
THE BOOK OF MORMON: DISCOVERIES AND EVIDENCES

Thursday: Wordprints, ancient names, and ancient texts

INTRODUCTION

Yesterday we discussed Hebraisms in the Book of Mormon. Today we will continue that discussion in a way by highlighting the ancient nature of many Book of Mormon names and texts, then concluding with a section on wordprinting, a statistical tool to determine the authorship of a text.

ANCIENT NAMES

NAME CHARACTERISTICS

There are some important characteristics of ancient names, especially Old Testament names, the context from which the Book of Mormon comes. For example, no one in the Old Testament has a **surname**—they are all known by one name only. This is not true in the New Testament. So if an author writing something like the Book of Mormon was influenced by the Bible in general, he might slip in a surname or two. After all, with several Nephis, Almas, Mosiahs, Helamans, and Lehis, wouldn't it be nice to be able to easily distinguish them? But the Book of Mormon is just like the Old Testament. Of the 337 proper names in the book, not one has a surname.

Another characteristic of Old Testament names comes from their Hebrew or Semitic origin—none of them use the letters **q, x, or w**, and none being with the letter **F**. Likewise, the Book of Mormon follows the same pattern—no names using the letters **q, x, or w**, and none starting with **F**. If you were creating 337 names for a fictional story of several hundred pages and knew nothing about the Hebrew alphabet, what are the chances that you would be able to follow that pattern for every single name?

NAME STATISTICS

Names in the Book of Mormon	337
Unique names to the Book of Mormon	188 (56%)
Lehite/Mulekite names	142
Jaredite names	41
Both	5
Names in quotes from the Bible	96 (28%)
Names in both the Bible and Book of Mormon	53 (16%)

HEBREW INFLUENCE

One example is in Alma 18:13, where a servant of the king calls him "*Rabbanah*", which the text says means "powerful or great king." That word is related to the Hebrew word *rbb* which means 'to be big or many.'

Another one is the name *Jershon*, mentioned in Alma 27:22 and other places. In the Old Testament, names are often given to places that have symbolic meaning or represent an event. *Jershon* relates to the Hebrew word *yrö*, which means "inheritance." This sets up a great play on words: "Behold, we will give up the land of *Jershon*...and this land *Jershon* [meaning: **inheritance**] is the land which we will give unto our brethren for an **inheritance**." To

reiterate, there is no evidence Joseph Smith knew any Hebrew when he translated the Book of Mormon, so this is a wonderful example of a hidden Hebrew influence.

Another example is the name “Alma.” Originally a source of criticism who declared that Alma was not only not Hebrew (because it wasn’t in the Bible or any other ancient text) but was a Latin female name! But when the Bar Kochba letters were discovered in 1960 by the famous Israeli archaeologist Yigael Yadin, there was a legal contract discovered from the time period A.D. 134-135. Twice in this document, the name *Alma* appears as the *son* of Yehudah, thus fixing it as a male Hebrew name. Not only does this remove the criticism, but it strengthens the Book of Mormon case as an authentic ancient document—because the name is verified by a non-Biblical source.

NIBLEY’S NOTES ON NAMES

Hugh Nibley wrote about how many names in the Book of Mormon showed characteristics of antiquity. From his writings, I note the following:

1. The Book of Mormon judge Paanchi and his father Pahoran both have good Egyptian names, though not mentioned in the Bible or in anything discovered before Joseph Smith’s time. The Egyptian Paanchi was the son of Kherihor (compare to the Book of Mormon Korihor), and lived about 400 years before Lehi. Paanchi’s brothers in the Book of Mormon also bear documented Egyptian names: Pahoran (‘a man of Horan,’ the Egyptian name for Syria/Palestine) and Pacumeni (Egyptian Pakamen). Ironically, both the Egyptian Paanchi and Kherihor and the Book of Mormon Paanchi and Korihor are involved in plots to gain power and priestcraft.
2. After the Babylonian destruction of Jerusalem, many Jews who were not carried away fled to a location in the Upper (southern) Nile at Elephantine. The names found while excavating this large Jewish colony have many similarities to the Book of Mormon names and less overlap with Biblical names. This makes sense, since these people came from the same time period as Lehi.
3. Related to that, a name list comes from Babylonian records of prisoners taken from Judah under Nebuchadnezzar. These are names right out of Lehi’s time. One item of note from the lists is the tendency of people of that age to name children after Egyptian heroes. A similar trend is found in the Book of Mormon, with Egyptian hero names such as Aha, Himni, Korihor, Paanchi, Pakumeni, Sam, Zeezrom, Ham, Manti, Nephi, and Zenoch. Other names, such as Zeniff and Zoram, have also been identified in that time period. None of these names are found in the Bible.
4. The Book of Mormon has many names ending in *-iah* or *-ihah*. This correlates with the majority of names found at Lachish, which was destroyed by the Babylonians during Lehi’s day. Other studies have demonstrated that a similar suffix (*-lahu*), a theophoric element tied to the name Jehovah (or Yahweh), was very common in Lehi’s Jerusalem.
5. In the Bible, Lehi is only a place name. But a piece of pottery from Elath included the name of a person called Lehi.
6. The names Laman and Lemuel are interesting. Laman is not found in the Bible. Lemuel is, but only twice in Proverbs. Both are attested in discoveries since Joseph Smith’s time as coming from the south Arabia. In addition, they are consistently grouped together in the Book of Mormon text, and we find many other such names of two men, often brothers, in assonant (sound alike) pairs in Arabic writings. Given that Lehi took his family, including Laman and Lemuel, into Arabia when they left Jerusalem, is a fascinating correlation.
7. One of the most common name elements in the Old Testament is *ba’al*, tying to the local god of that name. But the Book of Mormon has not one such name. A flaw? No, because studies have shown that in

Lehi's day, there were few with that element. Elephantine names (Jews that fled the destruction of Judah into Upper Egypt) include no *ba'al* names, just like the Book of Mormon.

ANCIENT TEXTS

Many ancient texts have come to light since the publication of the Book of Mormon. Many of the elements of these non-Biblical writings surface also in the Book of Mormon, helping us appreciate the antiquity of the Book of Mormon text.

METAL PLATES AND TEXTS HIDDEN AWAY

The first thing to note relates to how the Book of Mormon was stored—on metal plates and hidden away. Thought to be incredible in Joseph Smith's day, today both kinds of records are common. Records hidden away include the Nag Hammadi scrolls, the Dead Sea Scrolls, records at Masada, and the Bar Kokhba letters. Nearly a hundred ancient documents inscribed on metal plates have been found in the last 80 years. Such metal records, including scriptures, have been discovered on several continents, including right in Jerusalem. In some cases, the records have been buried in stone boxes, such as those from Sargon II at Khorsabad (at the Louvre today). The Ketef Hinnom texts, discovered in a tomb in Jerusalem and dating to the time of Lehi, are two small metal rolls which contain parts of Numbers 6. They are the oldest scriptural writings ever found. Even more texts have been discovered which speak of records kept on metal plates.

Moroni says that they were writing Hebrew (or an altered form of it) using "reformed Egyptian" characters (Mormon 9:32-33). Until fairly recently, no records had been discovered where Hebrew was written with anything but Hebrew letters. But now we have Hebrew texts written in Egyptian—written in hieratic, a 'reformed' version of Egyptian hieroglyphic characters. Examples abound, including the London Magical Papyrus, Papyrus Anastasi I, Ostrakon 25759, and Amherst Papyrus 63. The latter is the oldest example—from the 4th century B.C.—and perhaps the most interesting because it uses demotic (an Egyptian script in use during Lehi's day) and includes excerpts from Psalms 20. So we have not only Semitic texts written in Egyptian characters, but scripture!

JOSEPH OF EGYPT

The Book of Mormon includes a fascinating account of Captain Moroni tearing a piece of his garment, wrote on it and rallied the people to his cry of liberty. In response, people tore their own garments saying it was symbolic of the covenant they were making. Then they threw their garments at Moroni's feet, saying that if they didn't keep their covenant, that they would be cast down like their garments. Moroni reminds them of the story of Joseph, whose garment is rent by his brothers, and most of which was destroyed. But a part of that torn garment remained to the end of Israel's life, and he declared that to be symbolic of the remnant of Joseph's seed that God would preserve (Alma 46:19-23).

Many of the details of that story are not in our Old Testament. But well after the Book of Mormon was published, a number of ancient Jewish and Arab texts came to light that give similar details. They speak of Joseph's garment being torn, and a piece of it being preserved by Jacob/Israel on which he weeps nightly for his lost son. Another story tells of Joseph's garment being the thing that let Jacob know he was still alive, because he perceived the smell of his son before he saw him.

The Book of Mormon quotes prophecies of Joseph about the Lord raising up Moses and Aaron to deliver his people out of Egyptian bondage. There is no such prophecy recorded in the Bible. But ancient Jewish scriptural

commentaries (*targumim*) teach that Joseph did know his people would end up as slaves in Egypt and that they would be later delivered by God, through two deliverers.

PROPHECIES OF CHRIST

The Book of Mormon includes a number of prophecies about Jesus Christ prior to his birth, including details such as his name, his miracles, the manner of his death, his resurrection, and the name of his mother. Some critics called this out, saying that it's an easy thing for Joseph Smith to write such things into the text in the 1800s, since no such clear indications of the details of Jesus' life are in our current Old Testament.

But an examination of early and mediaeval Christian and Jewish texts show that many believed that Old Testament prophets had done exactly what the Book of Mormon declares—taught the details of Jesus' life. Ignatius, a bishop in Antioch (1st and 2nd century) taught that Old Testament prophets “lived according to Christ Jesus. On this account also they were persecuted, being inspired by His grace to fully convince the unbelieving that there is one God, who has manifested Himself by Jesus Christ His Son.” An early Christian document called *The Epistle of Barnabas* teaches that Moses knew much about the Savior and taught the people about his name, his mission, and his suffering. According to an Eastern medieval text called the *Book of the Bee*, many Old Testament prophets taught specifics about Jesus. For example, Hosea taught when he would be born and that he would have twelve disciples. Nahum wrote that he would be slain and the veil of the temple rent at that time. Habakkuk prophesied that he would come and do away with the law of the Jews. And early Church fathers (Justin Martyr and Irenaeus) both taught that Jeremiah spoke of Jesus preaching salvation to the dead, and that Jeremiah taught of Jesus' birth to a virgin, laying in a crib, and people coming to worship him. Another text, *4 Baruch*, speaks of Jeremiah's teachings about Jesus' life, his selection of twelve apostles, his death and resurrection in three days, and his return in glory on the Mount of Olives. None of these texts were available to Joseph Smith.

DEATH OF LABAN

The Book of Mormon has in its early pages a story of an execution. Nephi is instructed by the Spirit to kill Laban in order to get the brass plates and safely escape. He resists doing so but in the end follows the direction from God.

A second century Jewish text (*Abot de Rabbi Nathan* 20) discusses Moses' killing of an Egyptian taskmaster, as recorded in Exodus 2. In this text, Moses is hesitant to perform the deed until he is divinely instructed to do so. In fact, in this text, Moses was able to interact with a court of angels who rendered the verdict on the Egyptian and told Moses to kill him, so he did. Another text says that as David prepared to slay Goliath, he “lifted up his eyes to heaven and saw angels deliberating on Goliath the Philistine.”

These examples demonstrate that even in small details, the Book of Mormon account conforms to ancient traditions about similar experiences, which were not available to Joseph Smith.

WORDPRINTS

One of the most interesting studies of the Book of Mormon text is that of stylometry, or wordprinting. This is a statistical analysis of a text to determine likely authorship. It works by taking known writings of a person and comparing them to texts in question, to determine if that person is the author or not. Something like fingerprints, each author has their own ‘wordprint,’ which is determined by how they use a number of non-contextual words, such as *the*, *and*, *a*, or *of*. Studies have shown that the use of these words is consistent for a single author, even over a large period of time. Additional research has demonstrated that the wordprint pattern of an author can still

be detected in a translation of that author's writing, as long as the translation is more literal and not a freeform translation that is more of a paraphrase.

Wordprint analysis has been done on a number of writings, the most famous of which is perhaps the Federalist papers. You probably remember that these documents were written in the early days of our country and published anonymously. Through historical documents, authorship was discovered for seventy-three of the papers, but twelve could not be determined. By comparing those papers to the writings of potential authors, such as Alexander Hamilton and James Madison, wordprint research determined that Madison was unquestionably the author of all twelve. Another example has to do with an unfinished work of Jane Austen. Many years later, someone completed the novel and published it anonymously. The author tried hard to copy Jane Austen's writing style, and to many reading it, the author was very successful. But wordprint analysis was able to easily determine which parts were original and which were added and edited by the new author, because though she copied the style of Austen, she could not suppress her own pattern of using non-contextual words.

The Book of Mormon is an excellent potential wordprint study. It claims to contain sufficient writings by several original authors to perform the analysis (it takes several thousand words to achieve statistical relevance). In addition, we have known writings of Joseph Smith, Oliver Cowdery, and others who could have potentially authored the book, if it was not of ancient origin. These can be used to compare to the Book of Mormon text to see if it is the same person.

Two major wordprint studies have been done on the Book of Mormon. The first was published in 1980, and done by Wayne Larsen and Alvin Rencher, both statisticians. (I am not a statistician so am reporting what they said without claiming to fully understand it.) They use multivariate analysis of variance, which basically means looking at the patterns of usage of the non-contextual words in text of known authorship and comparing them to texts of unknown or disputed authorship. To check their work, they also performed cluster analysis and discriminant or classification analysis. Their conclusions are as follows:

- The differences in the usage of the words studied is large enough that "the statistical odds that a single author wrote the book [of Mormon] are less than 1 in 100 billion." The words they studied were *and, the, of, that, to, unto, in, it, for, and be*. They also did a follow-up study using a larger group of 38 words with the same results. No author can keep track of such patterns (even if he was aware of their existence, which Joseph Smith clearly wasn't) and vary them consistently from author to author in a text like the Book of Mormon.
- "None of the Book of Mormon selections resembled the writing of any of the suggested nineteenth-century authors. The Book of Mormon itself offers the strongest evidence for a clear scientific refutation of the theories that it was written in the nineteenth century."
- The Book of Mormon was "indeed written by several distinct authors, who were individually consistent" in their wordprints.
- Wordprints were similar for those of overlapping time periods. In other words, Nephi's writings most resembled Lehi's; Alma, Amulek, and Abinadi resembled each other; Samuel the Lamanite and Nephi (who were contemporaries) writings resemble each other. And modern authors, such as Joseph Smith and Oliver Cowdery, were far more similar to each other than they were to any of the Book of Mormon authors. [Use Figures 1 and 2 on pp. 173 and 175]
- The translation process "was both direct and literal and that each individual author's style was preserved." This agrees with recent research on the translation process that comes from Royal Skousen's study of the Book of Mormon manuscripts and other early historical documents, that Joseph Smith was given the text word for word, including the spelling of names. In other words, the translation was not

done as a human would normally do it—read the text in one language and attempt to convert it into another. Joseph Smith was told exactly how to write it in English, which proved to be a very literal translation of Nephi’s, Alma’s, Mormon’s, and others’ words.

- (As a side note, in a related study, they found a strong internal consistency in the book of Isaiah—better, in fact, than any other Old Testament book of that general time period. This is contrary to the dominant scholarly opinion that Isaiah has two or more separate authors.)

The second wordprint study was done by a group of people known as the “Berkley Group.” The science of stylometry had evolved much since Larsen and Rencher’s initial work, and this group of scientists, led by John L. Hilton and including several who were not members of the Church, determined to update the research and address some weaknesses in the methodologies. They started with a skeptical approach—not sure if wordprinting was even valid. They spent seven years developing and performing their tests on the Book of Mormon and other texts, and published their findings in 1987. They limited their research to larger blocks of text and thus fewer authors (Nephi and Alma in the Book of Mormon, who have the largest amount of text directly attributable to them), and Joseph Smith, Oliver Cowdery, and Solomon Spaulding from the nineteenth century). They turned their focus beyond just the frequency of non-contextual words, but also the patterns of their usage (the context of their use). They used the original Book of Mormon manuscripts, rather than the more recent version which includes modern editing changes, and only compared two texts at a time, thus focusing their research on “rejections,” meaning that word patterns are different between two texts. They employed a number of “control” studies which employed the same measurements on noncontroversial texts, and demonstrated the validity of their methodology. They also looked at translated texts of various kinds to see how wordprints survived a translation.

[Show Figure 1, p 238] The results of their control tests are in this chart. “Within-Author” means written by the same author, while “Between-Author” means written by two different people. Texts written by the same author peak at 2 rejections (which is “theoretically expected”), while texts written by different authors peak at 7 rejections. The larger the number of rejections, the less likely that the texts are written by the same author.

This is what they learned when they applied their methodology to the Book of Mormon.

- The Nephi and Alma texts compared to themselves show the same results as the control texts. That is, a block of Nephi’s writings compared to other of his writings shows that they are written by the same author; the same results are manifest for Alma’s writings compared to other Alma writings. [Figure 2, p. 240]
- Comparing the two authors’ texts to each other also matches the control texts. That is, the number of rejections is consistently high when Nephi and Alma are compared, demonstrating that these texts were not written by the same person. [Figure 3, p. 242]
- Comparing Nephi and Alma’s writings to Joseph Smith, Oliver Cowdery, and Solomon Spaulding’s writings shows a consistently high number of rejections, in most cases showing statistically that they are not the same authors. Particularly, Nephi and Joseph Smith are very different, though Alma and Joseph Smith are more alike (though statistically “uncertain”, meaning probably not the same).
- Their conclusion (and remember, this is from scientific non-members): “it is statistically indefensible to propose Joseph Smith or Oliver Cowdery or Solomon Spaulding as the author of the 30,000 words from the Book of Mormon manuscript texts attributed to Nephi and Alma. Additionally these two Book of Mormon writers have wordprints unique to themselves and measure statistically independent from each other in the same fashion that other uncontested authors do. Therefore, the Book of Mormon measures multiauthored, with authorship consistent to its own internal claims.”

Wordprinting is a remarkable statistical analysis that supports the proposition that the Book of Mormon is written by ancient and multiple authors. Likewise, the names in the Book of Mormon and the ties to ancient texts only discovered since Joseph Smith published the work, also support the idea of the antiquity of the text.

SOURCES

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