics have claimed that reference to glass in the Book of Mormon is inaccurate and that glass was not known in the ancient world until more recent times.<sup>48</sup>

**Response:** Scholars are currently uncertain as to when the first glass was made, but several kinds of glass were being fabricated in Egypt from an early time and in Mesopotamia from ancient times. "Archaeologists have found glass beads dating to as early as the third millennium BCE. Glazes based on the same materials and technology date earlier still." Examples of Egyptian glass dating from the Bronze Age display various colors including red, green, yellow, and several shades of blue, some of which are translucent. <sup>50</sup>

What has been termed as *glass* can also be found in the New World. Most prominent is volcanic glass, which played a crucial role in Mesoamerican ritual and economy.<sup>51</sup> According to Helen Haines and Michael Glascock, "Obsidian is a naturally occurring glass created through pyroclastic volcanic activity."<sup>52</sup> As described by another scholar, Ecuadorian blades made from obsidian were "as transparent as window glass."<sup>53</sup>

Mesoamerica cultures also valued "glass-like shards" of quartz crystal for both its practical and divinatory value.<sup>54</sup> Some samples could easily be described as "white," "clear," and "transparent," as mentioned in the book of Ether. When speaking to Mexican informants in the sixteenth century, the Catholic historian Bernardino de Sahagún was told about crystal, which was described to him as follows: "It is translucent, very transparent, clear. It is clear, very clear, exceedingly clear."<sup>55</sup>

#### 105. Arts

Status: Confirmed (1966-2024)

Critics' Claim: The Book of Mormon says that the people flourished

in "every kind of art" (Helaman 12:2), but some have claimed that there is no evidence for the arts in pre-Columbian times. <sup>56</sup>

Response: Examples of pre-Columbian art are now abundant.<sup>57</sup>

## 106. Heliocentric Astronomy

Status: Unconfirmed

**Critics' Claim:** Mormon's reference to the idea that the earth moves around the sun (Helaman 12:15) seems to reflect a heliocentric view of astronomy that did not exist in pre-Columbian times.<sup>58</sup>

**Response:** There is currently no evidence for a heliocentric view in pre-Columbian times. However, it can't be gleaned from the text how culturally prominent this view was or where Mormon derived it.

#### 107. Lunar Calendar

**Status: Confirmed** (1966–2024)

**Critics' Claim:** The Book of Mormon makes reference to the people of Zarahemla counting moons (Omni 1:21), but some have claimed that ancient American peoples were unfamiliar with the lunar calendar.<sup>59</sup>

**Response:** The people of Zarahemla, who encountered the wounded king Coriantumr, would have been familiar with a lunar calendar as part of the Israelite heritage. <sup>60</sup> Some Mesoamericans also appear to have used a lunar calendar. <sup>61</sup>

## 108. Early Cement

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that cement (Helaman 3:7, 11) was absent from the Americas in pre-Columbian times.<sup>62</sup>

**Response:** "When I was a young unmarried man," recalled President Heber J. Grant in 1929,

another young man who had received a doctor's degree ridiculed me for believing in the Book of Mormon. He said he could point out two lies in that book. One was that people had built their homes out of cement and that they were very skillful in the use of cement. He said there had never been found and never would be found, a house built of cement by the ancient inhabitants of this country, because the people

in that early age knew nothing about cement. He said that should be enough to make one disbelieve the book. I said: "That does not affect my faith one particle. I read the Book of Mormon prayerfully and supplicated God for a testimony in my heart and soul of the divinity of it, and I have accepted it and believe it with all my heart." I also said to him, "If my children do not find cement houses, I expect that my grand-children will." He said, well what is the good of talking to a fool like that?<sup>63</sup>

Cement was indeed known in pre-Columbian Mesoamerica (see figure 36), and archaeologists have now confirmed it.<sup>64</sup>

## 109. Archaeological Evidence

Status: Confirmed (1966-2024)

**Critics' Claim:** Some make the broad claim that there is no archaeological evidence for the account in the Book of Mormon.<sup>65</sup>

**Response:** Critics who make this claim often never specify what would constitute such evidence, nor are the challenges of assessing



**Figure 36.** Cement was used in ancient sites such as Teotihuacan. (Juan Carlos Fonseca Mata, *Wikimedia Commons*, s.v. "Ciudadela en Teotihuacan," commons .wikimedia.org/wiki/File:Ciudadela\_en\_Teotihuacan.jpg.)

archaeological evidence regularly addressed. While there are many things mentioned in the Book of Mormon that cannot at present be verified through archaeological evidence, other things can be. Latterday Saints can point to many examples from archaeology—including many items mentioned in this paper—that lend plausibility to the account in the Book of Mormon.<sup>66</sup>

#### 110. Chariots

Status: Partially Confirmed (1845–1965)

**Critics' Claim:** Chariots are mentioned during the reign of the Nephite judges (a span of just over a century), once during the preparation for a royal feast (Alma 18:9-10), and later in preparation for a siege as the people were gathering "provisions" (3 Nephi 3:22). Some have claimed that the references to chariots in the Book of Mormon are out of place.<sup>67</sup>

**Response:** The sparse references to "chariots" in the Book of Mormon may imply a limited use over a relatively brief period in Book of Mormon history. Reference to chariots in association with horses and cattle may suggests that some of these animals were used to pull such conveyances. However, they are never said to have been used in battle, nor are they directly associated with the repertoire of weaponry mentioned in the text. Thus, the view that they were battle chariots is unlikely.<sup>68</sup>

Beginning in the late nineteenth century, archaeologists working in central Mexico discovered miniature ceramic wheeled vehicles, which early experts called "chariots" or "toys" (figure 37). <sup>69</sup> They have been found in funerary contexts, possibly suggesting a religious or ritual purpose from the Classic and Postclassic periods, and they bear a remarkable resemblance to similar objects known from Mesopotamia and central Asia. This persuaded some scholars that the Mesoamerican objects may have been introduced from the Old World. <sup>70</sup> Whatever the case, these objects clearly show that some ancient Mesoamericans had a knowledge of the wheel, which is a puzzle since currently there is little evidence to suggest that the wheel had any significant influence on the development of pre-Columbian civilization.

If the "chariots" described in the Book of Mormon do refer to wheeled vehicles, the possibility that their remains could have become lost to the archaeological and historical record should not



**Figure 37.** Ceramic example of a wheeled figurine from Veracruz, Mexico, circa 450–650 AD. (Los Angeles County Museum of Art, rawpixel.com /image/11797054/dog-wheeled-platform.)

be discounted (especially if their production and use was limited to begin with). During one of the battles between the Spanish forces of Alvarado and the highland Maya of Guatemala, it was reported that the Maya had what might be described as ammunition carts on rollers which could be moved from place to place as needed during the battle. Although they were known and used just a few hundred years ago, examples of such carts have yet to be found or identified by archaeologists.

#### 111. Pearls

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that pearls (4 Nephi 1:24) were unknown in pre-Columbian times.<sup>72</sup>

**Response:** Pearls were a valued item of trade in ancient Mesoamerica.<sup>73</sup>

#### 112. Silk

**Status: Confirmed** (1966–2024)

Critics' Claim: Some have claimed that silk (Alma 1:29; Ether 9:17;

10:24) was unknown in pre-Columbian times.74

Response: Both silk and silk-like fabrics were known in pre-Colum-

bian Mesoamerica.75

#### 113. Linen

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that references to linen (Alma 1:29; Ether 9:17; 10:24) in an ancient pre-Columbian text are out of place.<sup>76</sup>

**Response:** Linen can refer to cloth made of flax or hemp but also may reference something that resembles linen cloth. Evidence from pre-Columbian Mesoamerica shows that there were fabrics that could be considered linen.<sup>77</sup>

#### 114. All Manner of Grain

Status: Confirmed (1966–2024)

**Critics' Claim:** Some have claimed that grain (Mosiah 11:3; Alma 11:7; Helaman 11:17; Ether 9:17) was unknown in pre-Columbian times.<sup>78</sup>

**Response:** We now know that there were a variety of grains available in pre-Columbian times. These include, in addition to pre-Columbian barley, two species of amaranth, huauzontle, chia, millet, and three kinds of teosinte.<sup>79</sup>

#### 115. Wheat

Status: Unconfirmed

Critics' Claim: Some claim that wheat (Mosiah 9:9) was unknown in

pre-Columbian times.80

**Response:** No examples of pre-Columbian wheat have thus far been identified by archaeologists.

## 116. Barley

**Status: Confirmed** (1966–2024)

Critics' Claim: Some have claimed that barley (Mosiah 9:9) was

unknown in pre-Columbian times. One author wrote, "It is the somewhat stubborn fact that *barley* was never found upon either of these western continents until imported by Europeans in modern times!"81 Another critic asked.

But where is the proof of this extraordinary assertion? It seems very probable that, if Americans had once had wheat and barley, they would not have given up their cultivation and use, and yet they were not to be found in America when the Europeans came.

He then noted that while ancient pre-Columbian sites were known in Peru, Arizona, and Ohio, for example, "not a vestige of wheat or barley has ever been found" at any of these sites. <sup>82</sup> "In this book we are told . . . that barley was among the produce of the earth; whereas all respected scholarship is absolutely positive in its authority" that barley is only a modern New World crop. <sup>83</sup> "The only grain known in America was maize." <sup>84</sup> "The findings of early American archaeology do not substantiate the claim that such items were known among the ancient Americans," in particular "wheat" and "barley." <sup>85</sup> "The aboriginal New World did not have wheat [and] barley." <sup>86</sup> "Barley never grew in the New World before the white man brought it here!"

If there was no barley in America until the white man came, then Alma 11:4–19 must be false. If God were the one that wrote the Book of Mormon, is it not a reasonable assumption that he would have known there was no barley in the New World? The Book of Mormon... falls short of authenticatable [sic] truth.<sup>88</sup>

**Response:** Discoveries made in recent decades have identified domesticated pre-Columbian barley in a variety of locations in the Americas dating back to Book of Mormon times. Beginning in the 1980s, archaeologists and botanists began to identify a species of pre-Columbian domesticated barley, known as "little barley," in the Americas (figure 38). It is now recognized as having been an important pre-Columbian crop that was cultivated from an early time. "Perhaps the most startling evidence of Hohokam agricultural sophistication came last year when salvage archaeologists found preserved grains of what looks like domesticated barley, the first ever found in the New World."<sup>89</sup>

In addition to samples identified at the site near Phoenix, "extensive



Figure 38. "Little barley" is distinctive because of the small size of its spikelets. (Matt Lavin, Flickr, flickr.com/photos/plant\_diversity/6180951213.)

archaeological evidence also points to the cultivation of little barley in the Southwest and parts of Mexico."90 Samples have been found at other North American pre-Columbian sites throughout the central and eastern United States. Concerning the discovery and identification of samples in Illinois and Oklahoma, two researchers state, "[This project reveals a previously unidentified seed type now identified as little barley (hordeum pussillum), and there are strong indications that this grain must be added to the list of starchy-seeded plants that were cultivated in the region by [sic] 2000 years ago."91 "It is reasonable to conclude that we are looking at a North American domesticated grain crop whose existence has not [previously] been suspected."92

### 117. Corn

Status: Confirmed (1966–2024)

**Critics' Claim:** Some critics have claimed that references to corn

(Mosiah 9:9) are anachronistic.93

Response: Several varieties of corn were known during Book of Mormon times.94

## 118. Grapes

**Status: Confirmed** (1966–2024)

Critics' Claim: Some have claimed that grapes (2 Nephi 15:2; 3 Nephi

14:16) were unknown in pre-Columbian times.95

**Response:** Grapes were known and are mentioned in historical sources. Pre-Columbian specimens have even been recovered from archaeological sites in Mexico.<sup>96</sup>

#### 119. Wine

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that wine (Mosiah 11:15; 22:7; Alma 55:8-11, 30; 3 Nephi 18:2) was completely unknown in pre-Columbian times.<sup>97</sup>

**Response:** Various kinds of fermented beverages that can be characterized as beers and wines were known and used in pre-Columbian times. <sup>98</sup> According to one expert, "There is no reason why the term 'wine' should not be retained to include the many varieties of liquor made by savage and semi-civilized races from the sap of trees. The latex of vegetable stems is sufficiently homologous with the juice of fruits, as that of the grape, to be classified with it in a genus [of beverages] distinct from fermented grain."<sup>99</sup>

#### 120. Salt

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that reference to salt by Jesus (3 Nephi 12:13; 16:15) would have been incomprehensible to the Nephites because salt was unknown in ancient America.<sup>100</sup>

Response: Salt was well-known in pre-Columbian times.<sup>101</sup>

# 121. Highways

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that references to highways (3 Nephi 6:8; 8:13) is out of place for a book describing an ancient American people.<sup>102</sup>

**Response:** Many notable examples of extensive highways have been discovered by archaeologists.<sup>103</sup>

#### 122. Roads

**Status: Confirmed** (1966–2024)

Critics' Claim: Some have claimed that roads (3 Nephi 6:8; 8:13) were

unknown in pre-Columbian times.104

Response: Roads were well known.<sup>105</sup>

## 123. Leprosy (NW)

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that reference to leprosy (3 Nephi

17:7) in ancient America is implausible.106

**Response:** Evidence from Mesoamerican historical texts and pre-Columbian art shows that several skin diseases were known in Mesoamerica that could be described as leprous (see figure 39).<sup>107</sup>

## 124. Machinery

**Status: Confirmed** (1845–1965)

**Critics' Claim:** Some have claimed that the reference to "machinery" (Jarom 1:8) seems out of place in an ancient American text. 108

**Response:** Several ancient American cultures developed a variety of machines in different industries. While most of these were simple by modern standards, they were nevertheless crucial to their cultural development.<sup>109</sup> When Europeans encountered native societies, they



Figure 39. Image of possible pre-Columbian leprosy. (Scripture Central Staff, "Leprosy.")

sometimes commented on these peculiar items. For instance, a historical account of a battle between the Spaniards and the Maya of Guatemala mentions that the Maya had "several military machines, formed of beams on rollers, to be moved from place to place" to resupply weapons to their army. 110

#### 125. Axes

**Status: Confirmed** (1966–2024)

Critics' Claim: Some Critics have claimed that "axes" (Alma 5:52)

were unknown in pre-Columbian times.111

**Response:** Axes were used in ancient Mesoamerica as tools, and are

attested in pre-Columbian art from an early period. 112

## 126. Tools to Spin

**Status: Confirmed** (1966–2024)

Critics' Claim: Some have claimed spinning tools (Mosiah 10:5;

Helaman 6:13) were unknown in ancient America. 113

Response: Spinning tools among pre-Columbian societies are

archaeologically well-attested.<sup>114</sup>

### 127. Tools to Till Soil

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that pre-Columbian peoples did not have tools to till the soil (Ether 10:25).<sup>115</sup>

Response: Tilling tools were known. 116

### 128. Tools to Hoe

Status: Confirmed (1966–2024)

Critics' Claim: Some have claimed that ancient Americans did not

have hoeing tools (Ether 10:25).117

Response: Hoeing tools were known and used in pre-Columbian

times.118

#### 129. Tools to Thrash

Status: Confirmed (1966–2024)

Critics' Claim: Some have claimed that ancient Americans did not

have tools with which to thrash grain (Ether 10:25).119

**Response:** They did possess grain-thrashing tools in pre-Columbian

times.120

## 130. Pruning Tools

**Status: Confirmed** (1966–2024)

Critics' Claim: Some have claimed that ancient Americans lacked

tools with which to prune (Jacob 6:2).121

Response: Pre-Columbian peoples had pruning tools. 122

## 131. Tools to Plow

**Status: Confirmed** (1966–2024)

Critics' Claim: Some have claimed that pre-Columbian peoples did

not have tools with which to plow (Ether 10:25).123

Response: Plowing can be done without the help of animals and pre-

Columbian peoples had plowing tools.124

### 132. Sickles

**Status: Confirmed** (1966–2024)

Critics' Claim: Some have claimed that sickle tools were completely

unknown to ancient Americans (Alma 26:5).125

Response: Sickle tools were known. 126

## 133. Many Buildings

**Status: Confirmed** (1829–1844)

**Critics' Claim:** Some critics claimed that there were no real buildings (2 Nephi 5:15; Mosiah 9:8; 11:8-15; 23:5; 3 Nephi 8:14; Ether 10:5-6) in ancient America.<sup>127</sup>

**Response:** Examples of pre-Columbian buildings in ancient America, including Mesoamerica, are ubiquitous and many examples date to Book of Mormon times.<sup>128</sup>

## 134. Geographical Correlations

**Status: Partially Confirmed** (1966-2024)

**Critics' Claim:** Some have claimed that there are no geographical references in the Book of Mormon that match up with any real-world locations.<sup>129</sup>

**Response:** There is substantial evidence for the geographical information provided by Nephi about their wilderness journey in the Old World (see chapter 6, "Old World Journeys by Land and Sea"). While there is still a great deal of work to be done in terms of the ancient American setting for Book of Mormon events, several potential geographical correlations have been suggested.<sup>130</sup>

## 135. Navigation

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that ocean navigation (1 Nephi 18:21) was unknown in pre-Columbian times.<sup>131</sup>

**Response:** It has become increasingly apparent that oceanic navigation was practiced for several thousand years in pre-Columbian times.<sup>132</sup>

## 136. Lawyers

Status: Confirmed (1966-2024)

**Critics' Claim:** Some have claimed that lawyers (Alma 10:14; 3 Nephi 6:11) did not exist in pre-Columbian times.<sup>133</sup>

Response: Mesoamerican historical and ethnographic sources

describe individuals who acted in the role of advocates and prosecutors before judges, which are functionally equivalent to lawyers.<sup>134</sup>

## 137. Judges

**Status: Confirmed** (1966–2024)

Critics' Claim: Some have claimed that there were no judges (Mosiah

29:28-29; 3 Nephi 6:21, 23, 25, 27) in pre-Columbian times. 135

**Response:** Historical and ethnographic sources indicates that there were judges who adjudicated various matters in ancient Mesoamerica.<sup>136</sup>

## **Summary of Results**

From 1830 until 1844 a total of eighteen items relating to ancient culture and the Book of Mormon were discussed by writers, only four of which could be confirmed by 1844 (figure 40). In the following 120 years (1845-1965) the number had risen to twenty-nine, seven confirmed, two partially confirmed, and twenty unconfirmed (figure 41). During the last fifty-nine years (1966–2024) there were a total of fifty-three items, forty-six of which were confirmed, two partially confirmed, and five unconfirmed (figure 42).

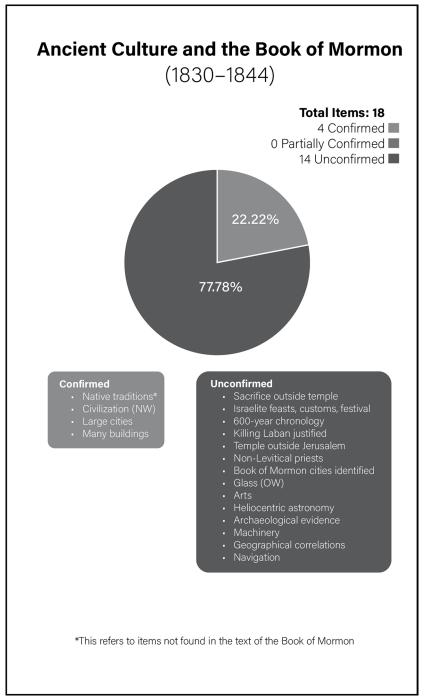


Figure 40. Anachronisms for ancient culture in the Book of Mormon (1830–1844).

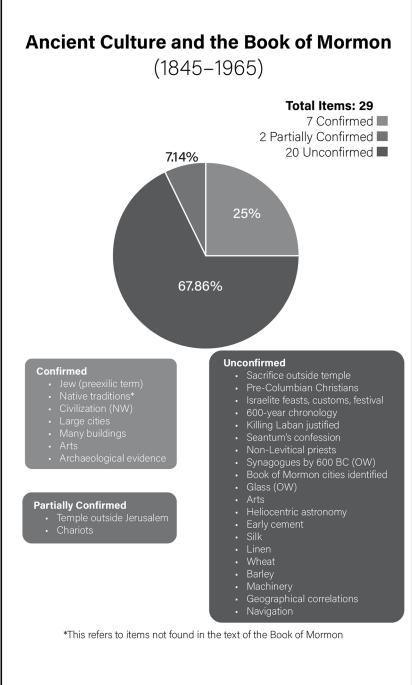


Figure 41. Anachronisms for ancient culture in the Book of Mormon (1845–1965).

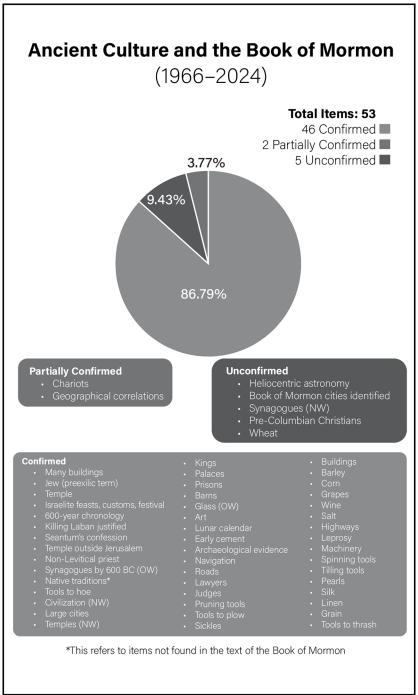


Figure 42. Anachronisms for ancient culture in the Book of Mormon (1966–2024).

### **Notes**

- 1. "Another aspect of this problem is the references in the Book of Mormon to 'the Jews.' Even if it could be established that the term 'Jews' was applied to the Israelites as early as 600 B.C., why would the Israelite Nephi, very early in the Book of Mormon, refer to his own people as 'the Jews' in a way that assumes he is talking about another people?" William D. Russell, "A Further Inquiry into the Historicity of the Book of Mormon," *Sunstone* 7, no. 5 (1982): 22.
- 2. Yehoshua M. Grintz, "Jew," in Encyclopaedia Judaica, ed. Cecil Roth and Geoffrey Wigoder (New York: MacMillan, 1971-72), 10:22, emphasis added; Solomon Zeitlin, "The Names Hebrew, Jew and Israel," Jewish Quarterly Review 43, no. 4 (1953): 365-79. The term is used in this political sense by the historian of the book of Kings. See 2 Kings 16:6; 25:25. Significantly, the term Jew is used most frequently in the book of Jeremiah, and Jeremiah was a contemporary of Lehi and Nephi. In his record, the term sometimes appears in a legal or religious context, as when the Jews witnessed a contract made by the prophet (Jeremiah 32:12), or by God when addressing covenant obligations (Jeremiah 34:9). But the term more often occurs in a political context. King Zedekiah, for example, feared those Jews who dissented over to the Babylonians (Jeremiah 38:19). In another instance, a Jewish captain warned his governor that if he was assassinated, "all the Jews which are gathered unto thee should be scattered, and the remnant of Judah perish." Jeremiah 40:15; emphasis added. Therefore, Nephi's usage of the term seems entirely appropriate.
- 3. James B. Pritchard, ed., *Ancient Near Eastern Texts Relating to the Old Testament*, 3rd ed. (Princeton, NJ: Princeton University Press, 1969), 287–88.
- 4. Origen Bacheler, *Mormonism Exposed, Internally and Externally* (New York: printed by the author, 1838), 31.
- Donald W. Parry and Emanuel Tov, The Dead Sea Scrolls Reader, 2nd ed. (Boston: Brill, 2014), 1:689; David Rolph Seely, "Lehi's Altar and Sacrifice in the Wilderness," Journal of Book of Mormon Studies 10, no. 1 (2001): 62–69, 80; Scripture Central Staff, "Sacrifices Outside Jerusalem," Evidence 120, 15 December 2020, scripturecentral.org/evidence /book-of-mormon-evidence-offering-sacrifices-outside-of-jerusalem.
- 6. M. T. Lamb, *The Golden Bible, or, The Book of Mormon: Is It from God?* (New York: Ward & Drummond, 1887), 320.
- D. P. Singhal, India and World Civilization (East Lansing: Michigan State University Press, 1969), 2:66–67.
- 8. Brant A. Gardner, *Traditions of the Fathers: The Book of Mormon as History* (Salt Lake City: Greg Kofford Books, 2015), 195.
- 9. "We should naturally suppose that, coming, as Lehi and his family are represented to have done, from Jerusalem, there would be some traces of Jewish manners and customs among the people. But we are disappointed. Nephi did, indeed, build a temple, after the manner of Solomon's temple. But we see no account of sacrifices and of national festivals." Jason Whitman, "Notices of Books: The Book of Mormon," The Unitarian 1 (1834): 44, 48. G. B.

- Hancock, Mormonism Exposed (Marionville, MO: A. Doggett, 1902), 71. Jack Free, Mormonism and Inspiration (Concord, CA: Pacific Publishing Company, 1962), 125, wrote, "As important as the Passover was, and is, among all people of Jewish descent, the Book of Mormon (said to be a history of Jewish descendants) makes no mention of its people ever keeping the Passover, nor even hints that its people knew anything about it." J. Roy H. Paterson, Meeting the Mormons: A Study of the Mormon Church in Scotland and Elsewhere (Edinburgh: Home Board of the Church of Scotland, 1965), 43.
- 10. Scripture Central Staff, "Lehi's Sacrifices," Evidence 115, 26 November 2020, scripturecentral.org/evidence/book-of-mormon-evidence-lehi-s-sacrifices; Scripture Central Staff, "What Sacrifices Did Lehi Offer to God in the Wilderness?," KnoWhy 545, 9 January 2020, scripturecentral.org/knowhy /what-sacrifices-did-lehi-offer-to-god-in-the-wilderness; Scripture Central Staff, "Abinadiand Pentecost," Evidence 156, 22 February 2021, scripture central .org/evidence/abinadi-and-pentecost; Scripture Central Staff, "Autumn Festival," Evidence 65, 19 September 2020, scripturecentral.org/evidence /book-of-mormon-evidence-autumn-festival-context-in-jacob-s-speech; Scripture Central Staff, "Covenant Renewal Formula," Evidence 54, 19 September 2020, scripturecentral.org/evidence/book-of-mormon-evidence -covenant-renewal-formula; Scripture Central Staff, "Mosiah's Coronation," Evidence 56, 19 September 2020, scripturecentral.org/evidence/book-of -mormon-evidence-mosiah-s-coronation; Scripture Central Staff, "Peace Treaty," Evidence 172, 22 March 2021, scripturecentral.org/evidence/book -of-mormon-evidence-peace-treaty-in-a-jubilee-year; Scripture Central Staff, "The Passover Tradition," Evidence 43, 19 September 2020, scripturecentral. org/evidence/book-of-mormon-evidence-the-passover-tradition; Scripture Central Staff, "Trumpet and Jubilee," Evidence 171, 22 March 2021, scripture central.org/evidence/book-of-mormon-evidence-trumpet-imagery-and-the -year-of-jubilee; Terrence L. Szink and John W. Welch, "King Benjamin's Speech in the Context of Ancient Israelite Festivals," in King Benjamin's Speech: "That Ye May Learn Wisdom," ed. John W. Welch and Stephen D. Ricks (Provo, UT: Foundation for Ancient Research and Mormon Studies [FARMS], 1998), 147-223.
- E. D. Howe, Mormonism Unvailed (Painesville, OH: printed by the author, 1834),
   S1; Andrew B. Hepburn, An Exposition of the Blasphemous Doctrines and Delusions of the So-Called Latter-day Saints, or Mormons (Sheffield, UK: Mary Thomas and Son, 1852), 11–12; William Sheldon, Mormonism Examined [...] (Brodhead, WI: printed by the author, 1876), 7–9; Paul Jones, The Bible and the Book of Mormon (Logan, UT: printed by the author, 1912), 4–6.
- 12. Robert F. Smith, "Book of Mormon Event Structure: The Ancient Near East," *Journal of Book of Mormon Studies* 5, no. 2 (1996): 98–101; John L. Sorenson, *An Ancient American Setting for the Book of Mormon* (Salt Lake City: Deseret Book, 1985), 270–76.
- 13. Howe, Mormonism Unvailed, 26.
- 14. Scripture Central Staff, "Slaying of Laban," Evidence 99, 19 September 2020, scripturecentral.org/evidence/book-of-mormon-evidence-legal-context-of-laban-s-death; Scripture Central Staff, "Was Nephi's Slaying of Laban

- Legal?," KnoWhy 256, 2 January 2017, scripturecentral.org/knowhy /was-nephis-slaying-of-laban-legal; John W. Welch, "Legal Perspectives on the Slaying of Laban," *Journal of Book of Mormon Studies* 1, no. 1 (1992): 119–41; John W. Welch, "Narrative Elements in Homicide Accounts," *Jewish Law Association Studies* 27 (2017): 206–38.
- 15. "At a later period occurred the trial of Nephi for the murder of Seezoram, the Chief Judge. The real murderer was the judge's brother, who is forced to confess by a series of confessions based on threats such as would undoubtedly be rejected by the judge of an English criminal court. Finally comes the statement, 'because of this fear and this paleness which has come upon your face, behold, we know that thou art guilty." James Williams, "The Law of the Book of Mormon," American Law Review 34 (1900): 222.
- 16. See Scripture Central Staff, "Seantum's Trial," Evidence 216, 26 July 2021, scripturecentral.org/evidence/seantums-trial; John W. Welch, "The Trial of Seantum," in *The Legal Cases in the Book of Mormon* (Provo, UT: Brigham Young University Press; Neal A. Maxwell Institute for Religious Scholarship, 2008), 323–34.
- 17. Sheldon, Mormonism Examined, 69.
- 18. Stephen D. Ricks, "Israel's Alternate Altars: Israelite-Jewish Temples, Sanctuaries, and Shrines beyond Jerusalem," in *Steadfast in Defense of Faith: Essays in Honor of Daniel C. Peterson*, ed. Shirley S. Ricks, Stephen D. Ricks, and Louis C. Midgley (Orem, UT: Interpreter Foundation; Salt Lake City: Eborn Books, 2023), 319–30. Scripture Central Staff, "Temples Outside Jerusalem," Evidence 165, 15 March 2021, scripturecentral.org/evidence/book-of-mormon-evidence-temples-outside-jerusalem.
- 19. Shua Kisilevitz and Oded Lipschits, "Another Temple in Judah!," *Biblical Archaeology Review* 46, no. 1 (2020): 40–49.
- 20. Alexander Campbell, "Delusions," in *Millennial Harbinger*, ed. Alexander Campbell (Bethany, VA: printed by the editor, 1831), 2:91; Bacheler, *Mormonism Exposed, Internally and Externally*, 30–31.
- 21. See, for example, Joshua G. Mathews, *Melchizedek's Alternative Priestly Order:* A Compositional Analysis of Genesis 14:18–20 and Its Echoes throughout the Tanak (Winona Lake, IN: Eisenbrauns, 2013); Deborah W. Rooke, *Zadok's Heirs: The Role and Development of the High Priesthood in Ancient Israel* (New York: Oxford University Press, 2000), 11–122, 328–30; Carl Edwin Armerding, "Were David's Sons Really Priests?," *Current Issues in Biblical and Patristic Interpretation: Studies in Honor of Merrill C. Tenney Presented by His Former Students*, ed. Gerald F. Hawthorne (Grand Rapids, MI: Eerdmans, 1975), 75–86; John W. Welch, "The Temple in the Book of Mormon: The Temples at the Cities of Nephi, Zarahemla, and Bountiful," in *Temples of the Ancient World*, ed. Donald W. Parry (Salt Lake City: Deseret Book; Provo, UT: FARMS, 1994), 332–34.
- 22. Marvin A. Sweeny, "Prophets and Priests in the Deuteronomistic History: Elijah and Elisha," in *Israelite Prophecy and the Deuteronomistic History: Portrait, Reality, and the Formation of a History*, ed. Mignon R. Jacobs and Raymond F. Person Jr. (Atlanta: SBL Press, 2014), 35–49; Nicholas P. Lunn, "Prophetic

- Representations of the Divine Presence: The Theological Interpretation of the Elijah-Elisha Cycles," *Journal of Theological Interpretation* 9, no. 1 (2015): 49–63.
- 23. "Investigation has shown, however, that the origin of the synagogue in Palestine was either during the Exile or more probably during the period of Persian domination after the Exile, though no express mention is made of it until after the second century before Christ.... The Book of Mormon represents Lehi and his family taking something from Jerusalem which did not exist until years after their time." Jones, Bible and the Book of Mormon, 12, see p. 18. See also Arthur Haire Forster, Four Modern Religious Movements (Boston: Gorham Press, 1919), 63; Gordon H. Fraser, What Does the Book of Mormon Teach? (Chicago: Moody Press, 1964), 73; Latayne Colvette Scott, The Mormon Mirage: A Former Mormon Tells Why She Left the Church (Grand Rapids, MI: Zondervan, 1979), 83; James R. White, Letters to a Mormon Elder (Port St. Lucie, FL: Solid Ground Christian Books, 1990), 175.
- 24. For example, scholarship has suggested that city gates functioned as a sort of protosynagogue. Lee I. Levine, *The Ancient Synagogue: The First Thousand Years*, 2nd ed. (New Haven, CT: Yale University Press, 2005), 28–33; Scripture Central Staff, "Why Did Alma and Amulek Preach in Synagogues?," KnoWhy 124, 17 June 2016, scripturecentral.org/knowhy/why-did-alma-and-amulek-preach-in-synagogues. See the overview provided by A. Keith Thompson, "Nephite Insights into Israelite Worship Practices before the Babylonian Captivity," *Interpreter: A Journal of Mormon Scripture* 3 (2013): 155–95, journal .interpreterfoundation.org/nephite-insights-into-israelite-worship-practices -before-the-babylonian-captivity/; William J. Adams Jr., "Synagogues in the Book of Mormon," *Journal of Book of Mormon Studies* 9, no. 1 (2000): 4–13, 76, scholarsarchive.byu.edu/jbms/vol9/iss1/3/.
- 25. Scott, Mormon Mirage, 83.
- 26. Sorenson, Ancient American Setting, 236.
- Bacheler, Mormonism Exposed, Internally and Externally, 33; One Who Hates Imposture, Mormonism Dissected (Bethania, PA: Reuben Chambers, 1841),
   J. M. Burgess, The Book of Mormon Contradictory to Common Sense, Reason, and Revelation (Liverpool: J. Blevin, 1850), 12–13.
- 28. ScriptureCentralStaff, "GreatSpirit," Evidence119,27November2020, scripture-central.org/evidence/book-of-mormon-evidence-the-great-spirit; Scripture Central Staff, "Horse and Elephant," Evidence 243, 21 September 2021, scripturecentral.org/evidence/horse-and-elephant; Scripture Central Staff, "Seven Lineages," Evidence 192, 11 May 2021, scripturecentral.org/evidence/book-of-mormon-evidence-seven-lineages; Scripture Central Staff, "Three Nephites and the Popol Vuh," Evidence 185, 19 April 2021, scripturecentral.org/evidence/book-of-mormon-evidence-three-nephites-and-the-popol-vuh; Scripture Central Staff, "Traditions of Ocean Migration," Evidence 190, 26 April 2021, scripturecentral.org/evidence/book-of-mormon-evidence-traditions-of-ocean-migrations; Scripture Central Staff, "Mesoamerican Traditions of Translation," Evidence 134, 7 January 2021, scripturecentral.org/evidence/book-of-mormon-evidence-mesoamerican-traditions-of-translation.

- 29. Philanthropist of Chester County, Mormonism Unmasked (Philadelphia: T. K. & P. G. Collins, 1840), 5–6. William Robertson, an influential historian in the late eighteenth and early nineteenth century, stated, "Neither the Mexicans nor Peruvians [were] entitled to rank with those nations that merit the name of civilized." William Robertson, The History of America (London: A. Strahan, 1800), 3:272.
- 30. John Lloyd Stephens, *Incidents of Travel in Central America, Chiapas, and Yucatan* (New York: Harper and Brothers, 1841).
- 31. Victor Wolfgang von Hagen, Maya Explorer: John Lloyd Stephens and the Lost Cities of Central America and Yucatan (Norman: University of Oklahoma Press, 1947), 75.
- 32. Scripture Central Staff, "Advanced Civilization," Evidence 383, 5 December 2022, scripturecentral.org/evidence/advanced-civilization. For an overview of the context of this argument and its refutation, beginning with nineteenth-century discoveries subsequent to the publication of the Book of Mormon, see Matthew Roper, "Joseph Smith, Central American Ruins, and the Book of Mormon," in *Approaching Antiquity: Joseph Smith and the Ancient World*, ed. Lincoln H. Blumell, Matthew J. Grey, and Andrew H. Hedges (Salt Lake City: Deseret Book; Provo, UT: Religious Studies Center, Brigham Young University, 2015), 141–62.
- 33. For a summary of the context of this argument see Roper, "Joseph Smith, Central American Ruins, and the Book of Mormon," 141–62; Peter Bartley, *Mormonism: The Prophet, the Book and the Cult* (Dublin: Veritas, 1989), 49.
- 34. Scripture Central Staff, "Advanced Civilization"; Marcello A. Canuto et al., "Ancient Lowland Maya Complexity as Revealed by Airborne Laser Scanning of Northern Guatemala," *Science* 361, no. 6409 (2018): 1–17.
- 35. Whitman, "Book of Mormon," 42, 48; Richard D. Hansen et al., "LiDAR Analyses in the Contiguous Mirador-Calakmul Karst Basin, Guatemala: An Introduction to New Perspectives on Regional Early Maya Socioeconomic and Political Organization," *Ancient Mesoamerica* 34, no. 3 (2023): 1–40.
- 36. John E. Clark, "Archaeology, Relics, and Book of Mormon Belief," *Journal of Book of Mormon Studies* 14, no. 2 (2005): 42–43.
- 37. Thomas Key, *The Book of Mormon in the Light of Science*, 15th ed. (Marlow, OK: Utah Missions, 1997), 67.
- 38. Many kinds of Mesoamerican temples were known. Laurette Sejourne, "El templo prehispánico," *Cuadernos americanos* 149 (1966): 129–67; Scripture Central Staff, "Mesoamerican Temples," Evidence 257, 15 October 2021, scripturecentral.org/evidence/mesoamerican-temples.
- 39. Gordon H. Fraser, Is Mormonism Christian? (Chicago: Moody Press, 1977), 142.
- 40. Simon Martin and Nikolai Grube, Chronicle of the Maya Kings and Queens, 2nd ed. (London: Thames & Hudson, 2008); Linda Schele and Mary Ellen Miller, The Blood of Kings: Dynasty and Ritual in Maya Art (New York: George Braziller; Fort Worth, TX: Kimbell Art Museum, 1986); Linda Schele and David Freidel, A Forest of Kings (New York: William Morrow, 1990); Linda Schele and Peter Mathews,

- The Code of Kings (New York: Scribner, 1998); Scripture Central Staff, "Why Did Nephi's People Want Him to Be a King?," KnoWhy 717, 13 February 2024, scripturecentral.org/knowhy/why-did-nephis-people-want-him-to-be-a-king.
- 41. Fraser, Is Mormonism Christian?, 142.
- 42. Jessica Joyce Christie, ed., *Maya Palaces and Elite Residences: An Interdisciplinary Approach* (Austin: University of Texas Press, 2003).
- 43. Key, Book of Mormon in the Light of Science, 67.
- 44. Prisons are described in Mesoamerican historical sources. W. George Lovell, Conquest and Survival in Colonial Guatemala: A Historical Geography of the Cuchumatan Highlands, 1500–1821, rev. ed. (Montreal: McGill-Queen's University Press, 1992), 50–51; Geronimo de Mendietta, Historia Eclesiastica Indiana: A Franciscan's View of the Spanish Conquest of Mexico, ed. and trans. Felix Jay (Lewiston, NY: Edwin Mellen Press, 1997), 44–45; Scripture Central Staff, "Treatment of Prisoners," Evidence 220, 31 July 2021, scripturecentral .org/evidence/treatment-of-prisoners.
- 45. Key, Book of Mormon in the Light of Science, 67.
- 46. Jacques Soustelle, *The Daily Life of the Aztecs* (Harmondsworth, UK: Penguin, 1955), 161.
- 47. Lynn V. Foster, *Handbook to Life in the Ancient Maya World* (New York: Oxford University Press, 2002), 311.
- 48. This was "ages before glass was invented." Bacheler, Mormonism Exposed, Internally and Externally, 27; William Harris, Mormonism Portrayed (Warsaw, IL: Sharp & Gamble, 1841), 13; Amos H. Wickersham, An Examination of the Principles of Mormonism (Wilmington, DE: Allderidge, Jeandell, & Miles, 1843), 14–15; T. W. P. Taylder, The Mormon's Own Book (London: Partridge, Oakey, 1855), 13; Lamb, Golden Bible, 81; Enos T. Hall, The Mormon Bible (Columbus: Fred J. Heer, 1899), 14; Harry M. Beardsley, Joseph Smith and His Mormon Empire (Boston: Houghton Mifflin, 1931), 77; George B. Arbaugh, Gods, Sex, and Saints (Rock Island, IL: Augustana Press, 1957), 21; Stuart Martin, The Mystery of Mormonism (London: Odhams Press, 1920), 166; Marvin Cowan, Mormon Claims Answered (Salt Lake City: printed by the author, 1979), 44; Peter Vokac, "More on the Nephites and the Book of Mormon," Biblical Archaeology Review 14, no. 6 (1988): 18.
- 49. CarolynWilke, "The Ancient Origins of Glass," *Knowable Magazine*, 18 November 2021.
- 50. Bruce Bower, "Glassmaking May Have Begun in Egypt, Not Mesopotamia," Science News, 22 November 2016, sciencenews.org/article/glassmaking -may-have-begun-egypt-not-mesopotamia; Jeanette Varberg, "Between Egypt, Mesopotamia and Scandinavia: Late Bronze Age Glass Beads Found in Denmark," *Journal of Archaeological Science* 54 (2015): 168–81. See also Katherine T. Faber et al., "Looking Back, Looking Forward: Materials Science in Art, Archaeology, and Art Conservation," *Annual Review of Materials Research* 51 (2021): 435–60; Dan Klein and Ward Lloyd, *The History of Glass* (London: Orbis, 1984), 9–10.

- 51. See Marc N. Levine and David M. Carballo, eds., *Obsidian Reflections: Symbolic Dimensions of Obsidian in Mesoamerica* (Boulder: University Press of Colorado, 2014).
- 52. Helen R. Haines and Michael D. Glascock, "A Glass Menagerie of Meaning: Obsidian Exchange in Mesoamerica," in *The Maya in a Mesoamerican Context: Comparative Approaches to Maya Studies*, ed. Christophe Helmke and Jesper Nielsen (Markt Schwaben, Germany: Verlag Anton Saurwein, 2013), 198.
- 53. Betty J. Meggers, Ecuador (London: Thames & Hudson, 1966), 56.
- 54. John J. McGraw, "Stones of Light: The Use of Crystals in Maya Divination," in Manufactured Light: Mirrors in the Mesoamerican Realm, ed. Emiliano Gallaga M. and Marc G. Blainey (Boulder: University Press of Colorado, 2016), 207–8.
- 55. McGraw, "Stones of Light," 208-9.
- 56. Philanthropist of Chester County, Mormonism Unmasked, 5.
- 57. Mary Ellen Miller, *The Art of Mesoamerica: From Olmecto Aztec*, 5thed. (London: Thames & Hudson, 2012); Mary Ellen Miller and Megan E. O'Neil, *Maya Art and Architecture*, 2nd ed. (London: Thames & Hudson, 2014).
- 58. Lamb. Golden Bible. 235-36.
- 59. Cowan, Mormon Claims Answered, 42.
- 60. Roland de Vaux, *Social Institutions*, vol.1, *Ancient Israel* (New York: McGraw-Hill, 1965), 183.
- 61. Mary Ellen Miller and Karl Taube, *The Gods and Symbols of Ancient Mexico and the Maya: An Illustrated Dictionary of Mesoamerican Religion* (New York: Thames & Hudson, 1993), 52.
- 62. Key, Book of Mormon in the Light of Science, 67.
- 63. Heber J. Grant, in Conference Report, April 1929, 129.
- 64. Sophisticated cement technologies were known and used as early as the time of the Book of Mormon. David S. Hyman, *Precolumbian Cements: A Study of the Calcareous Cements in Prehispanic Mesoamerican Building and Construction* (PhD diss., John Hopkins University, 1970), i–ii; Scripture Central Staff, "Cement," Evidence 103, 19 September 2020, scripture central.org/evidence/book-of-mormon-evidence-cement; Scripture Central Staff, "When Did Cement Become Commonin Ancient America?," KnoWhy 174, 26 August 2016, scripture central.org/knowhy/when-did-cement-become-common-in-ancient-america.
- 65. One early critic complained that the Book of Mormon contains "no dates, localities, or connection of any sort with sober history." E. Henderson, *A Theological Dictionary Containing Definitions of All Religions and Ecclesiastical Terms* (London: Thomas Tegg, 1841), 538; Taylder, *Mormon's Own Book*, 8–9. Clark Braden said, "There are no relics, no remains, no fossils to sustain the Book of Mormon." E. L. Kelley and Clark Braden, *Public Discussion of the Issues between the Reorganized Church of Jesus Christ of Latter-day Saints and the Church of Christ* [...] (St. Louis, MO: Clark Braden, 1884), 171. See W. L. Crowe,

- The Mormon Waterloo (St. Paul, NE: printed by the author, 1902), 99–101; Samuel W. Traum, Mormonism against Itself (Cincinnati: Standard Publishing, 1910), 141–42; Hal Hougey, Archaeology and the Book of Mormon (Concord, CA: Pacific Publishing, 1976), 3–24; Floyd C. McElveen, The Mormon Illusion (Ventura, CA: Regal Books, 1983), 60–65; Fraser, Is Mormonism Christian?, 143.
- 66. Among the archaeological evidence supporting the Book of Mormon are evidence for the account of the journey in the wilderness (including the site of Nahom, whose name is attested on ancient inscriptions dating to an appropriate time), attestations of other Book of Mormon names, and archaeological and cultural data from ancient America. See Scripture Central Staff, "Nahom," Evidence 163, 9 March 2021, scripture central.org/evidence/book-of-mormon-evidence-nahom; Clark, "Archaeology, Relics, and Book of Mormon Belief," 38–49, 71–74.
- 67. John A. Price, "The Book of Mormon vs. Anthropological Prehistory," *Indian Historian* 7, no. 3 (1974): 38; Fraser, *Is Mormonism Christian*?, 142.
- 68. Royal Skousen's suggestion that the chariots refer to some kind of cart is persuasive. Royal Skousen, *The Nature of the Original Language*, part 4 of *The History of the Text of the Book of Mormon* (Provo, UT: Brigham Young University Studies, 2018), 721–25.
- 69. Desire Charnay, The Ancient Cities of the New World (New York: Harper & Brothers, 1887), 170–76. For an overview, see John L. Sorenson, Mormon's Codex: An Ancient American Book (Salt Lake City: Deseret Book; Provo, UT: Neal A. Maxwell Institute for Religious Scholarship, 2013), 350–56, fig. 16.1.
- 70. Gordon F. Ekholm, "Wheeled Toys in Mexico," *American Antiquity* 11, no. 4 (1946): 222–28; Sorenson, *Mormon's Codex*, 350–56.
- 71. Carmelo Saenz de Santa Maria, ed., *Obras historicas de Don Francisco Antonio de Fuentes y Guzman*, (Madrid: Real Academia Espanola, 1972), 2:292.
- 72. Key, Book of Mormon in the Light of Science, 70-71.
- 73. Michael D. Coe, "Archaeological Synthesis of Southern Veracruzand Tabasco," in Archaeology of Southern Mesoamerica, part 2, ed. Gordon R. Willey, Handbook of Middle American Indians (Austin: University of Texas Press, 1965), 697; Alfonso Caso, "Lapidary Work, Goldwork, and Copperwork from Oaxaca," in Willey, Archaeology of Southern Mesoamerica, 915; Foster, Handbook to Life, 10. According to Robert W. Shufeldt, Reports of Explorations and Surveys, to Ascertain the Practicability of a Shipcanal between the Atlantic and Pacific Oceans by the Way of the Isthmus of Tehuantepec (Washington, DC: Government Printing Office, 1872), 136, "Along the Pacific coast, a few miles west of Salina Cruz, there are extensive beds of pearl-oysters, from which the natives have taken, from time to time, many valuable pearls."
- 74. John Hyde Jr., Mormonism: Its Leaders and Designs (New York: W. P. Fetridge, 1857), 226; John Fiske, The Discovery of America: With Some Account of Ancient America and the Spanish Conquest, 2 vols. (Boston: Houghton Mifflin, 1892), 1:179n2; Beardsley, Joseph Smith and His Mormon Empire, 76; George Bartholomew Arbaugh, Revelation in Mormonism: Its Character and Changing

- 75. Alejandro de Avila B., "Threads of Diversity: Oaxacan Textiles in Context," in *The Unbroken Thread: Conserving Textile Traditions of Oaxaca*, ed. Kathryn Klein (Los Angeles: Getty Conservative Institute, 1997), 125; Patricia Rieff Anawalt, *Indian Clothing before Cortes: Mesoamerican Costumes from the Codices* (Norman: University of Oklahoma Press, 1981), 12; Scripture Central Staff, "Silk," Evidence 124, 15 December 2020, scripturecentral.org/evidence/book-of-mormon-evidence-silk.
- 76. Arbaugh, Revelation in Mormonism, 55; Fraser, What Does the Book of Mormon Teach?, 69; Paterson, Meeting the Mormons, 40; Price, "Book of Mormon vs. Anthropological Prehistory," 38; Fraser, Is Mormonism Christian?, 141; Martin, Maze of Mormonism, 56; Jackson, "More on the Nephites," 14–15.
- 77. The Toltecs reportedly had various kinds of cloth that were "like thin linen." Alfredo Chavero, ed., *Obras historicas de Don Fernando de Alva Ixtlilxochitl* (Mexico: Editora Nacional, 1952), 1:40; Evidence from pre-Columbian Mesoamerica shows that there were fabrics that could be considered linen. Scripture Central Staff, "Mesoamerican Linen," Evidence 183, 19 April 2021, scripturecentral.org/evidence/book-of-mormon-evidence-linen.
- 78. Bartley, Prophet, the Book, and the Cult, 50.
- 79. Ricardo Ayerza Jr. and Wayne Coates, *Chia: Rediscovering a Forgotten Crop of the Aztecs* (Tucson: University of Arizona Press, 2005), 43–80; Joseph P. Cahill, "Genetic Diversity among Varieties of Chia (*Salvia hispanica* L.)," *Genetic Resources and Crop Evolution* 51, no. 7 (2004): 773–81; Arthur Fisher, "Preserving a Diverse Lineage," *Mosaic* 13, no. 3 (1982): 50; John Sorenson, "Vive Zapato! Hurray for the Shoe!," *Review of Books on the Book of Mormon* 6, no. 1 (1994), 338–39, scholarsarchive.byu.edu/msr/vol6/iss1/11/.
- 80. Lamb, *Golden Bible*, 304; Charles A. Shook, *Cumorah Revisited* (Cincinnati: Standard Publishing, 1910), 382–83; Arbaugh, *Revelation in Mormonism*, 55; Reed and Farkas, *Mormons Answered Verse by Verse*, 110.
- 81. Lamb. Golden Bible. 304.
- 82. Shook, Cumorah Revisited, 382-83.
- 83. William Edward Biederwolf, *Mormonism under the Searchlight* (Chicago: Glad Tidings Publishing, 1915), 21.
- 84. Fraser, What Does the Book of Mormon Teach?, 90; see Fraser, Is Mormonism Christian?, 141.

- 85. Wayne Ham, "Problems in Interpreting the Book of Mormon as History," *Courage* 1 (1970): 20.
- 86. Price, "Book of Mormon vs Anthropological Prehistory," 38.
- 87. Scott, Mormon Mirage, 82.
- 88. Rick Branch, "Nephite Nickels," *Utah Evangel* 29, no. 10 (1982): 1. See also Arbaugh, *Revelation in Mormonism*, 55; White, *Letters to a Mormon Elder*, 169; Bartley, *Prophet, the Book and the Cult*, 50–51; Weldon Langfield, *The Truth About Mormonism: A Former Adherent Analyzes the LDS Faith* (Bakersfield, CA: Weldon Langfield Publications, 1991), 40; Robert McKay, "No Book of Mormon Evidence," *Evangel* 38, no. 4 (1991): 8.
- 89. Daniel B. Adams, "Last Ditch Archaeology," Science 83, December 1983, 32.
- 90. Michael T. Dunne and William Green, "Terminal Archaic and Early Woodland Plant Use at the Gast Spring Site (13LA152), Southeast Iowa," *Mid-continental Journal of Archaeology* 23 no. 1 (1998): 64.
- 91. Nancy B. Asch and David L. Asch, "Archaeobotany," in *Deer Track: A Late Woodland Village in the Mississippi* Valley, ed. Charles R. McGimsey and Michael D. Conner (Kampsville, IL: Center for American Archaeology, 1985), 44.
- 92. Vorsila L. Bohrer, "Domesticated and Wild Crops in the CAEP Study Area," in Prehistoric Cultural Development in Central Arizona: Archaeology of the Upper New River Region, ed. P. M. Spoerl and G. J. Gumerman (Carbondale: Center for Archaeological Investigations, Southern Illinois University, 1984), 252. See also Andrea A. Hunter, "Utilization of Hordeum pusillum (Little Barley) in the Midwest United States: Applying Rindos' Co-Evolutionary Model of Domestication" (PhD diss., University of Missouri–Columbia, 1992); Robert E. Gasser, "Hohokam Use of Desert Plant Foods," Desert Plants 3, no. 4 (1981–1982): 220–21; Roland von Bothmer et al., "Revision of the Hordeum pusillum Group," Nordic Journal of Botany 2, No. 4 (1982): 307–21. The same species has been identified in Cuba as well. Y. Chinique de Armas et al., "Starch Analysis and Isotopic Evidence of Consumption of Cultigens among Fisher-Gatherers in Cuba: The Archaeological Site of Canimar Abajo, Matanzas," Journal of Archaeological Science 58 (2015): 121–32.
- 93. "Crops such as corn... are said to have been part of the food and animal scene of Nephite and Lamanite culture, yet the actual inhabitants of this hemisphere did not have these things during the 'Book of Mormon period.'" White, *Letters to a Mormon Elder*, 169.
- 94. Maize, a form of corn, was a central crop in Mesoamerica by at least the Early Preclassic period. Michael D. Coe, *Mexico*, 3rd ed. (New York: Thames & Hudson, 1982), 37–42: "Maize may have been in use in Mexico as early as 7000 BCE." Chinique de Armas et al., "Starch Analysis and Isotopic Evidence of Consumption of Cultigens among Fisher-Gatherers in Cuba," 121.
- 95. Price, "Book of Mormon vs. Anthropological Prehistory," 38; Martin, *Maze of Mormonism*, 56; Jackson, "More on the Nephites and the Book of Mormon," 14–15; Key, *Book of Mormon in the Light of Science*, 15.

- 96. Alejandro C. Martínez Muriel, "Don Martín, Chiapas: Inferencias económico -sociales de una comunidad arqueológica" (master's thesis, Universidad Nacional Autónoma de México, 1978), 125; Karla G. Huerta-Acosta et al., "The Genetic Diversity of Wild Grapes in Mexico," Genetic Resources and Crop Evolution 69 (2022): 1329-47; Scripture Central Staff, "Wine and Vineyards," Evidence 101, 19 September 2020, scripturecentral.org/evidence/book-ofmormon-evidence-wine-and-vineyards. According to Shufeldt, Reports of Explorations and Surveys, 120, 126, "There is a native grape of a black color, a very tough skin, round, and rather larger than our Concord grape. It grows wild in great abundance, and, considering that it is unimproved by cultivation, is quite eatable and very juicy. At San Andres a wine is made of it, which is said to resemble claret, and competent judges declare it to be very good. . . . In the town of Santa Maria Chimalapa ... the liquor most in common use is known as aguardiente, or chinguirito, is colorless, and has the flavor of rum, for it is made from the juice of the sugar-cane. In nearly every Indian hut a primitive still is kept for this purpose."
- 97. Price, "Book of Mormon vs. Anthropological Prehistory," 38; Martin, *Maze of Mormonism*, 56; Jackson, "More on the Nephites and the Book of Mormon," 14–15; Key, *Book of Mormon in the Light of Science*, 15.
- 98. Scripture Central Staff, "Wine and Vineyards."
- 99. A. E. Crawley. "Drinks, Drinking," in *Encyclopedia of Religion and Ethics*, ed. James Hastings (New York: Scribner, 1951), 5:73; Weston La Barre, "Native American Beers," *American Anthropologist* 40, no. 2 (1938): 224–34. Cacao was used in Preclassic times to make alcoholic beverages. Research by John Henderson and Rosemary Joyce show that cacao was used in northern Honduras from 1200 to 1100 BC. Rosemary A. Joyce and John Henderson, "From Feasting to Cuisine: Implications of Archaeological Research in an Early Honduran Village," *American Anthropologist* 109, no. 4 (2007): 642. Terry G. Powis et al., "The Origins of Cacao Use in Mesoamerica," *Mexicon* 30, no. 2 (2008): 36, pointed out, "It is important to note here that these cacao beverages were most likely fermented or alcoholic."
- 100. Key, Book of Mormon in the Light of Science, 21–22.
- 101. Salt was a valued commodity in pre-Columbian times, and archaeology has revealed evidence of salt mining. Susan Kepecs, "Salt Sources and Production," in *The Postclassic Mesoamerican World*, ed. Michael E. Smith and Francis F. Berdan (Salt Lake City: University of Utah Press, 2003), 126–30; Brian D. Dillon, Kevin O. Pope, and Michael W. Love, "An Ancient Extractive Industry: Maya Salt Making at Salinas de las Nueve Cerros, Guatemala," *Journal of New World Archaeology* 7, nos. 2–3 (1988): 37–41; Lovell, *Conquest and Survival in Colonial Guatemala*, 50–51; Heather McKillop, "Underwater Archaeology, Salt Production, and Coastal Maya Trade at Stingray Lagoon, Belize," *Latin American Antiquity* 6, no. 3 (1995): 214–28. See also Scripture Central Staff, "Salt," Evidence 397, 21 March 2023, scripturecentral.org/evidence/salt.
- 102. Key, Book of Mormon in the Light of Science, 67.
- 103. Lidar analysis has revealed over 177 kilometers of elevated Preclassic causeways in the Mirador Basin. Hansen et al., "LiDAR Analyses," 1–40; Scripture

- Central Staff, "Highways," Evidence 93, 19 September 2020, scripturecentral .org/evidence/book-of-mormon-evidence-highways.
- 104. Scott, Mormon Mirage, 81-82.
- 105. See the information on highways in item 121.
- 106. Key, Book of Mormon in the Light of Science, 47–48.
- 107. Scripture Central Staff, "Leprosy," Evidence 189, 26 April 2021, scripturecentral. org/evidence/book-of-mormon-evidence-leprosy; Eduard Seler, "Leprosy in Old Mexican Documents," in *Eduard Seler, Collected Works in Mesoamerican Linguistics and Archaeology*, ed. Frank E. Comparato (Culver City, CA: Labyrinthos, 1991), 2:55–56; Annette I. Kern, Karl Kramer, and Ortwin Smailus, "Of Curing and Vultures," in *A Celebration of the Life and Work of Pierre Robert Colas*, ed. Christophe Helmke and Frauke Sachse (Munich: Saurwein, 2014), 294–95.
- 108. H. Stevenson, A Lecture on Mormonism Delivered at the Wesleyan Methodist Chapel, Alston, December 7th, 1838 (Newcastle, UK: J. Blackwell, 1839), 12; Kelley and Braden, Public Discussion, 58; Key, Book of Mormon in the Light of Science, 68.
- 109. See Michael Woods and Mary B. Woods, Ancient Machine Technology: From Wheels to Forges (Minneapolis, MN: Twenty-First Century Books, 2011), 48–54.
- 110. Stephens, Incidents of Travel in Central America, Chiapas, and Yucatan, 2:177.
- 111. Fraser, What Does the Book of Mormon Teach?, 59, 61.
- 112. See Scripture Central Staff, "Axes," Evidence 170, 22 March 2021, scripture central.org/evidence/book-of-mormon-evidence-axes; Teresa Rojas Rabiela, "Agricultural Implements in Mesoamerica," Explorations in Ethnohistory: Indians of Central Mexico in the Sixteenth Century, ed. H. R. Harvey, Hanns J. Prem (Albuquerque: University of New Mexico Press, 1984), 192; Francis Robicsek, "The Weapons of the Ancient Maya," in Circumpacifica Band I: Mittel und Sudamerika: Festschrift fur Thomas S. Barthel, ed. Bruno Illius and Matthew Laubscher (Frankfurt: Peter Lang, 1990), 372; Prudence M. Rice et al., "Defensive Architecture and the Context of Warfare at Zacpeten," in The Kowoj: Identity, Migration, and Geopolitics in Late Postclassic Peten, Guatemala, ed. Prudence M. Rice and Don S. Rice (Denver: University Press of Colorado, 2009), 131–32.
- 113. Key, Book of Mormon in the Light of Science, 67.
- 114. StacieM.King, "ThreadProductioninEarlyPostclassicCoastalOaxaca,Mexico: Technology, Intensity, and Gender," *Ancient Mesoamerica* 22, no. 2 (2011): 323–43; Sharisse D. McCafferty and Geoffrey G. McCafferty, "Spinning and Weaving Tools from Santa Isabel, Nicaragua," *Ancient Mesoamerica* 19, no. 1 (2008): 143–56; Sharisse D. McCafferty and Geoffrey G. McCafferty, "Tickle Your Fancy? Spinning Feathers in Postclassic Cholula, Mexico" (paper prepared for the 64th Annual Meeting of the Society for American Archaeology, Chicago, March 1999).
- 115. Key, Book of Mormon in the Light of Science, 68.

- 116. Rabiela, "Agricultural Implements," 175-204.
- 117. Key, Book of Mormon in the Light of Science, 68.
- 118. Rabiela, "Agricultural Implements," 175-204.
- 119. Scott, Mormon Mirage, 83-84.
- 120. Rabiela, "Agricultural Implements," 196. See item 114, discussing grain.
- 121. Key, Book of Mormon in the Light of Science, 68.
- 122. Rabiela, "Agricultural Implements," 175-204.
- 123. Key, Book of Mormon in the Light of Science, 68.
- 124. Plowing was done by human means, and tools for plowing were known. Rabiela, "Agricultural Implements," 175–204. Furthermore, the disadvantages of lacking draft animals for transportation purposes may be less severe than may be assumed. See David C. Batten, "Horse Power: Wheat, Oats, Maize, and the Supply of Cities," *Ancient Mesoamerica* 10, no. 1 (1999): 99–103.
- 125. Key, Book of Mormon in the Light of Science, 68.
- 126. Angel Palerm, "Agricultural Systems and Food Patterns," in Social Anthropology, ed. Manning Nash, Handbook of Middle American Indians (Austin: University of Texas Press, 1967), 26–52; Rabiela, "Agricultural Implements," 175–204; Brian Hayden, "Past to Present Uses of Stone Tools in the Maya Highlands," in Lithic Studies among the Contemporary Highland Maya, ed. Brian Harden (Tucson: University of Arizona Press, 1987), 160–234.
- 127. Key, Book of Mormon in the Light of Science, 67.
- 128. Canuto et al., "Ancient Lowland Maya Complexity," 1–17; Scripture Central Staff, "Advanced Civilization"; Roper, "Joseph Smith, Central American Ruins, and the Book of Mormon," 141–62.
- 129. Whitman, "Book of Mormon," 42, 48.
- 130. Evidence for the geographical setting for Lehi's journey through the wilderness is well grounded. Research on the ancient American setting for the Book of Mormon, while not definitive, continues to prove fruitful. See Sorenson, *Ancient American Setting*, 138–89; Sorenson, *Mormon's Codex*, 119–43.
- 131. Philanthropist of Chester County, Mormonism Unmasked, 5-6.
- 132. Sonia Lombardo de Ruiz, "La navegacion en la iconografía maya," *Arqueología Mexicana* 6, no. 33 (1998): 40–47. Of course, the art of navigation need not have been derived from the Old World as some early readers assumed.
- 133. Thomas Key, A Biologist Looks at the Book of Mormon (Marlow, OK: Utah Missions, 1985), 5; Key, Book of Mormon in the Light of Science, 65.
- 134. Diego López Cogolludo, Los tres siglos de la dominacion española en Yucatan [...] (Campeche, MX: José María Peralta, 1842), 1:235, translated and quoted in Philip Ainsworth Means, History of the Spanish Conquest of Yucatan and of the Itzas (Cambridge, MA: Peabody Museum of American Archaeology and Ethnology, Harvard University, 1917), 13; Diego de Landa, Landa's Relación de las Cosas de Yucatan, ed. and trans. Alfred M. Tozzer (Cambridge, MA: Peabody Museum of American Archaeology and Ethnology, Harvard University, 1941),

- 231; Sandra Orellana, *The Tzutujil Mayas: Continuity and Change, 1250–1630* (Norman: University of Oklahoma Press, 1984), 91; Scripture Central Staff, "Lawyers," Evidence 223, 9 August 2021, scripturecentral.org/evidence /lawyers.
- 135. Key, Biologist Looks at the Book of Mormon, 5.
- 136. Francisco Avalos, "An Overview of the Legal System of the Aztec Empire," Law Library Journal 86, no. 2 (1994): 259–76; Bernardino de Sahagún, General History of the Things of New Spain: Florentine Codex, trans. Arthur J. O. Anderson and Charles E. Dibble (Santa Fe: School of American Research; Salt Lake City: University of Utah Press, 1961), 11:15–16; Landa's Relación, 231; Orellana, Tzutujil Mayas, 92; Scripture Central Staff, "Mesoamerican Judges," Evidence 230, 30 August 2021, scripturecentral.org/evidence /mesoamerican-judges.

# Chapter 5: Book of Mormon Names

Many names found in the Book of Mormon have been considered anachronistic by some readers. Research on Book of Mormon names since its publication in 1830 has shed light on many of these. Some names, including non-biblical ones that appear in the text, have been discovered in ancient Near Eastern inscriptions.

Speaking of Hebrew names in the Bible, Moshe Garsiel states:

Many hundreds of puns on names are to be found throughout the Bible. Some of them are explicated in so many words by figures in the narrative; many are overt and recognizable within the context; but very many are worked into the text in a clandestine manner. These last constitute a kind of riddle, offering a challenge to the reader to probe more deeply in order to uncover them with the help of various hints and directives supplied by the author.<sup>1</sup>

Current research by Latter-day Saint scholars trained in ancient Near Eastern languages has found that some Book of Mormon names have significant etymologies. Like those in the Bible, these often also point to evidence of significant wordplay in the text when considered in light of ancient Hebrew or Egyptian.<sup>2</sup>

This chapter only treats names that readers have claimed to be anachronistic and a product of modern invention. Those names which are attested in ancient Near Eastern inscriptions or which have been shown to have plausible etymologies are considered confirmed.

#### 138. Sam

**Status: Confirmed** (1845–1965)

**Critics' Claim:** Some have claimed that the name *Sam* (1 Nephi 2:5) is a modern name with no ancient support.

One of [Nephi's] brothers was a real Yankee—Sam! Well done, Prophet Smith; you can't get rid of your Jonathanisms. Sam indeed! Fie, Joseph, how you forget yourself. Can't you forge better than this? Precious little of the Yankee wit, have you in your composition, to let a *Yankeeism* creep into the *ancient* "Book of Nephi" in this manner.<sup>3</sup>

"This name Sam, by the way, sounds very modern." 4 "Nor did any Hebrew name his child 'Sam' (v. 5). That is a Yankee name but not Hebrew." 5

**Response:** The name *Sam* is attested in ancient Egyptian.<sup>6</sup> It is also a Hebrew name that is attested on a ring seal dating to the seventh century BC.<sup>7</sup> Paleo Hebrew characters such as those found on this inscription make no distinction between two types of s sounds—ś (s) and š (sh). The form of *Sam* in the Book of Mormon, assuming it follows early Israelite orthography, could therefore be a viable spelling no matter how it was anciently pronounced (whether as *Sam* or *Shem*). It may be significant that the name would have been pronounced as *Sam* in the northern dialect of Ephraim to which Lehi and Ishmael's families had familial ties.<sup>8</sup>

#### 139. Josh

Status: Confirmed (1966-2024)

**Critics' Claim:** Some have claimed that the name *Josh* (3 Nephi 9:10; Mormon 6:14) is modern and has no ancient support. "Josh.... There's Yankee for ye. Rather out of place, however, in *ancient* writings." 10

**Response:** The name *Josh* is attested in several preexilic inscriptions.<sup>11</sup> It is a hypocoristic (shortened) form of the name *Josiah*, one of the last kings of Judah (Jeremiah 27:1). Robert Deutsch and Michael Heltzer note that "this hypocoristic name is not found in the OT but *is* known from epigraphic sources" from the time of the prophet Jeremiah when it was likely pronounced *Yaush*.<sup>12</sup> It is found on two clay bullae (seal impressions) and three ostraca (inscribed fragments of pottery) from the site of Lachish dating to 586 BC. Four persons mentioned in documents from the Jewish colony of Elephantine in Egypt are also identified by this name.<sup>13</sup>

#### 140. Gid

Status: Partially Confirmed (1966–2024)

**Critics' Claim:** Some have claimed that the name *Gid* (Alma 57:28) is modern and has no ancient support.<sup>14</sup>

**Response:** Gid may be a hypocoristic form of the place name Gidom<sup>15</sup> or possibly derived from Gideon.<sup>16</sup>

#### 141. Giddianhi

**Status: Partially Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that the name *Giddianhi* (3 Nephi 3:9) is a modern name inspired by an individual involved in an anti-Masonic controversy.<sup>17</sup>

**Response:** Several scholars have drawn attention to the Egyptian element *anchi/anhi/'nh(i)* in the names *Giddianhi* and *Paanchi* (two names associated with the Gadianton robbers), which means "to live" and denotes "life" or "oath" and "to swear" as a verb. <sup>18</sup> Matthew Bowen suggests a possible etymology of "my fortune (-deity) is my (life) oath." <sup>19</sup>

#### 142. Gadianton

**Status: Partially Confirmed** (1966–2024)

**Critics' Claim:** Some critics of the Book of Mormon have claimed that the name *Gadianton* (Helaman 2:4) is of modern origin.<sup>20</sup>

**Response:** Gadianton is actually spelled with a double-d (Gaddianton) in its first appearance in the Original Manuscript of the Book of Mormon (Helaman 2:11–12). This is interesting since the Hebrew word for *robber* is spelled *gedud* (notice the double-d) and appears in Hosea 6:9 as "band of robbers." This could suggest a wordplay on the name *Gaddianton* and the word *robber*. Several possible etymologies have been proposed, including "provide (my) good fortune, O Lord (Yah)/Jehovah" or alternatively, but less likely, "(my) good fortune is oppression/affliction/rapine."<sup>21</sup>

#### 143. Abbreviated Names

Status: Confirmed (1966–2024)

**Critics' Claim:** In addition to being perceived as modern, names such as *Sam*, *Josh*, and *Gid* have been seen by some critics as a clearly modern attempt to abbreviate longer biblical names.<sup>22</sup>

**Response:** Hypocoristic or abbreviated names are now recognized as a legitimate form of ancient Israelite proper names, examples of

which have since been attested in Hebrew inscriptions predating 587 BC.<sup>23</sup> These include the names *Sam*, *Josh*, *Aha*, and others.<sup>24</sup>

#### 144. Sheum

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that the term *sheum* (Mosiah 9:9) is nonsense and has no evidence to indicate it is an ancient name for a grain.<sup>25</sup>

**Response:** Sheum is an authentic Mesopotamian name (found in Sumerian and Akkadian) for grains going back to the third millennium BC, suggesting a likely Jaredite origin.<sup>26</sup>

#### 145. Neas

Status: Partially Confirmed (1966–2024)

**Critics' Claim:** Some critics have claimed there is no evidence suggesting that *neas* (Mosiah 9:9) is an authentic ancient term for a grain.<sup>27</sup>

**Response:** Some evidence suggests that *neas* may have been a word of Mesopotamian origin.<sup>28</sup>

#### 146. Ziff

Status: Partially Confirmed (1966-2024)

**Critics' Claim:** Some have claimed that the term *ziff* (Mosiah 11:3) has no support as an authentic ancient word.<sup>29</sup>

**Response:** Some have concluded that since *ziff* is mentioned in connection with gold, silver, copper, and brass, that *ziff*, possibly a loan word, may also be a metal. Several scholars have suggested that the name may be related to the Hebrew *ziw*, "glow" or "shine," although none of the Hebrew cognates of *ziw* end in a consonant. Jerry Grover has noted that the name *zyf* is documented in old Arabic texts and is associated with a form of metal of some kind. Although Arabic script is currently only known from funerary inscriptions before AD 500, it is possible this name may go back to earlier times and could have been known to Lehi and his family. Jerry

## 147. Money Names

Status: Partially Confirmed (1966-2024)

**Critics' Claim:** Some have claimed that there is no evidence to suggest that any of the names of monetary units among the Nephites are of ancient origin.

The golden—a senine, a seon, a shum, a limnah, an antion, a shublon. The silver—a senum, an amnor, an ezrom, an onti, a shiblon, a shiblum, a leah . . . This gibberish . . . will do very well to be placed alongside of the 'new tongues' of the Mormonites, the jabber of Miss Carraboo, and Sheridan's Greek. 32

Response: According to Mormon, the Nephites,

did not reckon after the manner of the Jews who were at Jerusalem; neither did they measure after the manner of the Jews; but they altered their reckoning and their measure, according to the minds and the circumstances of the people, in every generation, until the reign of the judges, they having been established by king Mosiah. (Alma 11:4)

Thus, based on the text itself, we should expect the Nephite system to substantially differ from earlier systems known to ancient Israelites.

That being said, the names of some of these monetary units seem to reflect an ancient Near Eastern background. For instance, *limnah*, one of the Nephite measures of gold (Alma 11:5), could plausibly be derived from the Hebrew word *manah* or *minah* (a measuring unit for precious metals). The preposition *le* can mean "to, for, according to." Thus a *limnah* may mean "according to a mina."<sup>33</sup>

Onti and antion may be related to the Egyptian participle int, "bringing; buying." The name Shiblum (Alma 11:16) actually reads shilum in the Printers Manuscript of the Book of Mormon. Shillum is Hebrew (Micah 7:3) for "reward, payment, compensation" and appears in Northwest Semitic inscriptions with the meaning "to be paid, repaid." The Nephite silver measure senum and the gold measure senine plausibly derive from the Egyptian monetary term sniw or snny. The gold measure seon (or sean as it appears in the Printers Manuscript) may derive from the Hebrew sea, which is rendered "measure" in the Old Testament.

It is also interesting that the measures *ezrom* and *antion* show up in the names of two antagonists (Zeezrom and Antionah) in the same narrative in which the monetary units are delineated (Alma 10:31; 12:20). The fact that these are the *only* two named antagonists in this account

suggests intentional wordplay, in which the characters symbolize the greedy desire for gold and silver that had apparently corrupted their community.<sup>38</sup>

Collectively, these naming practices and monetary terms — several of which relate to concepts of measurement and payment — point to a system that drew upon ancient Hebrew and Egyptian ideas associated with economy. At the same time, differences between these systems are consistent with the Book of Mormon's internal claims.

## 148. Rameumptum

Status: Partially Confirmed (1966–2024)

**Critics' Claim:** Alma says that the Zoramites "had a place built up in the center of their synagogue, a place for standing, which was *high* above the head; and the top thereof would only admit one person" (Alma 31:13) and that this stand was called Rameumptum (Alma 31:21). Some critics have claimed that there is no evidence that *Rameumptum* is an authentic ancient name.<sup>39</sup>

**Response:** While a fully satisfactory etymology has not yet been identified, the Hebrew element *ram* in this name signifies something that is high, which seems appropriate in the context of Alma's description.<sup>40</sup> A possible but tentative etymology has been suggested.<sup>41</sup>

#### 149. Onidah

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that the name *Onidah* (Alma 32:4) was derived from a native American tribe and is not an authentic ancient name.<sup>42</sup>

**Response:** The name *Onidah* has a plausible Hebrew meaning, either "He attends (my) sorrow" or "he knows (my) affliction." The theme of *afflictions* is a significant part of the account of the Zoramites whose "afflictions had truly humbled them" (Alma 32:6; see also 32:24; 33:11). Alma and Amulek teach them how by their faith in Christ and repentance of their sins they can find rest from their afflictions (Alma 34:40–41).<sup>43</sup>

#### 150. Com

**Status: Unconfirmed** 

**Critics' Claim:** Some have claimed that there is no evidence to indicate that the Jaredite name *Com* (Ether 10:32) was an authentic ancient name.<sup>44</sup>

**Response:** There is currently no evidence supporting the antiquity of this name.

#### 151. Kim

Status: Unconfirmed

**Critics' Claim:** Some have claimed that the Jaredite name *Kim* (Ether 10:13) is not an authentic ancient name.<sup>45</sup>

**Response:** There is currently no evidence supporting the antiquity of this name.

## 152. Nephi

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that the name *Nephi* (1 Nephi 1:1) is not an authentic ancient name.<sup>46</sup>

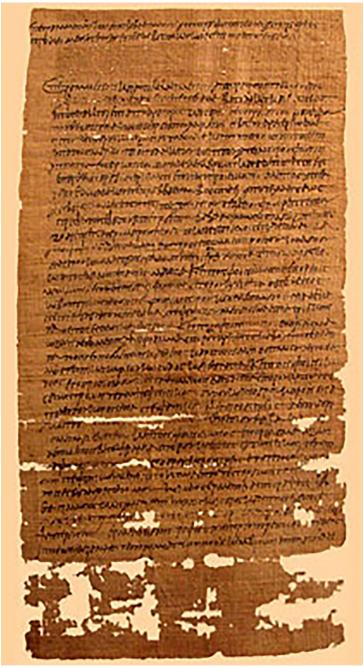
**Response:** Nephi is an attested Egyptian name meaning "good," "goodly," "fine," "fair," "beautiful," and would have been known at the time of Lehi. Furthermore, in many Book of Mormon passages, a strong case can be made for intentional and repeated wordplay.<sup>47</sup>

#### 153. Alma

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that the name *Alma* (Mosiah 16:2; 27:8; Alma 1:2) is not an authentic ancient name. <sup>48</sup> Others have claimed that the name is anachronistically Latin, rather than Hebrew, or that *Alma* is strictly a feminine name. As one writer put it, "Alma is supposed to be a prophet of God and of Jewish ancestry in the Book of Mormon. In Hebrew Alma means a betrothed virgin maiden — hardly a fitting name for a man." <sup>49</sup> Another claimed, "It reminds us of the 'Boy Named Sue."

**Response:** The name *Alma ben Yehudah*, the first ancient attestation of the name, appears in a land deed from the time of the Bar Kochba rebellion discovered in the Cave of Letters in 1961 (figure 42).<sup>51</sup> Another example of the name is found on an ossuary from the first century AD.<sup>52</sup> The name is also attested at Ebla by the end of the third



**Figure 42.** Land deed containing the name of Alma ben Judah. Babatha Scroll, *GetArchive* (website), jenikirbyhistory .getarchive.net/amp/media/babathascroll-5d18ca.

millennium BC.<sup>53</sup> There are also several significant examples of apparent wordplay in the Book of Mormon text based upon its meaning.<sup>54</sup>

#### 154. Moroni

**Status: Partially Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that the name *Moroni* (Alma 43:16; Mormon 6:6) is not an authentic ancient name.<sup>55</sup>

**Response:** Although not attested as an ancient name, there are plausible meanings for the name. One possible meaning is "belonging to Moron" or "from Moron," or possibly "my beloved" or "I was beloved." <sup>56</sup>

#### 155. Mormon

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that the word *Mormon* (Mormon 1:1, 5) is not an authentic ancient name.<sup>57</sup>

**Response:** The name *Mormon* (*mrmn*) appears on a stela inscription dating to the nineteenth to twenty-first Egyptian dynasties (1292–943 BC).<sup>58</sup> The name may be based on Egyptian roots meaning "truly beloved" or "love is established" or "love remains steadfast/firm."<sup>59</sup> Matthew Bowen suggests the meaning, "desire is enduring" or "love is enduring," and discusses apparent wordplay in the Book of Mormon text relating to this theme.<sup>60</sup>

#### 156. Deseret

**Status: Confirmed** (1845–1965)

**Critics' Claim:** After they departed into the wilderness, the Jaredites carried with them "deseret, which by interpretation, is a honey bee, and thus they did carry with them swarms of bees" (Ether 2:3). Some have claimed that *deseret* is not an authentic ancient name. As one early critic stated, "There is not the slightest reason for thinking that the word Deseret means Honey Bee in any language ever spoken by man."<sup>61</sup>

**Response:** In ancient Egypt, the crown of Lower Egypt, the Red Crown, has a distinctive appearance with a curly protuberance like that of a bee and it is portrayed on potsherds as early as Pre-Dynastic times (4000–3500 BC).<sup>62</sup> Egyptologist Sir Allen Gardiner noted that the name of this crown was *dšrt* (pronounced *Deshret*), and that the

name *dšrt* was substituted for the word *bee* in some Egyptian texts, possibly for sacred reasons.<sup>63</sup>

The need for Moroni to interpret this word in the text suggests it was not a name that originated in the land of Jaredite origins and may have been borrowed from another language, possibly Egyptian. Evidence for cultural exchanges between Egypt and Mesopotamia between 3200 and 2900 BC points to one possible way that this name, as a loan word, could have been introduced to ancient Mesopotamia from where the Jaredites originally migrated. The attestation of dšrt, a name closely associated with the honey bee, and the evidence for cultural connections between Egypt and Mesopotamia, at an early period, provides significant confirmation of the authenticity of this Book of Mormon name.

#### 157. Liahona

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that there is no evidence that the word *Liahona* (Alma 37:38) is an authentic ancient name.<sup>65</sup>

**Response:** Liahona has a plausible meaning of "To Yahweh Look!" or "Look to the Lord!" 66

#### 158. Irreantum

Status: Confirmed (1966-2024)

**Critics' Claim:** Some critics have claimed that the name *Irreantum*, which Nephi interpreted as meaning "many waters" (1 Nephi 17:5), is not an authentic ancient name.<sup>67</sup> As one writer put it, "Irreantum signifies a complete ass, nearer than anything else."<sup>68</sup> Another wrote, "Just in whose language this sea was called Irreantum, Nephi does not say. ... There is not a Mormon on this side of heaven that can tell."<sup>69</sup>

**Response:** A plausible etymology in ancient South Arabian with the meaning "place of abundant watering" is consistent with Nephi's interpretation "many waters" (1 Nephi 17:5).<sup>70</sup>

#### 159. Shazer

Status: Confirmed (1966-2024)

Critics' Claim: Some have claimed that there is no evidence that the

name Shazer (1 Nephi 16:13–14) is an authentic ancient Near Eastern name.<sup>71</sup>

**Response:** A plausible Semitic etymology of *Shazer* yields the meaning "young gazelle," which fits the hunting context of Nephi's narrative (1 Nephi 16:13–14).<sup>72</sup>

#### 160. Jarom

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that the name *Jarom* (Jarom 1:1) is

not an authentic Hebrew name.73

Response: Jarom is an attested Hebrew name found on several

inscriptions dating to the preexilic period.<sup>74</sup>

### 161. Jonas

Status: Unconfirmed

**Critics' Claim:** Some claim that the name *Jonas* (3 Nephi 19:4) is a Greek name and would not have been known to an Israelite with origins in preexilic Israel in the ancient Near East.<sup>75</sup>

**Response:** Strictly speaking, the name *Jonas* is currently unattested from preexilic Hebrew inscriptions. It should be noted, however, that *Jonas* is merely a Greek form of the Hebrew name *Jonah*. Thus, in this case, it can't be certain whether Jonas reflects an underlying Greek (rather than Hebrew) version of the name or if it is simply an artifact of the translation itself (the opting for one acceptable English variant of the name over another).

## 162. Timothy

**Status: Unconfirmed** 

**Critics' Claim:** Some claim that the name *Timothy* (3 Nephi 19:4) is a Greek name and would not have been known to an Israelite with origins in preexilic Israel in the ancient Near East.<sup>76</sup>

**Response:** The name *Timothy* is currently unattested from preexilic inscriptions.

## 163. Non-Biblical Hebrew Names in the Book of Mormon

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that there are no authentic Hebrew names in the Book of Mormon that are not found in the Bible.<sup>77</sup>

**Response:** There are many examples of Hebrew and other ancient Near Eastern names in the Book of Mormon, some of which do not appear in the Hebrew Bible or are transliterated differently in English translations.<sup>78</sup> Additionally, there are many examples of notable wordplay based on the meaning of Hebrew words found in the Book of Mormon text.<sup>79</sup>

## 164. Egyptian Names in the Book of Mormon

**Status: Confirmed** (1845–1965)

**Critics' Claim:** Some have claimed that there is no evidence that any of the names found in the Book of Mormon are authentic Egyptian names.<sup>80</sup>

**Response:** There are a number of Egyptian names in the Book of Mormon, including *Nephi, Paanchi, Mormon*, and others.<sup>81</sup> Furthermore, in several cases, the text seems to be cognizant of the meaning of these names, either through wordplay or glosses.<sup>82</sup> The authenticity of some of these names has even been pointed out by a non-Latter-day Saint scholar. In a letter to Grant Heward, William F. Albright of Johns Hopkins University wrote:

As you know, when the Book of Mormon was written, Egyptian had just begun to be deciphered and it is all the more surprising that there are two Egyptian names, Paanch and Pahor(an) which appear together in the Book of Mormon in close connection with a reference to the original language as being "Reformed Egyptian."

#### 165. Zarahemla

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Zarahemla was the name of a descendant of Mulek, the only surviving son of king Zedekiah, and a land and city in the land of promise were named after him (Omni 1:14; Mosiah 25:2; Helaman 8:21). Some have claimed that Zarahemla is not an authentic ancient name.<sup>84</sup>

**Response:** Zarahemla appears to be a compound of the Hebrew nouns zera ("seed, offspring, descendant") and hemlah ("compassion,

pity, mercy"), rendering the meaning "seed of compassion." When the root of *hemlah* is used as a verb, it can convey the meaning "to spare, have compassion" and the Lord warns king Zedekiah, his servants, and the wicked of Jerusalem that he will not spare them by using that verb ( $l\bar{o}$  'eḥmôl) (Jeremiah 13:14; 15:5; 21:7). The Book of Mormon text displays significant wordplay examples relating to the meaning of this name.<sup>85</sup>

### 166. Zeniff

Status: Partially Confirmed (1966–2024)

**Critics' Claim:** Some have claimed that the name *Zeniff* (Mosiah 9:1) has no evidence to support it as an ancient name.<sup>86</sup>

**Response:** The name *Zeniff* may possibly be taken from a conjectured Hebrew gentilic *senipi* "tiaraed, crowned, enwrapped (with turban)," derived from Hebrew *sanif*, *misnefet* (Job 29:14). If the name is related to the name *Zenephi*, the *ze* prefix could be Hebrew demonstrative-relative *ze(h)*-, meaning "he, one of." This would make *Zeniff*, like *Zenephi*, a compound Hebrew and Egyptian name, although we do not know if *niff* and *Nephi* are the same name.<sup>87</sup>

#### 167. Omni

Status: Confirmed (1966-2024)

**Critics' Claim:** Some have claimed that the name *Omni* (Jarom 1:15; Omni 1:1) is not an authentic Hebrew name.<sup>88</sup>

**Response:** The name *Omni* may derive from a root which means "my faithfulness, trust" and yields a plausible meaning "faithfulness (of the Lord/God)," "(the Lord/God) is my trust," or "(the Lord/God) is (the object of) my trust." <sup>89</sup>

### 168. Mosiah

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that the name *Mosiah* (Omni 1:12; Mosiah 1:2) is not an authentic Hebrew name.<sup>90</sup>

**Response:** The name *Mosiah* yields a plausible meaning of "The Lord is a deliverer, savior."91

#### 169. Helaman

Status: Partially Confirmed (1966–2024)

**Critics' Claim:** Some have claimed that there is no evidence that the name *Helaman* (Mosiah 1:2; Alma 37:1; Helaman 2:2) is an authentic ancient name.<sup>92</sup>

**Response:** The name *Helaman* may derive from a Hebrew root meaning "the strong, healthy strong, robust one" or possibly "seer" or "visionary."<sup>93</sup>

### 170. Ether

**Status: Unconfirmed** 

**Critics' Claim:** Some have claimed that the name *Ether* (Ether 1:6) is a modern name and not an ancient one.<sup>94</sup>

**Response:** There is currently no evidence for the name *Ether* in antiquity.

#### 171. Anti

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some have claimed that element *anti* in *Anti-Nephi-Lehi* (Alma 24:1) shows modern origin and was possibly influenced by an anti-Masonic controversy that occurred in New York before the publication of the Book of Mormon.<sup>95</sup>

**Response:** The element *anti* appears to be an Egyptian pronomial *nty* (pronounced "nety" or "enty") with the meaning "he, she of; partisan, adherent of." The name *Anti-Nephi-Lehi* would then mean "he/adherent/partisan of Nephi and Lehi," which perfectly fits the context of the Lamanite converts who received the Gospel as taught by the Nephite missionaries.<sup>96</sup>

## **Summary of Results**

During the first period (1830–1844), seventeen names of the Book of Mormon text were considered implausible or anachronistic, none of which could be confirmed (figure 43). In the next 120 years (1845–1965), the total number of anachronisms increased to twenty-seven. One name was confirmed, two were partially confirmed, and the remaining twenty-four lacked confirmation (figure 44). During the last

period (1966–2024), while the total number of items rose to thirty-four, nineteen items found confirmation, ten partial confirmation, and five lacked confirmation (figure 45).

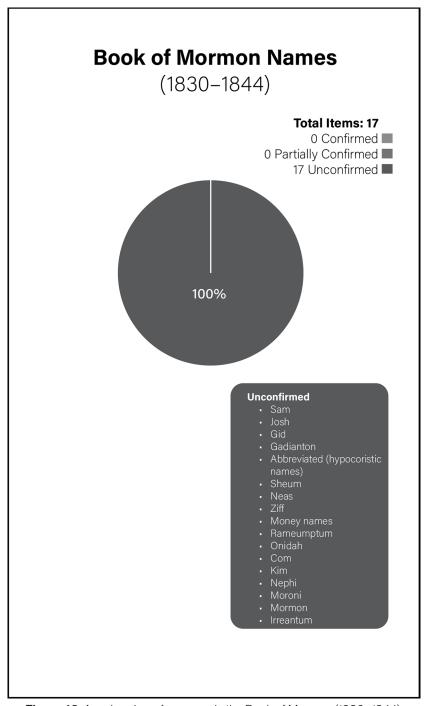


Figure 43. Anachronisms for names in the Book of Mormon (1830–1844).

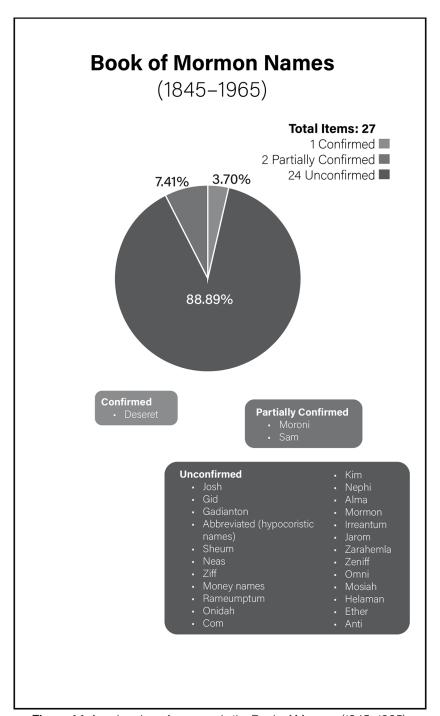


Figure 44. Anachronisms for names in the Book of Mormon (1845–1965).

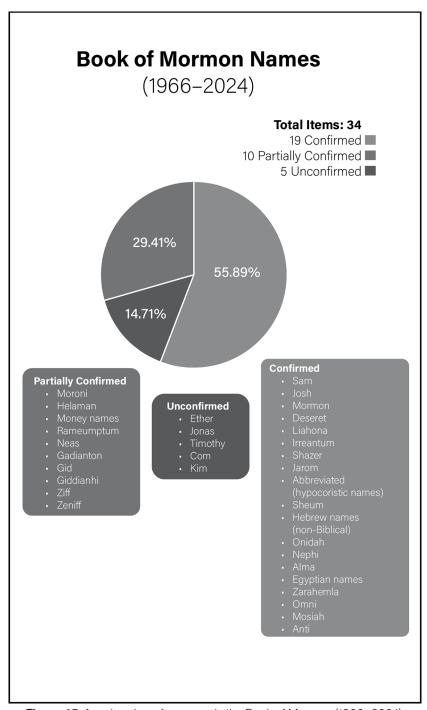


Figure 45. Anachronisms for names in the Book of Mormon (1966–2024).

### **Notes**

- 1. Moshe Garsiel, Biblical Names: A Literary Study of Midrashic Derivations and Puns (Ramat Gan, IL: Bar-llan University Press, 1991), 9.
- 2. John Gee, "Book of Mormon Names: Beyond Etymology," in Perspectives on Latter-day Saint Names and Naming: Names, Identity, and Belief, ed. Dallin D. Oaks, Paul Baltes, and Kent Minson (New York: Routledge, 2023), 217–27; Matthew L. Bowen, "Striking While the Irony Is Hot: Hebrew Onomastics and Their Function within the Book of Mormon Text," in Perspectives on Latter-day Saint Names and Naming, ed. Oaks, Baltes, and Minson, 228–49; Matthew L. Bowen, Name as Key-Word: Collected Essays on Onomastic Wordplay and the Temple in Mormon Scripture (Orem, UT: Interpreter Foundation; Salt Lake City: Eborn Books, 2018); Matthew L. Bowen, Ancient Names in the Book of Mormon: Toward a Deeper Understanding of a Witness of Christ (Orem, UT: Interpreter Foundation; Salt Lake City: Eborn Books, 2023); Stephen D. Ricks et al., Dictionary of Proper Names and Foreign Words in the Book of Mormon (Orem, UT: Interpreter Foundation; Salt Lake City: Eborn Books, 2022).
- Origen Bacheler, Mormonism Exposed, Internally and Externally (New York: printed by the author, 1838), 11. See also LaRoy Sunderland, "Mormonism," Zion's Watchman (New York), 17 February 1838; C. Lee, Mormonism: A Sketch of Its Rise and Progress (London: Houlston and Stoneman, 1852), 27; T. B. H. Stenhouse, The Rocky Mountain Saints (New York: D. Appleton, 1873), 530; Clark Braden, "Braden-Kelly Debate," Independent Patriot (Lamoni, IA), 9 July 1891; Charles A. Shook, Cumorah Revisited (Cincinnati, OH: Standard Publishing, 1910), 500.
- 4. Edgar E. Folk, The Mormon Monster (Chicago: Fleming H. Revell, 1900), 186.
- 5. Marvin Cowan, *Mormon Claims Answered* (Salt Lake City: printed by the author, 1979), 39.
- Herbert E. Winlock, "The Eleventh Egyptian Dynasty," Journal of Near Eastern Studies 2, no. 4 (1943): 266; Hugh Nibley, Lehi in the Desert / The World of the Jaredites / There Were Jaredites (Salt Lake City: Deseret Book, 1988), 20–21.
- 7. Nahman Avigad, *Corpus of West Semitic Stamp Seals* (Jerusalem: Israel Academy of Sciences and Humanities, 1997), 69; Scripture Central Staff, "Attestation of Sam," Evidence 338, 9 May 2022, scripturecentral.org/evidence/attestation-of-sam; Ricks et al., *Dictionary of Proper Names and Foreign Words*, 292–93; John A. Tvedtnes, John Gee, and Matthew Roper, "Book of Mormon Names Attested in Ancient Hebrew Inscriptions," *Journal of Book of Mormon Studies* 9, no. 1 (2000): 51, 78.
- 8. According to Franklin D. Richards and Erastus Snow, the Prophet Joseph Smith taught that Ishmael's children with whom Nephi's children intermarried were Ephraimites. "Joseph replied . . . 'This Ishmael and his family were of the lineage of Ephraim.'" Franklin D. Richards, "Origin of American Aborigines," *Contributor* 17, no. 7 (May 1896): 425. And according to Snow, "the Prophet Joseph Smith informed us that . . . Ishmael was of the lineage of Ephraim, and that his sons married into Lehi's family, and Lehi's

- sons married Ishmael's daughters." Erastus Snow, in *Journal of Discourses*, 23:184–85. See also Don Bradley, *The Lost 116 Pages: Reconstructing the Book of Mormon's Missing Stories* (Salt Lake City: Greg Kofford Books, 2019), 157–63.
- 9. Bacheler, *Mormonism Exposed*, *Internally and Externally*, 14; Sunderland, "Mormonism": Braden. "Braden-Kelly Debate."
- 10. Bacheler, Mormonism Exposed, Internally and Externally, 14.
- 11. Scripture Central Staff, "Book of Mormon Evidence: Attestation of Josh," Evidence 348, 14 June 2022, scripturecentral.org/evidence/attestation-of-josh; Tvedtnes, Gee, and Roper, "Book of Mormon Names Attested," 49.
- 12. Robert Deutsch and Michael Heltzer, *New Epigraphic Evidence from the Biblical Period* (Tel Aviv: Archaeological Center Publication, 1995), 56, emphasis added.
- 13. Deutsch and Heltzer, New Epigraphic Evidence, 56–57; Avigad, Corpus of West Semitic Stamp Seals, 184, 202–3; Shmuel Ahituv, Echoes from the Past: Hebrew and Cognate Inscriptions from the Biblical Period (Jerusalem: CARTA, 2008), 481–82.
- 14. Bacheler, Mormonism Exposed, Internally and Externally, 14; Sunderland, "Mormonism."
- 15. Gary A. Herion, "Gidom," in *The Anchor Bible Dictionary*, ed. David Noel Freedman, 6 vols. (New York: Doubleday, 1992), 2:1015.
- 16. Ricks et al., Dictionary of Proper Names and Foreign Words, 122.
- 17. David Persuitte, who argued for a nineteenth-century origin for the Book of Mormon account, claimed the name Giddianhi may have been derived from the name of a man named Giddens or Giddings who was involved in the trial for the murder of Mason William Morgan. David Persuitte, *Joseph Smith and the Origins of the Book of Mormon* (Jefferson, NC: McFarland, 1985), 176–77.
- 18. Ricks et al., Dictionary of Proper Names and Foreign Words, 123; Matthew L. Bowen, "'Swearing by Their Everlasting Maker': Some Notes on Paanchi and Giddianhi," Interpreter: A Journal of Latter-day Saint Faith and Scholarship 28 (2018): 164–68, journal.interpreterfoundation.org/swearing-by-their-ever lasting-maker-some-notes-on-paanchi-and-giddianhi/.
- 19. Bowen, "'Swearing by Their Everlasting Maker," 164-68.
- 20. One reader facetiously defined the name *Gadianton* as "a prudent ruler, or governor of a territory or province—one who expels black-legs, thieves, robbers and murderers, from his province" or "one who has justice prudently administered to all honest subjects." "Mr. Editor," *Warsaw Signal*, 11 August 1841.
- 21. Ricks et al., Dictionary of Proper Names and Foreign Words, 116-17.
- 22. "Sam, Josh, and Gid are half names, or Jonathanisms." Bacheler, *Mormonism Exposed, Internally and Externally*, 14; see Sunderland, "Mormonism."
- 23. Richard S. Hess, "Hypocoristic Names," in *Encyclopedia of Hebrew Language and Linguistics*, ed. Geoffrey Khan (Leiden: Brill, 2013).

- 24. Ahituv, Echoes from the Past, 481; Deutsch and Heltzer, New Epigraphic Evidence, 21, 56; Yair Shoham, "A Group of Hebrew Bullae from Yigael Shiloh's Excavations in the City of David," in Ancient Jerusalem Revealed, ed. Hillel Geva (Jerusalem: Israel Exploration Society, 1994), 58; I. Ben-Dor, "Two Hebrew Seals," Quarterly of the Department of Antiquities in Palestine 13 (1948): 67; George Andrew Reisner, Clarence Stanley Fisher, and David Gordon Lyon, Harvard Excavations at Samaria: 1908–1910 (Cambridge, MA: Harvard University Press, 1924), 1:244; Scripture Central Staff, "Attestation of Sam"; Scripture Central Staff, "Attestation of Josh"; Scripture Central Staff, "Attestation of Aha," Evidence 117, 27 November 2020, scripturecentral.org /evidence/book-of-mormon-evidence-attestation-of-aha. Tvedtnes, Gee, and Roper, "Book of Mormon Names Attested," 40–51.
- 25. "Pray tell me what kinds of grain neas and sheum are. Joseph Smith's translation needs another translation, to render it intelligible." Bacheler, Mormonism Exposed, Internally and Externally, 14; G. Townshend, Why I Am Not a Mormon (Denver: Alexander & Meyer, 1907), 14; George Bartholomew Arbaugh, Revelation in Mormonism: Its Character and Changing Forms (Chicago: University of Chicago Press, 1932), 55; Latayne Colvette Scott, The Mormon Mirage: A Former Mormon Tells Why She Left the Church (Grand Rapids, MI: Zondervan, 1979), 84; Rick Branch, "Book of Mormon Fails," Utah Evangel 30, no. 2 (1983): 3; Thomas Key, A Biologist Looks at the Book of Mormon (Marlow, OK: Utah Missions, 1985), 2.
- 26. Mark Weeden, "The Akkadian Words for 'Grain' and the God Haya," *Die Welt des Orients* 39, no. 1 (2009): 77–107; John Huehnergard, *A Grammar of Akkadian* (Altanta: Scholars Press, 1997), 528; Scripture Central Staff, "Attestation of Sheum," Evidence 138, 19 January 2021, scripturecentral.org/evidence/book-of-mormon-evidence-attestation-of-sheum; Ricks et al., *Dictionary of Proper Names and Foreign Words*, 321–25.
- 27. Bacheler, Mormonism Exposed, Internally and Externally, 14; Scott, Mormon Mirage, 84; Branch, "Book of Mormon Fails," 3; Key, Biologist Looks at the Book of Mormon, 2.
- 28. Ricks et al., *Dictionary of Proper Names and Foreign Words*, 248–49; Jeremy Black, Andrew George, and Nicholas Postgate, *A Concise Dictionary of Akkadian* (Wiesbaden, DE: Harrassowitz Verlag, 1999), 28; A. Leo Oppenheim et al., eds., *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*, vol. 1, part 2 (Chicago: Oriental Institute, 1968), 450–52.
- 29. Bacheler, Mormonism Exposed, Internally and Externally, 15.
- 30. Ricks et al., Dictionary of Proper Names and Foreign Words, 368–70.
- 31. Jerry D. Grover, *Ziff, Magic Goggles, and Golden Plates: Etymology of Zyf and a Metallurgical Analysis of the Book of Mormon Plates* (Provo, UT: Grover Publishing, 2015), 39.
- 32. Bacheler, Mormonism Exposed, Internally and Externally, 15.
- 33. Ricks et al., Dictionary of Proper Names and Foreign Words, 211–12.
- 34. Ricks et al., Dictionary of Proper Names and Foreign Words, 51–53, 268.

- 35. Ricks et al., Dictionary of Proper Names and Foreign Words, 329-30.
- 36. Ricks et al., Dictionary of Proper Names and Foreign Words, 301–3.
- 37. Genesis 18:6;1Samuel 25:18;1Kings 18:32;2Kings 7:1,16,18; Ricks et al., *Dictionary of Proper Names and Foreign Words*, 303–5.
- 38. SeeScriptureCentralStaff, "WordplayonAntion," Evidence260,25October2021, scripturecentral.org/evidence/wordplay-on-antion; Scripture Central Staff, "Wordplay on Zeezrom," Evidence 49, 19 September 2020, scripturecentral.org/evidence/book-of-mormon-evidence-wordplay-on-zeezrom.
- 39. Bacheler, Mormonism Exposed, Internally and Externally, 15.
- 40. See Matthew L. Bowen, "'See That Ye Are Not Lifted Up': The Name Zoram and Its Paronomastic Pejoration," *Interpreter: A Journal of Latter-day Saint Faith and Scholarship* 19 (2016): 109–43, journal.interpreterfoundation.org/see-that-ye-are-not-lifted-up-the-name-zoram-and-its-paronomastic-pejoration/. For an interesting contrast between the treatment Rameumptom and the Hill Onidah, see Matthew L. Bowen, "He Knows My Affliction: The Hill Onidah as Narrative Counterpart to the Rameumptom," *Interpreter: A Journal of Latter-Day Saint Faith and Scholarship* 34 (2020): 195–220, journal.interpreter foundation.org/he-knows-my-affliction-the-hill-onidah-as-narrative -counterpart-to-the-rameumptom/.
- 41. Ricks et al., Dictionary of Proper Names and Foreign Words, 284-85.
- 42. "Page 318, a place is called 'Onidah.' Perhaps the writer has heard of a county in this state the name of which sounds exactly like the above." Sunderland, "Mormonism."
- 43. Bowen, "Striking While the Irony Is Hot," 240–41; Francis Brown, S. R. Driver, and Charles A. Briggs, eds., A Hebrew and English Lexicon of the Old Testament (Oxford: Clarendon Press, 1974), 777; G. Johannes Botterweck, Helmer Ringgren, and Heinz–Josef Fabry, Theological Dictionary of the Old Testament, trans. David E. Green (Grand Rapids, MI: Eerdmans, 2001), 11:234, 239–40; Scripture Central Staff, "Wordplay on Onidah," Evidence 292, 27 December 2021, scripturecentral.org/evidence/wordplay-on-onidah; Bowen, "He Knows My Affliction," 195–220.
- 44. Sunderland, "Mormonism."
- 45. Sunderland. "Mormonism."
- 46. In 1830, a writer for the *Rochester Gem* parodied the Book of Mormon, "containing the books of Nephi, Nimshi, Pukei, and Buckeye," and called it the work of "an ignoramus." "Imposition and Blasphemy!!—Moneydiggers, Etc," *Rochester Gem*, 15 May 1830, 15. See also "The Book of Pukei—Chap. 1," *Reflector* (Palmyra, NY), 12 June 1830; "Book of Pukei.—Chap. 2," *Reflector* (Palmyra, NY), 7 July 1830. Another writer purported, "There is not a single discovery or scrap of evidence in support of any of the following names of heads, under which the book has been divided, viz . . . Nephi." M. A. Sbresny, *Mormonism: As It Is Today. Some Striking Revelations* (London: Arthur H. Stockwell, 1911), 24–25. One writer suggested "'Nephi,' might have been a corruption of 'Nepheg,' Hebraic for 'offshoot,' one of those begotten in Exodus."

- Grover C. Loud, *Evangelized America* (New York: Dial Press, 1928), 150. Others have claimed it derives from the word *naphthar*, or *naphtha*, a flammable oil-like liquid that is mentioned in the apocryphal Book of Maccabees and that the KJV renders "nephi." Jerald Tanner and Sandra Tanner, *Mormonism: Shadow or Reality?* (Salt Lake City: Utah Lighthouse Ministry, 1987), 72. See 2 Maccabees 1:36.
- 47. Gee, "Beyond Etymology," 221–22; Scripture Central Staff, "Wordplay on Nephi," Evidence 160, 1 March 2021, scripturecentral.org/evidence/book-of-mormon-evidence-wordplay-on-nephi; Ricks et al., Dictionary of Proper Names and Foreign Words, 251-53; Scripture Central Staff, "What Is So Good about Nephi's Name?," KnoWhy 445, 28 June 2018, scripturecentral.org/knowhy /what-is-so-good-about-nephis-name; John Gee, "Four Suggestions on the Origin of the Name Nephi," in Pressing Forward with the Book of Mormon: The FARMS Updates of the 1990s, ed. John W. Welch and Melvin J. Thorne (Provo. UT: Foundation for Ancient Research and Mormon Studies [FARMS], 1999), 1-5. On the rich and remarkable wordplay on this Egyptian name, see Matthew L. Bowen, "Internal Textual Evidence for the Egyptian Origin of Nephi's Name," Insights 22, no. 11 (2002): 2, scholarsarchive.byu.edu/insights/vol22/iss11/3/; Matthew L. Bowen, "'O Ye Fair Ones': An Additional Note on the Meaning of the Name Nephi," Insights 23, no. 6 (2003): 2-3, scholarsarchive.byu.edu/cgi /viewcontent.cgi?article=1308&context=insights; Matthew L. Bowen, "'O Ye Fair Ones'—Revisited," Interpreter: A Journal of Mormon Scripture 20 (2016): 315-44, journal.interpreterfoundation.org/o-ye-fair-ones-revisited/; Matthew L. Bowen, "Nephi's Good Inclusio," Interpreter: A Journal of Mormon Scripture 17 (2016): 181–95, journal.interpreterfoundation.org/nephis-good-inclusio/; Bowen, "'He Is a Good Man': The Fulfillment of Helaman 5:6-7 in Helaman 8:7 and 11:18–19," Interpreter: A Journal of Mormon Scripture 17 (2016): 167– journal.interpreterfoundation.org/he-is-a-good-man-the-fulfillment-of -helaman-56-7-in-helaman-87-and-1118-19/.
- 48. Shook, Cumorah Revisited, 500; Sbresny, Mormonism, 24–25.
- 49. Walter Martin, *The Maze of Mormonism* (Santa Ana, CA: Vision House, 1978), 327. See also Robert McKay, "A Mormon Name," *Utah Evangel* 31, no. 8 (August 1984): 4; McKay, "What about Alma?" *Inner Circle* 2, no. 9 (September 1985): 6.
- 50. John L. Smith, "That Man Alma," Utah Evangel 33, no. 3 (April 1986): 2.
- 51. Yigael Yadin, *Bar-Kokhba: The Rediscovery of the Legendary Hero of the Last Jewish Revolt against Imperial Rome* (London: Weidenfeld and Nicolson, 1971), 176; Hugh Nibley, *The Prophetic Book of Mormon* (Salt Lake City: Deseret Book, 1989), 281–82.
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## Chapter 6: Old World Journeys by Land and Sea

The accounts of the wilderness journeys of Lehi's family and the Jaredites have been the focus of criticism and even mockery since the publication of the Book of Mormon. Some have claimed that "the locale of the early chapters of the book is given as the Near East, specifically Jerusalem, the Red Sea area and the Arabian Peninsula," and other information about the geography and desert culture recounted in Nephi's narrative are inconsistent with what is known about that region anciently.¹ Beginning with the pioneering work of Hugh Nibley in the mid-Twentieth century and continuing until today, researchers have done much to shed light on this portion of the Book of Mormon showing that the narrative in many ways fits remarkably well in that ancient cultural context.²

#### 172. Land of Jerusalem

**Status: Confirmed** (1845–1965)

**Critics' Claim:** Some early critics of the Book of Mormon claim that the phrasing "land of Jerusalem" (1 Nephi 2:11) used by Nephi and other Nephite prophets is inappropriate. As one early reader remarked, "'The land of Jerusalem.' ... There is no such land. No part of Palestine bears the name Jerusalem, except the city itself."<sup>3</sup>

**Response:** The phrase *land of Jerusalem* is used in the El Amarna Letters (figure 46) that were not discovered until 1887.<sup>4</sup> The phrase is also found in a text attributed to the prophet Jeremiah (4Q385b) discovered in the 1940s among the Dead Sea Scrolls. The text refers to the "exiles who were brought into exile from the land of Jerusalem." <sup>5</sup>

### 173. Bethlehem Part of the Land of Jerusalem

**Status: Confirmed** (1845–1965)



**Figure 46.** Amarna letter, Louvre Museum. Louvre Museum, Wikimedia Commons, s.v. "Amarna letter mp3h8882," commons.wikimedia.org/wiki/File:Amarna \_letter\_mp3h8882.jpg.

**Critics' Claim:** One of the earliest and most common criticisms of the Book of Mormon was Alma's statement that Jesus was "born at Jerusalem which is the land of our forefathers" (Alma 7:10), rather than Bethlehem.<sup>6</sup>

**Response:** The El Amarna Letters, not discovered until 1887, show that the terms Jerusalem and "land of Jerusalem" could be used interchangeably, since Jerusalem was considered the administrative center that controlled the surrounding land. Letter 289 says, "And now as for Jerusalem — behold this land belongs to the king." In the days of Jesus, Jerusalem was also the capital of Judea. Significantly, El Amarna Letter 290 mentions "a town in the land of Jerusalem" with the Canaanite name *Bit-Lahmi*, which is "an almost certain reference to the town of Bethlehem." So, Bethlehem, known to us as the place

of Jesus's birth, was considered by the ancient writer to have been a town belonging to Jerusalem, a town of the "land of Jerusalem," just as Alma's prophecy suggests.

## 174. No Verifiable Details for Lehi's Wilderness Journey

Status: Confirmed (1966–2024)

**Critics' Claim:** Some critics have claimed that Nephi's description of his family's wilderness journey is too vague and that it is impossible to verify any of the details mentioned in his account. "After you leave Jerusalem, ransack its pages and you can't find anything that interlocks with any other history. It takes you out into the wilderness and you remain in the wilderness, and nobody knows anything about it or heard anything about it."

**Response:** Nephi's account of his family's journey through the wilderness to the sea has been shown to fit remarkably well with geographical, cultural, and historical information about the Arabian region, including northern Yemen and Oman.<sup>10</sup> In particular, Nephi mentions a place called *Nahom*, where they buried his father-in-law Ishmael (1 Nephi 16:34). The existence of a place known as *NHM* is now verified by ancient inscriptions and other historical records.<sup>11</sup>

## 175. Direction of Departure

**Status: Confirmed** (1845–1965)

**Critics' Claim:** Some critics have claimed that it would have made no sense for Lehi and his family to have traveled southward into the Arabian wilderness (1 Nephi 2:5–6; 16:3) and that they should rather have gone westward across the Mediterranean.<sup>12</sup>

**Response:** Hugh Nibley has shown that under the circumstances the route southward would have been the wisest way to go. Given the precarious political situation involving the Kingdom of Judah, caught between Babylon and Egypt, and Judah's friendly relationship with Egypt, a westward journey could have led to disaster, as the apprehension of Urijah suggests (Jeremiah 26:20–23). On the other hand, a southern route would have been safer and would more or less shadow the Frankincense Trail. This route was fairly well established and would have taken Lehi and his family away from the danger of Lehi's Jerusalem enemies and their allies.<sup>13</sup>

## 176. Three-Day Journey

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Nephi says they reached a valley by the Red Sea after a three-day journey (1 Nephi 2:5–6). Some critics have claimed that it would have taken more than three days for Lehi and his family to travel to the Red Sea.<sup>14</sup>

**Response:** This is actually based upon a misreading of the text, which speaks of a three-day journey to the valley of Lemuel *after* they reach the borders of the Red Sea (1 Nephi 2:5–6). Wadi Tayyib al-Ism, considered to be the most likely candidate for Lehi's encampment, is approximately 75 miles (120 km) south of Aqaba, which is consistent with a three-day journey.<sup>15</sup>

#### 177. River in a Valley

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that there were no rivers in the part of ancient Arabia where Lehi is said to have camped "in a valley by the side of a river of water" (1 Nephi 2:6). According to one writer, Lehi and his family set up "their tents 160 miles from the place of starting, in a valley at the mouth of a river on the border of the Red Sea, where there never was a river for more than 300 miles either way along the shore of the sea."<sup>16</sup>

**Response:** There is a perennial flowing river or stream in Wadi Tayyib al-lsm—the only one known along this entire stretch of the Red Sea coastline—which matches the description of the valley of Lemuel nicely.<sup>17</sup>

#### 178. River Flows into Red Sea

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Other critics have claimed that there were never any rivers that flowed into the Red Sea, contrary to what the Book of Mormon claims (1 Nephi 2:8–9). As one critic wrote,

In almost every page there are statements which must be rejected on a moment's reflection. . . . In the wilderness, three days' journey, we are told of a river, where there never was a river. Then this river is said, first to empty itself into the Red Sea, and then into "the fountain of the Red Sea."

Evidently the ignorant man who wrote all this nonsense, or spoke it, knew nothing of the geography of the wilderness, and knew little about seas, and rivers, and fountains. Young Smith might say these things in his ignorance, but a man

really in the situation which he describes must have known

better.18

According to another, "a river is spoken of in the wilderness, where no such river exists." Indeed, one critic insisted, "There are not even any traceable ancient river systems in this part of Arabia." As recently as 1979, a critic claimed, "there are no rivers in all of Arabia now or in recorded history, and no river empties into the Red Sea!" 21

**Response:** The stream or river running through Wadi Tayyib al-Ism is the only stream in all of northwest Arabia that flows toward the sea throughout the year. It has been documented as reaching the Red Sea during certain parts of year and may have done so more consistently in antiquity.<sup>22</sup> During drier months, the river currently goes underground before reaching the sea, but does continue to flow under a gravel bed. Since "fountains" were usually underground water sources in antiquity, this may be what is meant by Nephi saying that river flowed "into the fountain of the Red Sea" (1 Nephi 2:9).<sup>23</sup>

#### 179. Eastward Turn

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that Nephi's description is too vague, making it impossible to determine where his family turned eastward after Ishmael's death (see 1 Nephi 17:1).

It was at this geographical point that they had their first death in the person of Ishmael. There is but little light that we can throw upon the exact route taken by these travelers, for the simple reason that the Mormon has no more light on these geographical questions than have we.<sup>24</sup>

**Response:** Nephi says that after they camped at Nahom they "did travel nearly eastward from that time forth" until they arrived at Bountiful (1 Nephi 17:1). NHM is an attested location (figure 47) at a significant eastward turning point in Yemen along the Incense Trail. Plausible locations for Bountiful lie nearly eastward from Nahom, a significant correlation of geographical evidence. This eastward turn aligns precisely with where Nephi's account would suggest.<sup>25</sup>



Figure 47. Wadi Jauf, the NHM area. Photo courtesy of Warren Aston.

#### 180. New Names

**Status: Confirmed** (1845–1965)

**Critics' Claim:** At most stops along his journey, Lehi gives his own names to the locations where his group stays (see 1 Nephi 2:8; 16:6, 13; 17:5), a practice some critics have claimed is strange and inappropriate. <sup>26</sup>

**Response:** As shown by Hugh Nibley, this is a common practice among Bedouins who travel through the Arabian desert.<sup>27</sup>

#### 181. Not Much Fire

**Status: Confirmed** (1845–1965)

**Critics' Claim:** Some critics considered it absurd that Lehi's family would not make much fire during their wilderness journey (1 Nephi 17:12).<sup>28</sup>

**Response:** Hugh Nibley has shown this was often a necessity in order to keep from attracting enemies and marauders in the desert.<sup>29</sup>

#### 182. Raw Meat

**Status: Confirmed** (1845–1965)

**Critics' Claim:** Some critics have objected to the practice of eating raw meat, which Nephi indicates they were required at times to do during their wilderness journey (1 Nephi 17:2).<sup>30</sup>

**Response:** Nibley shows that this was a known Bedouin practice when necessity requires.<sup>31</sup> The law of Moses prohibited the drinking of blood, not the eating of raw meat, as long as sacrificial rules were obeyed.

## 183. Bountiful (OW)

Status: Confirmed (1966-2024)

**Critics' Claim:** Some critics have claimed that Nephi's reference to a site that was "bountiful" during their wilderness journey in the Old World (1 Nephi 17:5) is incorrect, as there would have been no sites that were bountiful in ancient Arabia.

To believe the book of Mormon, we must suppose that these emigrants traversed almost the whole length of the Arabian Gulf... and that they discovered a country almost equal to paradise, where nobody else can find anything but a sandy, barren desert <sup>32</sup>

"Here, again, is a blunder of ignorance of known factors. The coastline of the Persian Gulf was utterly inhospitable and barren." One critic sarcastically quipped, "Arabia is bountiful in sunshine, petroleum, sand, heat, and fresh air, but certainly not in 'much fruit and wild honey', nor has it been since creation times." 34

**Response:** Research has verified the existence of a fertile region—the Dhofar region—that matches Nephi's description.<sup>35</sup>

#### 184. Much Fruit

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that Nephi's statement that they found much fruit at Bountiful is wrong since ancient Arabia was not known for its "much fruit" (1 Nephi 17:5).<sup>36</sup>

**Response:** Recent research has confirmed that various kinds of fruit (figure 48) can be abundantly found at candidates for the Old World Bountiful.<sup>37</sup>



Figure 48. Date palms near beach at Wadi Sayq. Photo courtesy of Warren Aston.

## 185. Wild Honey

Status: Confirmed (1966–2024)

**Critics' Claim:** Some critics have claimed that references to wild honey at Bountiful (1 Nephi 17:5) is unlikely for a text describing a location in ancient Arabia.<sup>38</sup>

**Response:** Research yields examples of wild honey at sites such as Wadi Sayq in southern Oman.<sup>39</sup>

#### 186. Timber

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that timber that could have been used to build a ship (1 Nephi 18:1) would have been unknown in ancient Arabia. "At this point Nephi is instructed to build a ship for passage to the New World, at a location probably more remote from ship-building timber than any place on the globe." Another wrote, "Nephi neglects to tell us the smaller details — how he found wood for the fire, saw timber for the ship." <sup>41</sup>

**Response:** We still have much to learn about the history of trees along the coast of present-day Oman during the time of Lehi. Investigations

thus far, however, suggest that there was sufficient timber in this region for the construction of a ship.<sup>42</sup>

#### 187. Ore

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Nephi makes tools from ore while in Bountiful (1 Nephi 17:10, 16). Some critics have claimed that no ore has ever been found in this region of Arabia and would have been unavailable to Nephi.

Although the territory is one that in expanse is comparable to that portion of the United States lying between the Mississippi River and the Atlantic Ocean, yet in all that range of territory there has been no metal discovered that would be suitable for ship construction, except in the central part of the Sinaitic peninsula, either of which is hundreds of miles distant from the reputed spot where the vessel was built. And this fact goes far to strengthen the oft repeated assertion that the "author and proprietor" of the Book of Mormon was illiterate.<sup>43</sup>

**Response:** Oman was a well known source for copper ore in antiquity.<sup>44</sup> More recent discoveries have identified iron ore deposits in southern Oman close to a potential candidate for Old World Bountiful.<sup>45</sup>

#### 188. Bellows

Status: Confirmed (1966–2024)

**Critics' Claim:** Some critics have claimed that the process of making a bellows would have been unknown to Nephi at the time of their wilderness journey.<sup>46</sup>

**Response:** Metallurgists in the ancient Near East were constructing relatively simple bellows for smelting metal before Nephi's day.<sup>47</sup>

#### 189. Mountain at Bountiful

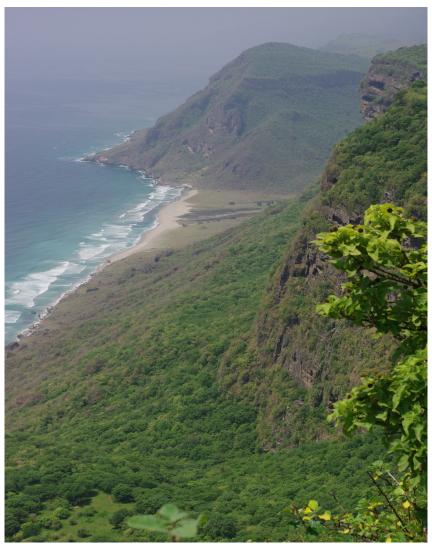
Status: Confirmed (1966-2024)

**Critics' Claim:** Nephi states that he often went to a mountain near their camp at Bountiful (1 Nephi 17:7; 18:3). Some critics have claimed, however, that there were no mountains along the coast in this region of the world. "There are no mountains within several hundred miles of 'Bountiful' on the Persian Gulf." 48

**Response:** There are mountains near the coast in southern Oman. One site, Wadi Sayq, even has a prominent mountain near the inlet from which Nephi's ship could have been launched (figure 49).<sup>49</sup>

## 190. Pre-Columbian Sea Crossings

**Status: Confirmed** (1966–2024)



**Figure 49.** View of Khor Kharfot, with Wadi Sayq to the right. Photo courtesy of Warren Aston.

**Critics' Claim:** Some have claimed that transoceanic crossings from the Old World to the Americas did not occur prior to the advent of Columbus in 1492. "By this account Columbus is all becalmed; his voyage was too late in the age; his adventure is not a circumstance to the Mormons." "Prior to the discovery of America by Columbus, it was to the eastern hemisphere an *unknown land*; and that communication with the *moon* would, prior to that period, have been a more conceivable idea." <sup>51</sup>

**Response:** Growing evidence supports the view that transoceanic crossings of both the Pacific and Atlantic before Columbus were not only possible but have occurred over thousands of years.<sup>52</sup> Some of the strongest evidence is transoceanic exchanges of plants as well as microorganisms that could only have spread through human agents.<sup>53</sup>

## 191. Pacific Ocean Crossing

Status: Confirmed (1966-2024)

**Critics' Claim:** Some critics have claimed that an ocean crossing to the Americas makes no geographical sense in light of Nephi's description (1 Nephi 18:23) and would have been anciently implausible.<sup>54</sup>

**Response:** Recent research points to the plausibility of an ancient Pacific crossing with the help of El Niño-driven currents, which could have taken Lehi's party across the Pacific, landing them somewhere along the Central American coast.<sup>55</sup>

## 192. Jaredite Voyage Too Long

**Status: Confirmed** (1966–2024)

**Critics' Claim:** Some critics have claimed that the Jaredite voyage of 344 days is much too long for a crossing from the Old World to the New.

They were driven continually toward the promised land by "furious winds" and "terrible tempests," [Ether 6:5–6] yet it required 344 days to cross the ocean to this country.— You can judge for yourself with what speed they must have traveled.<sup>56</sup>

"It was a lazy wind that took 344 days to blow the Jaredites across the sea. A lost fishing crew is blown across the sea in less than a month these days." <sup>57</sup>

**Response:** The Jaredite vessels were barges that were driven by ocean currents and could be briefly submerged (Ether 2:6, 16–17, 23–25; 6:5–10). They were not sailing vessels. This is very different from the ocean-going vessels that would have been known to Joseph Smith were he the one who created this account.

Assuming the Jaredites crossed the Pacific from somewhere in eastern Asia, the time of 344 days seems reasonable. Following a tsunami on 11 March 2011 that killed 16,000 people in northern Japan, massive amounts of debris were carried across the northern Pacific reaching the coast of Vancouver Island, British Columbia, on 13 December 2011, a transit time of 280 days.<sup>58</sup>

According to Clifford Evans and Betty J. Meggers, a boat from off the shore of Kyushu, Japan, could catch the northwestern Pacific current, which would carry them at a speed of 24–43 miles per day. This would allow them to reach the shores of North America in approximately 330 days. <sup>59</sup> Japanese junk vessels have sometimes been carried as far as the western coast of Mexico. In 1617 one such vessel made it to Acapulco. In 1815, a U.S. ship carried three Japanese men from Mexico to China. The three were "survivors of the crew of a junk which had drifted from the coast of Japan, entirely across the Pacific Ocean, and finally stranded on the coast of Mexico, where they remained two years." <sup>60</sup>

Wythe Braden states,

Losing its rudder and being dismasted in the process, such a junk would drift at the mercy of the Kuroshio until eventually washed ashore somewhere along the route of the current's circulation — Canada, Alaska or the Aleutians by way of the Alaskan Current to the north, California or Mexico to the south, or to the Hawaiian Islands via the North Equatorial Current <sup>61</sup>

## **Summary of Results**

Writers from 1830 to 1844 had mentioned ten items that were considered anachronistic (figure 50) relating to Lehi's wilderness journey and the voyage of the Jaredites. None were confirmed. During the second period (1845–2024) there were sixteen items (figure 51), six of which found confirmation, two partial confirmation, and eight lacked verification. By 2024 the number of items had risen to twenty-one, all of which have found confirmation (figure 52).

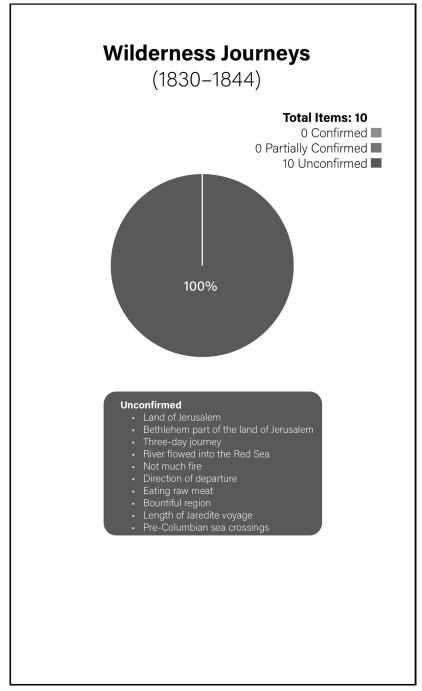


Figure 50. Anachronisms for wilderness journeys in the Book of Mormon (1830-1844).

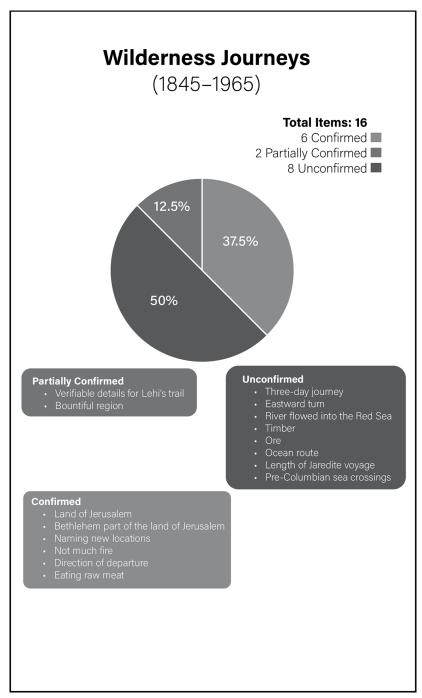


Figure 51. Anachronisms for wilderness journeys in the Book of Mormon (1845–1965).

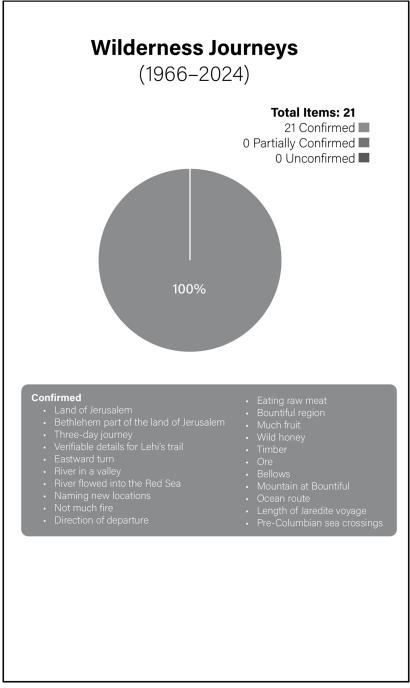


Figure 52. Anachronisms for wilderness journeys in the Book of Mormon (1966-2024).

#### **Notes**

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- 2. Hugh Nibley, Lehi in the Desert / The World of the Jaredites / There Were Jaredites (Salt Lake City: Deseret Book; Provo, UT: Foundation for Ancient Research and Mormon Studies [FARMS], 1988); Eugene England, "Through the Arabian Desert to a Bountiful Land: Could Joseph Smith Have Known the Way?," in Book of Mormon Authorship: New Light on Ancient Origins, ed. Noel B. Reynolds (Provo, UT: Religious Studies Center, Brigham Young University, 1982), 143-56; Noel B. Reynolds, "Lehi's Arabian Journey Updated," in Book of Mormon Authorship Revisited, ed. Noel B. Reynolds (Provo, UT: FARMS, 1997), 379-89; S. Kent Brown, "New Light from Arabia on Lehi's Trail," in Echoes and Evidences of the Book of Mormon, ed. Donald W. Parry, Daniel C. Peterson, and John W. Welch (Provo, UT: FARMS, 2002), 55-125; George Potter and Richard Wellington, Lehi in the Wilderness (Springville, UT: Cedar Fort, 2003); Warren P. Aston, Lehi and Sariah in Arabia: The Old World Setting of the Book of Mormon (self-pub., Xlibris, 2015); S. Kent Brown and Peter Johnson. Journey of Faith: From Jerusalem to the Promised Land (Provo. UT: Neal A. Maxwell Institute for Religious Scholarship, 2006); Warren P. Aston, "The Origins of the Nihm Tribe of Yemen: A Window into Arabia's Past," Journal of Arabian Studies 4, no. 1 (2014): 134-48; Warren P. Aston, "Into Arabia: Lehi and Sariah's Escape from Jerusalem," BYU Studies Quarterly 58, no. 4 (2019): 117-25, scholarsarchive.byu.edu/byusq/vol58/iss4/4/; Neal Rappleye, "An Ishmael Buried near Nahom," Interpreter: A Journal of Latter-day Saint Faith and Scholarship 48 (2021): 33-48, journal.interpreterfoundation.org/an -ishmael-buried-near-nahom/; Warren P. Aston, "A Research Note: Continuing Exploration and Research in Oman," Interpreter: A Journal of Latter-day Saint Faith and Scholarship 53 (2022): 255-64, journal interpreter foundation .org/a-research-note-continuing-exploration-and-research-in-oman/; Neal Rappleye, "The Place—or the Tribe—Called Nahom? NHM as Both a Tribal and Geographic Name in Modern and Ancient Yemen," BYU Studies 62, no. 2 (2023):49-72, scholarsarchive.byu.edu/byusq/vol62/iss2/4/; Rappleye, "The Nahom Convergence Reexamined: The Eastward Trail, Burial of the Dead, and the Ancient Borders of Nihm," Interpreter: A Journal of Latter-day Saint Faith and Scholarship 60 (2024): 1–86, journal.interpreterfoundation.org/the -nahom-convergence-reexamined-the-eastward-trail-burial-of-the-dead -and-the-ancient-borders-of-nihm/; Warren P. Aston, Godfrey J. Ellis, and Neal Rappleve, Into Arabia: Anchoring Nephi's Account in the Real World (Orem. UT: Interpreter Foundation; Salt Lake City: Eborn Books, 2024).
- 3. Origen Bacheler, *Mormonism Exposed, Internally and Externally* (New York: printed by the author, 1838), 14.
- 4. James B. Pritchard, The Ancient Near East: An Anthology of Texts and Pictures (Princeton, NJ: Princeton University Press, 1958), 271–72, 274; Scripture Central Staff, "Land of Jerusalem," Evidence 79, 19 September 2020, scripturecentral.org/evidence/book-of-mormon-evidence-land-of -jerusalem; Scripture Central Staff, "Why Does the Book of Mormon Talk about a 'Land of Jerusalem'?," KnoWhy 495, 20 December 2018,

scripturecentral.org/knowhy/why-does-the-book-of-mormon-talk-about-a-land-of-jerusalem; Gordon C. Thomasson, "Revisiting the Land of Jerusalem," in *Pressing Forward with the Book of Mormon: The FARMS Updates of the 1990*s, ed. John W. Welch and Melvin J. Thorne (Provo, UT: FARMS, 1999), 139–41; Robert F. Smith, "The Land of Jerusalem: The Place of Jesus' Birth," in *Reexploring the Book of Mormon: A Decade of New Research*, ed. John W. Welch (Provo, UT: FARMS; Salt Lake City: Deseret Book, 1992), 170–72; Nibley, *Lehi in the Desert*, 6–7.

- 5. Florentino García Martínez and Eibert J. C. Tigchelaar, eds., *The Dead Sea Scrolls Study Edition* (Grand Rapids, MI: 1998), 2:773.
- "This prophet Smith... is better skilled in the controversies of New York than in the geography of history of Judea. He makes John baptize in the village of Bethabara, and says Jesus was born in Jerusalem." Alexander Campbell, "Delusions," in *Millennial Harbinger*, ed. Alexander Campbell (Bethany, VA: printed the editor, 1831), 2:93.
- 7. Pritchard, Ancient Near East, 273.
- 8. Pritchard, Ancient Near East, 274n1.
- 9. ClarkBraden,in"Braden-KelleyDebate," Independent Patriot (Lamoni,IA),9 July 1891. Another critic has written, "Joseph had little knowledge of the vast desert area, the Arabian Peninsula. . . . Therefore, he was purposefully vague as to details of his route. For this reason Mormon 'historians' have been put to no end of trouble in piecing together an authentic map of Lehi's route to the sea." Wesley M. Jones, A Critical Study of Book of Mormon Sources (Detroit: Harlo Press, 1964), 15.
- 10. Scripture Central Staff, "Overview of Lehi's Journey," Evidence 233, 31 August 2021, scripturecentral.org/evidence/overview-of-lehis-journey.
- Rappleye, "The Place—or the Tribe—Called Nahom?," 49–72; Warren P. Aston,
  "A History of NaHoM," BYU Studies Quarterly 51, no. 2 (2012): 78–98,
  scholarsarchive.byu.edu/byusq/vol51/iss2/6/; Aston, "Origins of the Nihm
  Tribe of Yemen," 134–48.
- 12. "Why were they not directed to the Mediterranean Sea, which was so near Jerusalem, instead of being made to perform the long and perilous journey to the borders of the Red Sea? More especially since the voyage through the former would have been shorter by six or seven thousand miles, (no trifling distance,) than the one performed according to the data given. An easterly course would have taken them across the desert of Arabia to the Persian Gulf." Daniel P. Kidder, *Mormonism and the Mormons* (New York: G. Lane and P. P. Sandford, 1842), 265; *The Doctrines of Mormonism* (London: Religious Tract Society, 1850), 12; William Kirby, *Mormonism Exposed and Refuted* (Nashville: Gospel Advocate Publishing, 1893), 442–43.
- 13. Nibley, Lehi in the Desert, 49-51.
- 14. "This, it must be confessed, was a most extraordinary journey; to go from Jerusalem to the Red Sea, with his wife, children, tents and baggage, in three days, was to travel with unparalleled celerity." Gimel, "Book of Mormon," Christian Watchman (Boston), 7 October 1831; Samuel W. Traum, Mormonism

- against Itself (Cincinnati: Standard Publishing, 1910), 90; Fraser, What Does the Book of Mormon Teach?, 35; Gordon H. Fraser, Is Mormonism Christian? (Chicago: Moody Press, 1977), 137–38.
- 15. Scripture Central Staff, "Valley of Lemuel," Evidence 121, 28 November 2020, scripturecentral.org/evidence/book-of-mormon-evidence-valley-of-lemuel.
- 16. S. Burnet, *The Evangelist*, September 30, 1880, as cited by Joseph Smith III in *The Spaulding Story Reexamined* (Lamoni, IA: Herald Office, 1883), 14.
- 17. Scripture Central Staff, "Valley of Lemuel"; Aston, "Into Arabia," 117–25; Scripture Central Staff, "Have the Valley of Lemuel and the River Laman Been Found?," KnoWhy 286, 13 March 2017, scripturecentral.org/knowhy /have-the-valley-of-lemuel-and-the-river-laman-been-found.
- 18. Doctrines of Mormonism, 12.
- 19. W.SparrowSimpson, *Mormonism:ItsHistory, Doctrines, and Practices* (London: A. M. Pigott, 1853), 32.
- 20. Fraser. What Does the Book of Mormon Teach? 35.
- Marvin Cowan, Mormon Claims Answered (Salt Lake City: printed by the author, 1979), 39; see also Is Mormonism True or Not? (London: Religious Tract Society, 1850), 14; Smith, Spaulding Story Reexamined, 14; Traum, Mormonism against Itself, 95–96; Fraser, Is Mormonism Christian?, 138.
- 22. Scripture Central Staff, "Valley of Lemuel"; Aston, "Into Arabia," 117–25; Warren Aston, "What Did the River of Filthy Water and the River of Laman Look Like?," *Scripture Central Blog*, 22 January 2020, bookofmormoncentral.org/blog/what-did-the-river-of-filthy-water-and-the-river-of-laman-look-like; Mohammed Abdullah Alsaleh, "Natural Springs in Northwest Saudi Arabia," *Arabian Journal of Geosciences* 10, no. 15 (2017): 335; Scripture Central Staff, "Have the Valley of Lemuel and the River Laman Been Found?"
- 23. See Jeff Lindsay, "Joseph and the Amazing Technicolor Dream Map: Part 1 of 2," *Interpreter: A Journal of Mormon Scripture* 19 (2016): 184–85, 207–10, journal.interpreterfoundation.org/joseph-and-the-amazing-technicolor -dream-map-part-1-of-2/; Jeff Lindsay, "Joseph and the Amazing Technicolor Dream Map: Part 2 of 2," *Interpreter: A Journal of Mormon Scripture* 19 (2016): 258–61, journal.interpreterfoundation.org/joseph-and-the-amazing -technicolor-dream-map-part-2-of-2/.
- 24. Traum, Mormonism against Itself, 91-92.
- 25. Aston, "History of NaHoM," 78–98; Aston, "Origins of the Nihm Tribe of Yemen," 134–48; Scripture Central Staff, "Nahom," Evidence 163, 9 March 2021, scripturecentral.org/evidence/book-of-mormon-evidence-nahom; Scripture Central Staff, "Eastward Turn," Evidence 184, 19 April 2021, scripturecentral.org/evidence/book-of-mormon-evidence-eastward-turn.
- 26. "All the rivers and valleys he makes Lehi name with new names." Hyde, Mormonism, 223. T. B. H. Stenhouse complained that Nephi "calls all the rivers, mountains, and other prominent landmarks, which they passed, by other names than those generally known either in ancient or modern geography." T.

- B. H. Stenhouse, *The Rocky Mountain Saints* (New York: D. Appleton, 1873), 530.
- 27. Scripture Central Staff, "Desert Naming Practices," Evidence 341,23 May 2022, scripturecentral.org/evidence/desert-naming-practices; Nibley, *Lehi in the Desert*, 75–76.
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- 29. Nibley, Lehi in the Desert, 63-67.
- 30. Parsons, Mormon Fanaticism Exposed, 11; Simpson, Mormonism, 32.
- 31. Scripture Central Staff, "Raw Meat," Evidence 411, 3 July 2023, scripturecentral .org/evidence/raw-meat; Nibley, *Lehi in the Desert*, 63–67.
- 32. Gimel. "Book of Mormon."
- 33. Fraser, What Does the Book of Mormon Teach?, 37.
- 34. Thomas Key, A Biologist Looks at the Book of Mormon (Marlow, OK: Utah Missions, 1985), 1.
- Scripture Central Staff, "Bountiful," Evidence 164,9 March 2021, scripture central. org/evidence/book-of-mormon-evidence-bountiful; Aston, Lehi and Sariah in Arabia, 101–55; Iftikhar A. Abbasi, "Geological Assessment of the Khor Kharfot Sediments, Western Dhofar Region, Sultanate of Oman," SQU Journal for Science 21, no. 1 (2016): 16–25.
- 36. Key, Biologist Looks at the Book of Mormon, 1. Some critics have assumed a trajectory toward the Persian Gulf; however, this is inconsistent with the other directions mentioned by Nephi in his account of his family's journey.
- 37. Aston, Lehi and Sariah in Arabia, 134-39.
- 38. Key, Biologist Looks at the Book of Mormon, 1.
- 39. Brown and Johnson, *Journey of Faith*, 139–40; Aston, *Lehi and Sariah in Arabia*, 134–35.
- 40. Fraser, What Does the Book of Mormon Teach?, 37.
- 41. Jones, *Critical Study of Book of Mormon Sources*, 16. See also Fraser, *Is Mormonism Christian?*, 138; Key, *Biologist Looks at the Book of Mormon*, 1; Key, *Book of Mormon in the Light of Science*, 31.
- 42. Aston, "Research Note," 255–64; Brown and Johnson, *Journey of Faith*, 84–86; Aston, *Lehi and Sariah in Arabia*, 136–40, 200.
- 43. Traum, Mormonism against Itself, 98.
- 44. Julie Goy et al., "Archaeometallurgical Research on Iron Age (1250–300 BCE) Copper Production in the Northern al-Hajjar Mountains (Oman Peninsula)," in

- Mining for Ancient Copper: Essays in Memory of Beno Rothenberg, ed. Erez Ben-Yosef (Winona Lake, IN: Eisenbrauns, 2018), 366–384.
- 45. Bradley R. Larsen, "Finding Nephi's Ore," Interpreter: A Journal of Latter-day Saint Faith and Scholarship 63 (2025): 297–322, journal.interpreter foundation.org / finding-nephis-ore/; W. Revell Phillips, "Metals of the Book of Mormon," *Journal of Book of Mormon Studies* 9, no. 2 (2000): 36–41, 82, scholarsarchive.byu.edu/jbms/vol9/iss2/6/; Brown and Johnson, *Journey of Faith*, 62–65; Aston, *Lehi and Sariah in Arabia*, 105, 142, 170–71, 183–84.
- 46. Key, Biologist Looks at the Book of Mormon, 5.
- 47. Phillips, "Metals of the Book of Mormon," 36–41, 82; Brown and Johnson, *Journey of Faith*, 65.
- 48. Fraser, Is Mormonism Christian?, 138.
- 49. Scripture Central Staff, "Bountiful,"; Aston, Lehi and Sariah in Arabia, 141.
- 50. Parsons, Mormon Fanaticism Exposed, 13.
- 51. J. M. Burgess, *The Book of Mormon Contradictory to Common Sense, Reason, and Revelation* (Liverpool: J. Blevin, 1850), 2.
- 52. Carroll L. Riley et al., eds., Man across the Sea: Problems of Pre-Columbian Contacts (Austin: University of Texas Press, 1971); Stephen C. Jett, Ancient Ocean Crossings: Reconsidering the Case for Contacts with the Pre-Columbian Americas (Tuscaloosa: University of Alabama Press, 2017); Alice Beck Kehoe, Traveling Prehistoric Seas: Critical Thinking on Ancient Transoceanic Voyages (New York: Routledge, 2016). See also Scripture Central Staff, "Transoceanic Migrations," Evidence #221, August 2, 2021, scripturecentral.org/evidence/transoceanic-migrations.
- 53. John L. Sorenson and Carl L. Johannessen, "Biological Evidence for Pre-Columbian Transoceanic Voyages," in Contact and Exchange in the Ancient World, ed. Victor H. Mair (Honolulu: University of Hawaii Press, 2006), 238–97; John L. Sorenson and Carl L. Johannessen, World Trade and Biological Exchanges before 1492 (self-pub., 2013); John L. Sorenson, "Ancient Voyages across the Ocean to America: From 'Impossible' to 'Certain," Journal of Book of Mormon Studies 14, no. 1 (2005): 4–17, 124–25, scholarsarchive.byu.edu /jbms/vol14/iss1/3/.
- 54. W.L. Crowe, The Mormon Waterloo (St. Paul, NE: printed by the author, 1902), 107.
- 55. David L. Clark, "Lehi and El Niño: A Method of Migration," *BYU Studies* 30, no. 3 (1990): 1–7, scholarsarchive.byu.edu/byusq/vol30/iss3/11/; Aston, *Lehi and Sariah in Arabia*, 211–13.
- 56. G.C.Stewart, "The Book of Mormon," Perfectionist (Putney, VT), 15 May 1843, 28.
- 57. Alva A. Tanner, A Key to the Book of Mormon (Oakley, ID: printed by the author, 1916), 12.
- 58. Nikolai Maximenko et al., "Numerical Simulations of Debris Drift from the Great Japan Tsunami of 2011 and Their Verification with Observational Reports," *Marine Pollution Bulletin* 132 (2018): 5–25.
- 59. "If a boatload of early Jomon fishermen left the sheltering bays of Kyushu

[Japan] and went out into the sea off the southeastern coast in October or November, they would have entered a zone with some of the strongest currents in the northern Pacific, running northeastward at 24-43 miles per day. Records for the 40-year period between 1901–1940 tabulate 802 typhoons of which 130 were in October and 67 in November. A canoe caught too far from shore by one of these storms might easily be swept by the combined northeasterly pressure of wind and current far out to sea before control was regained. Even if the occupants retained possession of their paddles, they might have been unable to turn back. During the month of November, westerly and northerly winds predominate in the northern hemisphere, and are steadiest and of greatest force between about the 40th and 55th parallels. In addition, the percentage of gales increases during November in high latitudes, occurring at an average frequency of one every 8-10 days over the greater part of the northern Pacific except near coasts. A combination of these forces would have borne a canoe eastward along the great circle route, which on a flattened map curves far north of Hawaii. Records during the last century demonstrate the feasibility of such a drift vessel reaching land with living passengers after a voyage of 11 months [approximately 330 days]." Clifford Evans and Betty J. Meggers, "Transpacific Origin of Valdivia Pottery on Coastal Ecuador," in XXXVI Congreso Internacional de Americanistas, España, 1964, ed. Alfredo Jiménez Núñez (Sevilla: ECESA, 1966), 66. See also Kirk Magleby, "Tracking the Jaredites," Book of Mormon Resources (blog), 18 January 2017, bookofmormonresources.blogspot.com/2017/01/tracking-jaredites.html; Kirk Magleby, "Jaredites Crossed the Pacific," Book of Mormon Resources (blog), 13 January 2020, bookofmormonresources.blogspot.com/2020/01 /jaredites-crossed-pacific.html.

- 60. Charles Wolcott Brooks, "Report of Japanese Vessels Wrecked in the North Pacific Ocean, from the Earliest Records to the Present Time," *Proceedings of the California Academy of Science* 6 (1875): 9, 12.
- 61. Wythe E. Braden, "On the Probability of Pre-1778 Japanese Drifts to Hawaii," Hawaiian Journal of History 10 (1976): 78. See also Otto Sittig, "Compulsory Migrations in the Pacific Ocean," in Annual Report of the Board of Regents of the Smithsonian Institution, July 1895 (Washington, DC: Government Printing Office, 1896): 519–35.

# Chapter 7: Records, Writing, and Language

Items mentioned in the Book of Mormon relating to ancient records and languages have been grouped under this category. These include alleged anachronisms relating to writing on metal plates, archaeological evidence for Hebrew and Egyptian writing, and pre-Columbian writing.

## 193. Jews Writing in Egyptian

**Status: Confirmed** (1966–2023)

**Critics' Claim:** Book of Mormon writers said they wrote in "the language of the Egyptians" (1 Nephi 1:2) or used "reformed Egyptian" characters (Mormon 9:32). Some have claimed that Jews would never have written in ancient Egyptian.<sup>1</sup>

**Response:** Examples of Jewish texts written in Egyptian scripts are now attested from preexilic times in Israel and the ancient Near East.<sup>2</sup>

## 194. Scripture in Egyptian

**Status: Confirmed** (1966–2023)

**Critics' Claim:** The Book of Mormon also states that the writings on the plates of brass, which contained the five books of Moses, a history of the Jews, and the writings of prophets like Jeremiah and Isaiah (1 Nephi 5), were in Egyptian (Mosiah 1:4). Some have specifically claimed that ancient Israelites and Jews would never have written scriptures in Egyptian.<sup>3</sup>

**Response:** Scriptural texts written in Egyptian are attested. For example, Amherst Papyrus 63 (figure 53), a papyrus from the second century BC, has a copy of Psalm 20:2–6 written in Demotic Egyptian script.<sup>4</sup>



**Figure 53.** Papyrus Amherst 63.4. (*Wikimedia Commons*, s.v. "Papyrus Amherst 63.4," commons.wikimedia.org/w/index.php?curid=152360431.)

## 195. Anthon Transcript and Egyptian

Status: Partially Confirmed (1966–2023)

**Critics' Claim:** At the behest of Joseph Smith, Martin Harris delivered a transcript of characters copied from the plates of the Book of Mormon to a scholar named Charles Anthon to verify their authenticity and possibly provide a translation. The original copy of these characters is apparently no longer extant, but several other copies of a portion of those characters based upon that earlier copy have survived. Some claim that these extant copies of Book of Mormon characters bear no resemblance to ancient Egyptian.

**Response:** Although subsequently denied by Charles Anthon, historical evidence suggests that he told Martin Harris that the transcribed characters resembled "short-hand" Egyptian, a term that was used in literature in the professor's personal library to refer to Egyptian hieratic script. The term "short-hand" Egyptian would not have likely been known to Harris before his visit to Anthon.<sup>7</sup>

While most of the relatively few scholars who have considered the issue have been dismissive of the so-called Anthon transcript, two non-Latter-day Saint Egyptologists suggested a resemblance to Egyptian scripts. William Hayes, former Curator of Egyptian Art at the Metropolitan Museum of Art in New York City, thought it could conceivably have been an example of hieratic script.8 Professor Richard A.

Parker of the Department of Egyptology at Brown University thought the characters "could well be the latest form of the written language — demotic characters"<sup>9</sup>

#### 196. Metal Plates (OW)

**Status: Confirmed** (1829–1844)

Critics' Claim: The Book of Mormon is presented as a translation from gold plates (Joseph Smith — History 1:34), and makes reference to several other records on metal plates throughout its pages (1 Nephi 3:24; 9:4; Mosiah 8:9; Mormon 2:18). Although there was some evidence for the ancient practice of writing on metal plates at the time the Book of Mormon was published, it is unclear if Joseph Smith was familiar with such sources. Some of his contemporaries claimed that important records were not kept on metal plates in ancient times. The missionary and Latter-day Saint Apostle John Taylor wrote in 1843 that he and others were told that "it was improbable, nay, almost impossible — notwithstanding the testimony of history to the contrary, that anything like plates could have been used anciently; particularly among this people." The general idea of metal plates in antiquity was dismissed by some critics as well as the possibility that such plates could have been found in the Americas.

**Response:** Since the publication of the Book of Mormon, thousands of examples of metal plates have been recovered from the past, pointing to the widespread nature of the practice across time and in various cultures. (See figure 54 for an example.) Additionally, many of these documents show affinities with the contents of metal plates described in the Book of Mormon.<sup>11</sup>

## 197. Israelite Writing on Metal

**Status: Confirmed** (1966–2023)

**Critics' Claim:** Some have claimed that ancient Israelites or Jews never kept records on metal. "The Jews never kept any of their records on plates of brass," one critic asserted. Another wrote, "The records of the Jews were not engraven on plates but written on skins." Is

When the Book of Mormon came to reveal to the world that these migrating people...had the custom of engraving their records on tablets of gold or copper to leave to posterity... the wise laughed heartily at these absurdities.<sup>14</sup>



**Figure 54.** Kamauli copper plate inscription of Vaidadeva. (Arthur Venis, s.v. "Kamauli copper plate inscription of Vaidyadeva plate 3 obverse," *Wikimedia Commons*, commons.wikimedia.org/wiki/File:Kamauli\_copper\_plate\_inscription\_of\_Vaidyadeva\_plate\_3\_obverse.jpg.)

**Response:** Examples of Israelite or Jewish metallic records include the silver Ketef Hinnom amulets, which date to before the destruction of the first Jerusalem temple, and also the copper scroll inscribed with a list of purported treasures from the Jerusalem temple that was found with the Dead Sea Scrolls. The copper scroll is actually two metal copper plates that were then rolled together.<sup>15</sup>

A medieval Jewish text called *The Treatise of the Vessels*, recently translated into English, references a list of temple treasures that were hidden away in the earth and claims that "Shimmur the Levite and his companions wrote them on a tablet of bronze, along with all the vessels of the most holy sanctuary which Solomon the son of David made." <sup>16</sup>

There is also a report from an eighteenth-century British sailor that a Jewish colony in India preserved a record of their people, written in Hebrew and inscribed on copper plates. Interestingly, this group of Jews reportedly belonged to the tribe of Manasseh and fled Israel close to the time of Lehi. Thus, although the account can't currently be verified, it provides a close analogue to the story of the Book of Mormon.<sup>17</sup>

## 198. Scripture Inscribed on Metal

**Status: Confirmed** (1966–2023)

Critics' Claim: Some have specifically claimed that ancient Israelites

and Jews never wrote scripture on metal.18

**Response:** The preexilic silver Ketef Hinnom amulets bear an inscription from the priestly blessing in Numbers 6:24–26.<sup>19</sup> Sacred texts considered scripture in other religious traditions were also sometimes engraved on metal plates.<sup>20</sup>

## 199. Writing on Metal Plates (NW)

**Status: Unconfirmed** 

**Critics' Claim:** Some have claimed that there are no New World archaeological examples of texts inscribed on metal plates from pre-Columbian times.<sup>21</sup>

**Response:** There is currently no evidence for this.

## 200. Pre-Columbian Writing

**Status: Confirmed** (1966–2023)

**Critics' Claim:** Some have claimed that there is no evidence for writing in pre-Columbian times. Early Apostle Parley P. Pratt reported that a Reverend Peck, in 1831, rejected the Book of Mormon stating that there were no inscriptions from pre-Columbian times.<sup>22</sup> One critic in Great Britain stated in 1838.

According to Mormon, these native Americans could read and write . . . but when that country first became known to Europeans, the inhabitants knew no more about letters than the four-legged animal knows the rules of logic; and not a scrap of writing was to be found.<sup>23</sup>

Another in 1840 claimed that there was not "even so much as a shadow or proof that the sciences of reading and writing [and other evidences of advanced culture mentioned in the Book of Mormon] were ever known here." 24 "When that country first became known to Europeans, the inhabitants knew no more about letters than a monkey knows about logic." 25

It is a well-known fact that the Indians had no books, and among the twenty millions who were found scattered about through the three Americas when Columbus made his discovery four hundred years ago, none of them could read, and consequently they had no literature to transmit.<sup>26</sup>

"There is no evidence that Indians had anything other than simple pictorial writing at that time. They wrote no books."<sup>27</sup>

**Response:** The widespread practice of writing on stone and paper codices in pre-Columbian Mesoamerica is now well known (figure 55).<sup>28</sup>

## 201. Early Pre-Columbian Writing

**Status: Confirmed** (1966–2023)

**Critics' Claim:** Some have claimed that pre-Columbian writing did not develop until centuries after the period described in the Book of Mormon. "Literacy in Middle America came into its florescence many years after the Book of Mormon dates, and during most of the period ascribed to the Mormon record there was no true literacy known on the American continents."<sup>29</sup>

**Response:** Evidence now indicates that pre-Columbian writing was known from an early period in Mesoamerica. Recently, multispectral



**Figure 55.** Replica of a Classic Maya Codex. (Gary Todd, s.v. "Classic Maya Codex, Replica," *Wikimedia Commons*, commons.wikimedia.org/wiki/File:Classic\_Maya\_Codex,\_Replica.jpg.)

imaging was done on bark paper fragments, the remains of a Maya codex found in lowland Guatemala dating to the Early Classic. Researchers discovered that the codex had been painted over, concealing an earlier text so that the paper could be transcribed with a newer one.<sup>30</sup> Pre-Columbian codices may have been used as early as Olmec times in the Early Preclassic Period.<sup>31</sup>

## 202. Reformed Egyptian (OW)

**Status: Confirmed** (1966–2023)

**Critics' Claim:** Some have claimed that there has been no such thing as "reformed Egyptian" (Mormon 9:32).<sup>32</sup>

**Response:** "Reformed" (that is, modified forms of) Egyptian script are now well-known, of which hieratic and Demotic Egyptian are two examples.<sup>33</sup>

## 203. Evidence of Egyptian Language (NW)

Status: Partially Confirmed (1966–2023)

**Critics' Claim:** Some have claimed that there is no evidence that Egyptian was ever known in pre-Columbian times.<sup>34</sup>

**Response:** Linguistic evidence from Uto-Aztecan languages that were spoken in Mexico and the North American southwest suggests a significant influence from ancient Egyptian.<sup>35</sup>

# 204. Egyptian or Reformed Egyptian Inscriptions (NW)

Status: Unconfirmed

**Critics' Claim:** Some have claimed that no pre-Columbian inscriptions of Egyptian script have been discovered in the New World.<sup>36</sup>

**Response:** It is true that no authentic Egyptian inscriptions have thus far been discovered from pre-Columbian times.

# 205. Evidence of Hebrew Language (NW)

Status: Partially Confirmed (1966–2023)

**Critics' Claim:** Some have claimed that there is no evidence that the Hebrew language was known in ancient America.<sup>37</sup>

**Response:** Research on Uto-Aztecan languages provides evidence suggesting a significant influence from ancient Aramaic and Hebrew.<sup>38</sup>

## 206. Hebrew Inscriptions (NW)

Status: Unconfirmed

Critics' Claim: Some have claimed that no pre-Columbian Hebrew

inscriptions have been found in the Americas.39

Response: No authentic Hebrew inscriptions have been identified

thus far.

## 207. Inscriptions with Book of Mormon Names (OW)

Status: Confirmed (1966–2023)

**Critics' Claim:** Some have claimed that not a single place mentioned in the Book of Mormon has been identified in ancient writings.<sup>40</sup>

**Response:** Nephi mentions a place called *Nahom* on his family's journey through the wilderness (1 Nephi 16:34). The name *NHM*, which is a viable ancient spelling for *Nahom*, has been identified with a tribe and location in ancient Yemen. Inscriptions rediscovered in the twentieth century show that the name for this region and tribe was extant at the time of Lehi. This is significant because unlike other names mentioned in Nephi's account to which his family gave their own personal names, the place of Ishmael's burial was previously called by that name (1 Nephi 16:34).<sup>41</sup>

## 208. Inscriptions with Book of Mormon Names (NW)

Status: Unconfirmed

Critics' Claim: Some have claimed that no Book of Mormon names

have been discovered in pre-Columbian inscriptions.<sup>42</sup>

Response: No such inscriptions have been found thus far.

# 209. Inscriptions with Book of Mormon Texts

**Status: Unconfirmed** 

Critics' Claim: Some have claimed that no pre-Columbian inscrip-

tions with texts from the Book of Mormon have been found.43

**Response:** No such inscriptions have so far been found.

# 210. Practice of Hiding Up Records

**Status: Confirmed** (1966–2023)

**Critics' Claim:** Early critics of the Book of Mormon claimed that the practice of hiding up records (Mormon 1:3, 6:6; Joseph Smith—History 1:51–52) is suspicious and not authentic.<sup>44</sup>

**Response:** The practice of hiding or burying sacred records in the earth, often with the intention to bring them forth for a later time, is now a well-attested ancient and pre-modern historical practice.<sup>45</sup>

## 211. Inscribed Stone Monuments (NW)

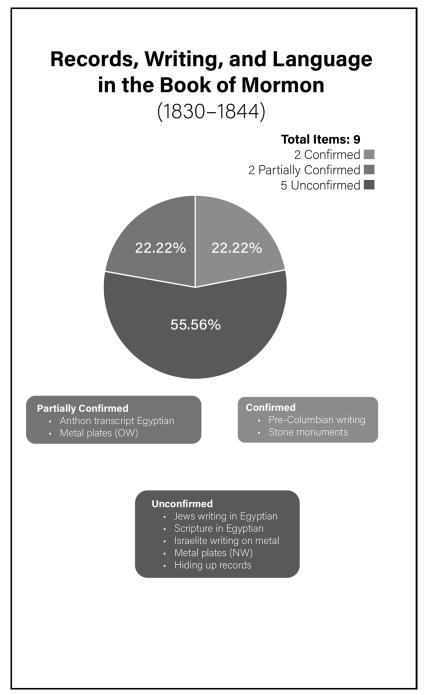
**Status: Confirmed** (1829–1844)

**Critics' Claim:** The Book of Mormon mentions "a large stone . . . with engravings on it" (Omni 1:20). Some have claimed that there is no evidence of stone monuments in pre-Columbian times. 46

**Response:** Illustrated examples of stone monuments with inscriptions were described by Stephens and Catherwood in their 1841 publication *Incidents of Travel in Central America, Chiapas and Yucatan.* <sup>47</sup> According to David Stuart, "Mayanists are now accustomed to the idea that ancient Maya artisans and scribes, when composing and carving monumental inscriptions, were principally concerned with the commemoration of historical events surrounding kings, their families, and their courts." <sup>48</sup>

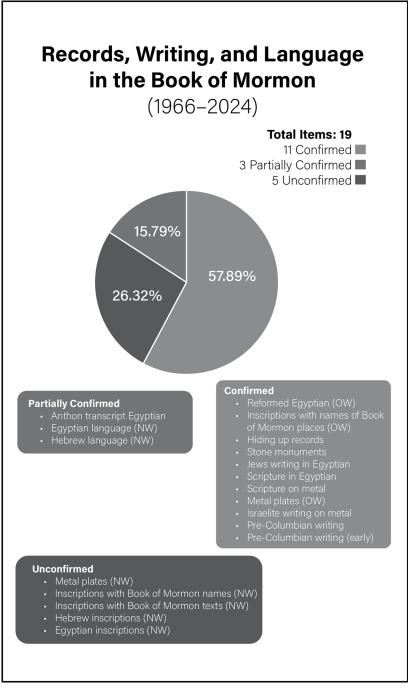
# **Summary of Results**

During the first period (1830–1844), nine items relating to language, writing, and records had been mentioned by writers, two of which found confirmation by 1844. Two others were partially confirmed and five were unconfirmed (figure 56). In the second period (1845–1965), the total had risen to eighteen items, six confirmed, one partially confirmed, and eleven unconfirmed (figure 57). During the third period (1966–2024), there were nineteen items, eleven confirmed, three partially confirmed, and five unconfirmed (figure 58).



**Figure 56.** Anachronisms for records, writing, and language in the Book of Mormon (1830–1844).

**Figure 57.** Anachronisms for records, writing, and language in the Book of Mormon (1845–1965).



**Figure 58.** Anachronisms for records, writing, and language in the Book of Mormon (1966–2024).

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# Chapter 8: Events in Third Nephi

Some readers have dismissed the description of destruction among the Nephites at the time of the death of Jesus as an account that could only be accepted by the credulous. Writing in 1838, Origen Bacheler claimed the account of the destruction in 3 Nephi was a prominent example of the many "improbabilities" in the Book of Mormon. "It has no appearance of truth. It seems just as a forgery would seem and has not one redeeming trait in this respect to counterbalance. If such a work is not a forgery, then the landmarks of evidence fail, and we have no means of this nature for detecting a forgery and discriminating between falsehood and truth."

M. T. Lamb claimed in 1887 that this account was "so improbable, and in some cases so absolutely impossible physically, as to furnish one of the completest proofs of the unreal and visionary character of the Book." He also mockingly characterized this event as the "climax of all miracles" which "gathers into it more that is strange and unaccountable and foolish and physically impossible, we may safely say, than any other miracle ever performed upon earth. The author, evidently, mounts the fiery steed of his imagination and herds together every strange thing, every wonderful thing, every blood-curdling story, and every impossible thing he had ever heard of, or thought of, or dreamed of, and attempts, in this master effort, to combine them all in one huge miracle!"

According to another writer in 1912, "Geology and the Book of Mormon are in irreconcilable conflict as to great seismic changes which the latter avers took place at the time of the crucifixion." Episcopal Bishop Franklin Spalding asserted that if true, "the account of the convulsions of nature, which occurred in America at the time of Christ's coming, would compel the geologist to re-examine his theories as to the formation of land and sea, and the astronomer to adjust

his laws of the heavens to the wonderful three days of darkness." This section addresses these issues.

## 212. General Description of the Destruction in 3 Nephi

**Status: Confirmed** (1966–2024)

**Critic's Claim:** Some have claimed that the account of the destruction at the time of the death of Christ among the Nephites (3 Nephi 8:5–23; 9:3–12; 10:13–14) is implausible.<sup>6</sup>

**Response:** In 1913, Osborne J. P. Widtsoe noted significant correlations between the Book of Mormon account and the disastrous eruption of Krakatoa in 1883 (see figure 59). Subsequent Latter-day Saint researchers have cited additional correlations. Geologist Bart Kowallis showed that each of the phenomena described in Mormon's account are consistent with a significant volcanic event. These include a great and terrible storm or tempest, terrible thunder, earthquakes, sharp lightening, the burning of cities, the sinking of at least one city into the sea, earth being carried up upon and burying a city, the sinking and burial of settlements, changes upon the face of the land, whirlwinds, destruction of highways, the breaking up of cities during earthquakes, the breaking up and scattering of rocks, the three-hour duration of initial destruction, three days of darkness, the palpable nature of the darkness, inability to light fire in the darkness despite having very dry wood, vapors of smoke, and people crushed by falling objects.

In another important study, Jerry Grover shows that the account in the Book of Mormon would be consistent with one or perhaps two volcanic events in Mesoamerica associated with a major earthquake.<sup>10</sup> Research, events, and discoveries since the publication of the Book of Mormon have shown that the description of the events in Third Nephi are not only plausible, but in several cases strikingly realistic.<sup>11</sup>

#### 213. Sunken Cities

**Status: Confirmed** (1966–2024)

**Critic's Claim:** The account in Third Nephi states that many cities were sunk into water (3 Nephi 9:7) or into the earth (3 Nephi 9:8) at the time of the death of Christ. Some have claimed that this is not realistic.<sup>12</sup>

**Response:** Similar phenomena are now known to have occurred. One way that this occurs is due to liquefaction. For example, during an



**Figure 59.** A lithograph of the 1883 eruption of Krakatoa. (*Wikipedia*, s.v. "An 1888 lithograph of the 1883 eruption of Krakatoa," en.wikipedia.org/wiki/Krakatoa #/media/File:Krakatoa\_eruption\_lithograph.jpg.)

earthquake in 1692, a significant portion of the town of Port Royale in Jamaica sunk into the sand.<sup>13</sup>

# 214. Great Tempest

**Status: Confirmed** (1966–2024)

**Critic's Claim:** The account of destruction at the death of Christ among the Nephites describes a great and terrible tempest (3 Nephi 8:6). Some have claimed that the description of this kind of event is implausible.<sup>14</sup>

**Response:** Similarly destructive events are now attested. Dramatic tempests frequently accompany volcanic events.<sup>15</sup>

## 215. Destruction by Fire

**Status: Confirmed** (1966–2024)

**Critic's Claim:** Some have claimed that the destruction of cities by fire among the Nephites at the time of the death of Christ (3 Nephi 8:8; 9:3, 9–10) is not realistic.<sup>16</sup>

**Response:** The account of destruction by fire is consistent with similar events associated with volcanism.<sup>17</sup> For instance, the 1982 eruption of El Chichon in Chiapas Mexico reportedly caused destruction by fire. One witness stated, "The fire started coming out of the sky... and we didn't know whether to leave or stay. Ash and sand were falling, and rocks came through the roof like bullets." Another stated, "I had 20 cattle and a few horses. The fire that came burned everything. I had corn, beans, coffee, and everything now is flat ground." During fire accompanying the eruption of the Mexican Volcano Popocateptl in the first century AD, it is estimated that around 20,000 people may have been killed.<sup>19</sup>

#### 216. Whirlwinds

**Status: Confirmed** (1966–2024)

**Critic's Claim:** Some have claimed that the report of whirlwinds (3 Nephi 8:12, 16) during the destruction reported in Third Nephi is implausible.<sup>20</sup>

**Response:** Based on the text, it is impossible to know whether the whirlwinds were directly associated with volcanic activity or just a contemporaneous disaster. In any case, whirlwinds and tornadoes are phenomena known to sometimes accompany volcanic events.<sup>21</sup> It was reported that during the 1815 eruption of Tambora, "violent whirlwinds carried up men, horses, cattle, and whatever else came within their influence, into the air; tore up the largest trees by the roots, and covered the whole sea with floating timber."<sup>22</sup>

#### 217. Earthquake

**Status: Confirmed** (1966–2024)

**Critic's Claim:** Some have claimed that the description of earth-quakes in the account of the destruction among the Nephites at the death of Christ (3 Nephi 8:12, 17) is absurd.<sup>23</sup>

**Response:** The description of earthquakes and destruction associated with them among the Nephites at the time of Christ's death is consistent with many other events associated with earthquakes.<sup>24</sup>

## 218. Earthquakes in Mesoamerica

**Status: Confirmed** (1966–2024)

**Critic's Claim:** Some have claimed that the description of earth-quakes in Third Nephi (3 Nephi 8:12, 17) is implausible because earth-quakes are uncommon in Mesoamerica. According to Gordon Fraser, the Yucatan peninsula, a region which some Latter-day Saints think may have been associated with the Book of Mormon, is "an area of flat jungle growing on a bench of limestone and has been singularly free from earthquakes, if, indeed, such were physically possible." <sup>25</sup>

**Response:** Earthquakes are well attested in many parts of Mesoamerica.<sup>26</sup>

## 219. Buildings Fall

**Status: Confirmed** (1966–2024)

**Critic's Claim:** Some have claimed that the account of people dying through the destruction of fallen buildings at the time of the death of Christ (3 Nephi 8:14) is implausible.<sup>27</sup>

**Response:** Serious destruction and deaths from the collapse of buildings is an attested phenomenon during serious earthquakes.<sup>28</sup>

#### 220. Thick Darkness

**Status: Confirmed** (1966–2024)

**Critic's Claim:** Some have claimed that the description of thick darkness (3 Nephi 8:8–23) during the destruction at the time of the death of Christ is implausible.<sup>29</sup>

**Response:** Similar accounts of thick darkness during volcanic events are commonly attested.<sup>30</sup> Survivors of the Krakatau eruption in

Indonesia reported "thick darkness, so black and intense that I could not see my hand before my eyes," and passengers on an American boat that was eighty-three kilometers from Krakatau said that at 9:30 in the morning it was "darker than the darkest night." 31

#### 221. Darkness that Can Be Felt

**Status: Confirmed** (1966–2024)

**Critic's Claim:** Some have claimed that the description of a darkness

so thick that it can be felt (3 Nephi 8:20) is unrealistic.32

**Response:** Accounts of volcanic events often describe a thick darkness in similar terms. During the Krakatoa eruption in 1883 one witness described "a darkness that might almost be felt." 33

## 222. Three Days of Darkness

Status: Confirmed (1966-2024)

**Critic's Claim:** Some have claimed that the description of three days of darkness (3 Nephi 8: 23; 10:9) at the time of destruction at Christ's death is implausible.<sup>34</sup>

**Response:** Historical accounts of significant volcanic events sometimes report multiple days of thick darkness. The eruption of the volcano Coseguina in Nicaragua, for example, caused a period of thick darkness of forty-four hours (figure 60). Other accounts mention three days of darkness.<sup>35</sup>

## 223. Inability to Light Fire

**Status: Confirmed** (1966–2024)

**Critic's Claim:** Some readers of the Book of Mormon have claimed that the idea of darkness that was so thick that fire could not be lit (3 Nephi 8:20-21) is unrealistic.<sup>36</sup>

**Response:** Reports of the difficulty or inability to light fire following a significant volcanic event are attested.<sup>37</sup> A witness to the Krakatau eruption stated, "We couldn't light a fire, as matches went out immediately," although eventually after much effort they were able to do so.<sup>38</sup>

# 224. Earth Carried Up

**Status: Confirmed** (1966–2024)

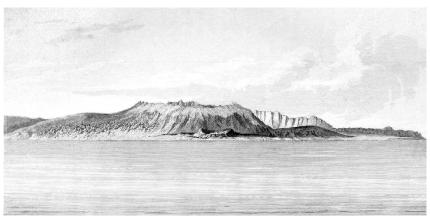


Figure 60. Volcano of Conseguina, Gulf of Fonseca. (Captain Sir Edward Belcher, RN, Wikimedia Commons, s.v. "Narrative of a Voyage around the World — Volcano of Conseguina — Gulf of Fonseca," commons.wikimedia.org/wiki/File:Narrative \_of\_a\_Voyage\_around\_the\_World\_-\_Volcano\_of\_Conseguina\_%E2%80%94 \_Gulf\_of\_Fonseca.png.)

**Critic's Claim:** Some have claimed that the idea of the earth being carried up over a city and causing its destruction (3 Nephi 8:10) is unrealistic.<sup>39</sup>

**Response:** Similar geological events, sometimes accompanying significant volcanic phenomena, are attested.<sup>40</sup>

# 225. Earth Closing Up

**Status: Confirmed** (1966–2024)

**Critic's Claim:** Some have claimed that the idea of the earth cleaving together again after having opened up (3 Nephi 10:10) is unrealistic.<sup>41</sup>

**Response:** The event described in 3 Nephi could plausibly be an example of liquefaction during an earthquake. Examples of such a phenomenon include the destruction of much of the city of Port Royal in 1692.<sup>42</sup>

#### 226. Destruction at the Time of Christ

**Status: Partially Confirmed** (1966–2024)

**Critic's Claim:** Some have claimed that there is no evidence to support the idea that a significant geological event, such as that described among the people of Nephi, occurred specifically at the time of the death of Jesus.<sup>43</sup>

**Response:** Although it is impossible to date most volcanic eruptions with exact precision, there is limited geological evidence that several volcanic events may have occurred in Mesoamerica and possibly parts of Central America during the first century AD. An eruption of the San Martin volcano in Veracruz Mexico may have occurred around this time, although precise dating is uncertain. The Tacana volcano near the site of Izapa near the Pacific coast of Chiapas, which seemingly halted development there for a time, has been dated to 25–72 AD.<sup>44</sup> Further south, archaeologist Payson Sheets found evidence that the Arenal volcano in Costa Rica may have erupted about this time, although the dating was not very precise.<sup>45</sup>

An excellent set of carbon dates have been obtained for the Popocatepetl volcano in central Mexico, which erupted during the early to mid-first century AD, likely resulting in the deaths of tens of thousands in the region and the forced relocation of more than 100,000 in parts of Puebla and the Valley of Mexico. The archaeologists found evidence suggesting that the event occurred during the early spring of the year between the end of March and early April. Such evidence suggests that possibly several significant volcanic events may have occurred around the time of Christ, although not yet enough to consider the events described in Third Nephi as completely confirmed.

## 227. Light for a Day, Night, and Day

Status: Partially Confirmed (1966-2024)

**Critic's Claim:** The signs given at the time of Christ's birth have been questioned. Some have claimed that the account of an extended period of light extending for a day and a night and a day (3 Nephi 1:15, 19) is impossible.<sup>47</sup>

**Response:** The Book of Mormon never clarifies whether this sign was caused via supernatural means or through a natural phenomenon. If the former is true, then it would likely be futile to expect to find naturalistic evidence for this occurrence. On the other hand, the latter scenario is possible, as the Lord apparently used other seemingly natural events (earthquakes, whirlwinds, volcanic eruptions) to carry out his will. In that case, several examples of comparable phenomena have been reported, lending plausibility to the extended duration of light reported in Third Nephi.<sup>48</sup>

# **Summary of Results**

During the first period (1830–1844), writers had noted fourteen items relating to miraculous events surrounding the birth and death of Jesus mentioned in the Book of Mormon that they considered unlikely or implausible, none of which could be confirmed (figure 61). By the end of the second period (1845–1965), that number had risen to fifteen (figure 62). By 2024, however, while the total number of items rose to sixteen, fourteen of these could be confirmed and two partially confirmed (figure 63).

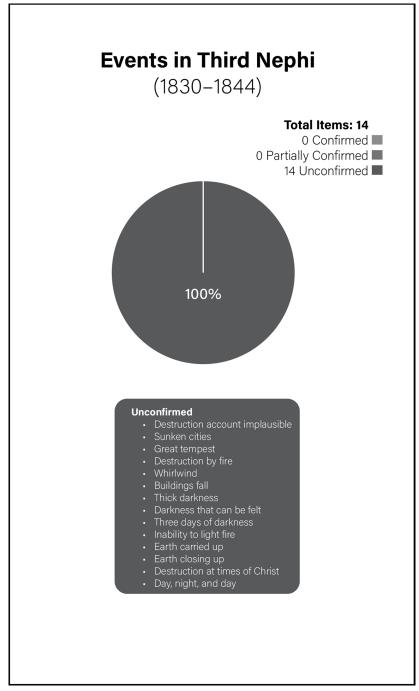
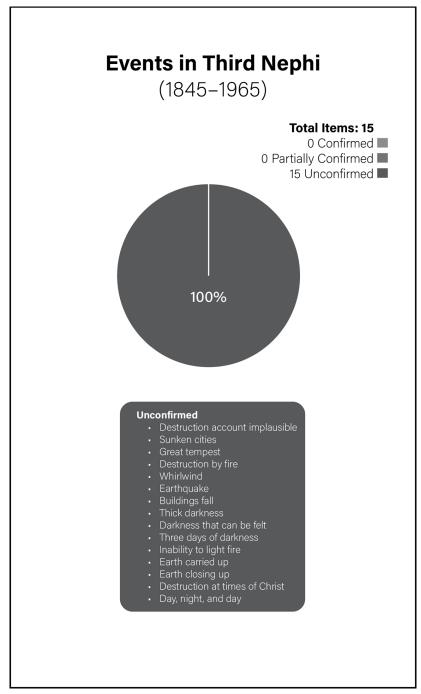
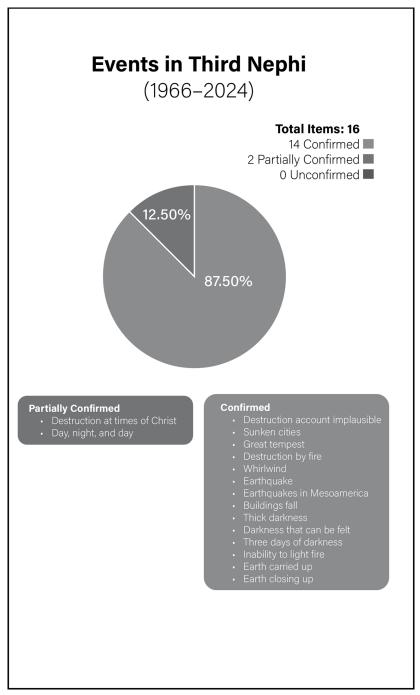


Figure 61. Anachronisms for Third Nephi events in the Book of Mormon (1830–1844).



**Figure 62.** Anachronisms for Third Nephi events in the Book of Mormon (1845–1965).



**Figure 63.** Anachronisms for Third Nephi events in the Book of Mormon (1966–2024).

## **Notes**

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# Chapter 9: Concluding Observations

During the fourteen years of the first phase (1830–1844), 102 items in the Book of Mormon were alleged to be anachronistic. By the end of that period, seven of these had been confirmed as accurate textual features, two had been partially confirmed, while ninety-three remained unconfirmed (see figures 64 and 65). By the end of the second phase (1845–1965), a period of 120 years, the total number of claimed anachronisms had increased to 168, of which thirty-six were confirmed as accurate textual features, ten were partially confirmed, and 122 were unconfirmed (see figures 66 and 67. During the last fifty-eight years, which constitute the third phase (1966–2024), the total number of claimed anachronisms increased to 226, of which 174 have been confirmed as accurate cultural, historical, or linguistic features, thirty-one partially confirmed, and twenty-one unconfirmed (see figures 68 and 69).

Notably, while the number of alleged anachronisms increased during each of the three periods, so did the number of confirmations. Not only did they increase, but they increased exponentially. Whereas 90.2% of the items remained unconfirmed in 1844, today that figure has dropped to a meager 9.29%. Thus, the key finding of this study is that, over time, allegedly problematic features of the Book of Mormon text have strongly trended towards confirmation or partial confirmation, especially in the past fifty-eight years.

The results of this survey elicit several brief observations. First, I would stress that this data only represents an evaluation of the status of anachronisms as framed by critics and does not consider other kinds of evidence that might conceivably be marshaled for or against the claims of the Book of Mormon. It provides a useful, albeit limited, picture of evidence. It also should be understood that there has been little attempt to address how anachronisms may measure up against

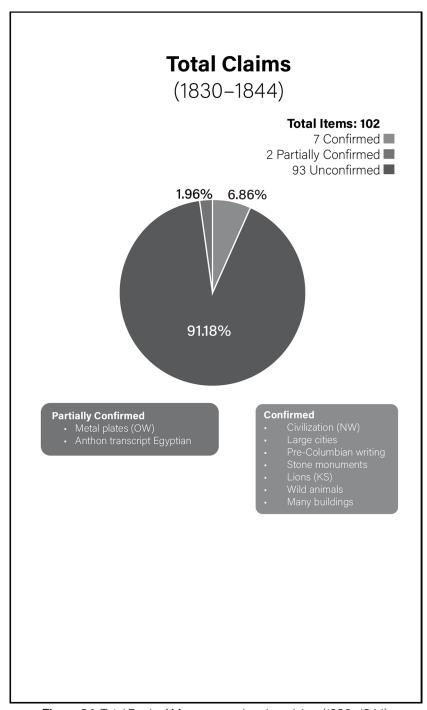


Figure 64. Total Book of Mormon anachronism claims (1830-1844).

# **Total Claims**

(1830–1844, continued)

#### Unconfirmed

- Asses pre-ColumbianCows pre-Columbian

- Horses, Book of Mormon times

- Wild goats
- Fortifications

- Millions of war deaths

- Steel (NW)Forges/furnaces (NW)Gold money

- Sacrifice outside temple
- 600 year chronology

- Killing Laban justified
   Temple outside Jerusalem
   Non-Levitical priests
   Book of Mormon cities identified

- Native traditions\*
- Archaeological evidence
- Geographical correlations

- ZiffMoney namesRameumptumOnidah

- Land of Jerusalem
   Bethlehem part of the Land of Jerusalem
   Three day journey
   River flowed into Red Sea

  - Direction of departure

  - Length of Jaredite voyagePre-Columbian sea crossings
- Jews writing in EgyptianScripture in Egyptian
- Israelite writing on metal
  Metal plates (NW)
  Hiding up records
  Destruction account implausible
  Sunken cities
  Great tempest
  Destruction by fire
  Whirlwind
  Buildings fail

  - Buildings failThick darkness
    - Darkness that can be felt
    - Three days of darkness

    - Earth closing upDestruction at times of ChristDay, night, and day

Figure 65. Total Book of Mormon anachronism claims (1830–1844, continued).

<sup>\*</sup>This refers to items not found in the text of the Book of Mormon

# **Total Claims** (1845 - 1965)Total Items: 168 36 Confirmed 10 Partially Confirmed 122 Unconfirmed **Partially Confirmed** 5.95% Iron practical use (NW) Metal money 21.43% Verifiable details for Lehi's 72.62% Confirmed Oxen pre-Columbian Oxen, Book of Mormon times (LS) Elephants pre-Columbian Elephants contemporary with man Honey bees Lions \*This refers to items not found in the text of the Book of Mormon

Figure 66. Total Book of Mormon anachronism claims (1845–1965).

## **Total Claims**

(1845–1965, continued)

#### Unconfirmed

- Asses pre-Columbian
  Asses traditions\*
- Asses, Book of Mormon times Oxen, Book of Mormon times Cows, Book of Mormon times

- Elephants, Book of Mormon times Sheep, pre-Columbian

- Swine Flocks and herds
- Fortifications

- Steel swords (OW) Steel swords (NW)
- Scimitars (NW) Scimitars (OW)

- Spears
  Bow and arrow (early)

- Slings Large armies
- Large army casualties Millions of war deaths

- Wars of conquest Shields

- Breastplates
  Breastplates (copper/brass)
- Pre-arranged battles Rations
- Raiders and plunderers Steel (OW)
- Steel (NW)

- Brass (NW) Iron smelting (NW)

- Sacrifice outside temple Pre-Columbian Christians
- 600 year chronology Israelite feasts, customs, festival Killing Laban justified
- Seantum's confession Non-Levitical priests

- Wheat
- Barlev
- Geographical correlations

Great tempest
 Destruction by fire
 Whirlind
 Earthquake
 Buildings fall
 Thick darkness

- Onidah

- Moroni
  Irreanum
  Thick darkness
  Jarom
  Darkness that can be fel
  Zarahemla
  Three days of darkness
  Zeniff
  Inability to light fire
  Omni
  Earth carried up
  Mosiah
  Earth closing up
  Helaman
  Day, night, and day
- Eastward turn
- Timber
  Ore
  Ocean route
  Length of Jaredite voyage

- Metal plates (NW)
   Reformed Egyptian (OW)
   Egyptian language (NW)
   Hebrew language (NW)
  - Inscriptions with Book of Mormon names (NW)
  - Inscriptions with Book of Mormon texts (NW)
  - · Destruction account implausible

Figure 67. Total Book of Mormon anachronism claims (1845–1965, continued).

<sup>\*</sup>This refers to items not found in the text of the Book of Mormon

# **Total Claims** (1966-2024)Total Items: 226 174 Confirmed **Unconfirmed** 31 Partially Confirmed 21 Unconfirmed Steel swords (NW) • Battle remains (Book of Mormon)\* 13.72% Heliocentric astronomy identified 9.29% • Pre-Columbian Christians Wheat 76.99% Metal plates (NW) · Inscriptions with Book of Partially Confirmed Horses, Book of Mormon times Asses, pre-Columbian Asses, Book of Mormon times Geographical correlations Moroni Money namesRameumpton Breastplates (copper/brass) Millions of war deaths Wars of extermination Early copper Chains Reas Gadianton Gid Giddianhi Egyptian language (NW) Anthon transcript Egyptian Hebrew language (NW) Destruction at times of Christ

\*This refers to items not found in the text of the Book of Mormon

Figure 68. Total Book of Mormon anachronism claims (1966–2024).

# **Total Claims**

(1966-2024, continued)

Confirmed	Temples outside Jerusalem
Horses pre-Columbian	Non-Levitical priests
Horse traditions*	Synagogues by 600 BC (OW)
Horses and man	
Cows pre-Columbian (LS)	Civilization (NIM)
Oxen pre-Columbian (LS)	River in a valley
	Not much tire
	Temples (NW)     River flowed into Red Sea
Elephants pre-Columbian	
	Palaces     Direction
Cattle	Glass (OW)     Eating raw meat
	Art     Bountiful region
	Archaeological evidence     Ore
	Navigation     Bellows
Moths	Roads     Mountain at Bountiful
	Lawyers     Ocean route
Chickens	<ul> <li>Judges</li> <li>Length of laredite voyage</li> </ul>
• Dogs	lools to hoe
	<ul> <li>Pruning tools</li> <li>Pre-Columbian sea crossings</li> </ul>
	Sickles     Metal plates (OW)
	Buildings     Pre-Columbian writing
	Barley     Pre-Columbian writing (early)
	Corn     Reformed Egyptian (OW)
	Grapes     Inscriptions with names of Book of
Steel swords (OW)	Wine Mormon places (OW)
	Salt     Israelite writing on metal
Scimitars (OW)	Highways     Hiding up records
<ul> <li>Daggers</li> </ul>	Tilling tools     Stone Monuments
	Pearls     Jews writing in Egyptian
	Silk     Destruction account implausible
<ul> <li>Quivers</li> </ul>	Grain     Great tempest
	Tools to thrash     Destruction by fire
Large armies	Josh
Large army casualties	
<ul> <li>Fainting, loss of blood</li> </ul>	Deseret     Buildings fall
Pre-arranged battles	Liahona     Thick darkness
	Irreantum     Scripture on metal
	Shazor     Darkness that can be felt
	Sheum     Three days of darkness
Raiders and plunderers	Hebrew name (non-biblical)     Inability to light fire
Steel (OW)	Onidah     Earth carried up
<ul> <li>Iron working (NW)</li> </ul>	Nephi     Earth closing
Iron practical use (NW)	Alma     Leprosy
<ul> <li>Abundance of ores (copper, gold, silver,</li> </ul>	Egyptian names     Mahinery
Metal money	• Spirining tools
Jew (pre-exile term)	- Larry brass (OW)
Sacrifice outside temple	• Blass (INV)
Israelite feasts, customs festival	Anti     Iron (NW)     Land of Jerusalem
600 year chronology	Bethlehem, part of the land of Jerusalem
Killing Laban justified	Three day journey
Seantum's confession	Verifiable details of Lehi's trail
23211001110001011	ramasis actains of Corns train

Figure 69. Total Book of Mormon anachronism claims (1966–2024, continued).

specific interpretive models of the geography of the text, something far beyond the scope of this study. Future researchers may perhaps wish to explore more specific applications of this approach as they pursue potential future correlations of the text with ancient civilizations. My purpose in this survey is less ambitious — that is, to highlight how the currents of arguments about anachronisms have shifted since 1830.

Second, it should be abundantly clear that perceived anachronisms are susceptible to refutation over time as new information is made available through additional research, interpretation, and discoveries. Kenneth Kitchen, in speaking of archaeology and the Bible, warns against the tendency of some readers to say,

"we did not find it, so it never existed!" instead of the more proper formulation: "evidence is currently lacking; we may have missed it or it may have left no trace; particularly when 5 percent of a mound is dug, leaving 95 percent or more untouched, unknown, and so, not in evidence."

Similar caution should be taken when discussing the Book of Mormon. Third, items that may seem problematic in the Book of Mormon can often generate good questions that lead to fresh research, new discoveries, and textual insights. As Hugh Nibley noted,

Long experience has shown that the Latter-day Saints only become aware of the nature and genius of their modern scriptures when relentless and obstreperous criticism from the outside forces them to take a closer look at what they have, with the usual result of putting those scriptures in a much stronger position than they were before.<sup>2</sup>

What at first appear to be "negative items," writes archaeologist John E. Clark, "may prove to be positive ones in hiding. 'Missing' evidence focuses further research, but it lacks compelling logical force in arguments because it represents the absence of information rather than secure evidence." Furthermore, certain kinds of questions require specific types of tools and information to answer. Anyone can generate questions or express doubt or disbelief. Getting reliable answers, on the other hand, often requires that we do rigorous work and research to investigate the truth.

Fourth, when believers in the Book of Mormon's authenticity examine its many so-called anachronisms with a view of their trajectory over time, it can encourage them to approach challenging questions that remain with greater optimism and patience. As Clark puts it,

deficiencies of negative evidence persist, for the most part, but they should not distract attention from the scores of other unusual items mentioned in the book which have been confirmed through archaeology—nor from the possibility that missing evidence may someday be found.4

The evidence presented in this book is consistent with his conclusion that while many questions remain "today, current science is more supportive because many claims made in the book have been substantiated," and "as seen by science, the Book of Mormon is stronger today than it was in 1830, 1844, 1950, or even 2000, so I expect it will continue to become stronger in the future."5

Finally, the confirmation of many items that were once considered problematic can encourage current and future readers of the Book of Mormon to take its historical claims seriously. If the text truly is authentic and ancient—which I certainly believe to be so—then the deepest and most complete understanding of its content will only come as readers diligently assess the book in light of its ancient historical contexts in both the Old and New Worlds. If the current trend holds, many more exciting and faith-promoting discoveries may be right around the corner. Only time will tell, but in this particular area, time seems to favor the Book of Mormon.

#### **Notes**

- 1. Kenneth A. Kitchen, "New directions in Biblical Archaeology: Historical and Biblical Aspects," in Biblical Archaeology Today, 1990: Proceedings of the Second International Congress on Biblical Archaeology, Jerusalem, June-July 1990, ed. Avraham Biran, Joseph Aviram, and Alan Paris-Shadur (Jerusalem: Israel Exploration Society, 1993), 48.
- 2. Hugh Nibley, An Approach to the Book of Abraham (Salt Lake City: Deseret Book; Provo, UT: Foundation for Ancient Research and Mormon Studies, 2010), 40.
- 3. John E. Clark, "Archaeological Trends and Book of Mormon Origins," BYU Studies 44, no. 4 (2005): 94, scholarsarchive.byu.edu/cgi/viewcontent.cgi ?article=3732&context=byusq.
- 4. Clark, "Archaeological Trends," 95.
- 5. Clark, "Archaeological Trends," 95.

## Selected Bibliography

This bibliography provides a selection of some of the sources—general and relevant to each chapter—that I have found useful in the compilation of this work. It is not exhaustive, but merely intended to provide the interested reader a convenient list of resources should they wish to pursue further study of so-called anachronisms in the Book of Mormon.

I first examine general resources relative to anachronisms, and then provide a section for resources specific to each chapter in the book.

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### **About the Authors**

Matthew Roper is a researcher and writer for Scripture Central. He received a Bachelors degree and an MA in Sociology from Brigham Young University. He compiled and was responsible for the Harold B. Lee Library's electronic collection Nineteenth Century Publications about the Book of Mormon 1829–1844. He has published in Literary and Linguistic Computing, BYU Studies Quarterly, Mormon Studies Review, Interpreter, and the Journal of Book of Mormon Studies.

Wade Ardern provided the preface to this volume. Originally from New Zealand, Wade earned his bachelor's degree in history from the University of Waikato. He received a Nibley Fellowship while pursuing graduate studies in archaeology at Brigham Young University, where he completed a master's degree in anthropology. Wade served as a research assistant for John L. Sorenson at FARMS, worked with the New World Archaeological Foundation, and was a research associate for John E. Clark at BYU. Since 2003, he has taught for Seminaries and Institutes, including at the Church College of New Zealand and various locations in Cache Valley, Utah. Since 2018, he has been an instructor at the Logan Institute of Religion at Utah State University. Wade married Jessica Chandler in the Portland Oregon Temple, and they have five children.



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