Introduction
There are few topics as basic to Egyptology as the “four sons of Horus,” the figures on canopic jars where organs of the deceased were placed. These figures served a ritual function in Egyptian religion. It is also well-known that the four canopic jars could also be used to represent the “four corners of the earth.”

Figure 1. Facsimile No. 1 from the Book of Abraham

Facsimile Nº 1 of the Book of Abraham contains a representation of the figures on the four canopic jars universally known to Egyptologists as the “four sons of Horus,” but designated by Joseph Smith as the idolatrous gods of (5) Elkenah, (6) Libnah, (7) Mahmackrah, and (8) Korash.

Many theories have been proposed as to why Joseph Smith translated hieroglyphics differently from modern scholars. Some have asserted that the text was given by revelation and had nothing to do with the documents at hand, while others have suggested that a translation process occurred, but that we do not have the original documents. Critics have seized upon the discrepancies to claim that Joseph Smith could not translate
and was a false prophet, and that the facsimiles and Book of Abraham text are fabrications of an imaginative mind.

I propose another explanation suggesting that the text provided by Joseph Smith represents a real and accurate translation, while still rendering to Egyptologists their due respect. This explanation centers upon changes in the Egyptian language over time, with the characters having the sounds given by Joseph Smith in the early period, and those given by Egyptologists in the late period of Egyptian literature.

**Derivation of Modern Hieroglyphic Readings**
Champollion mapped Egyptian hieroglyphs onto Coptic letters and then, having a critical mass, mapped Coptic sounds back onto Egyptian hieroglyphs. Champollion did a magnificent job for what he had to work with. To get an idea of how hard it is to determine the exact sound of a hieroglyph, consider the fact that any hieroglyph may be written with or without phonetic complements or determinatives. Even if one has an idea from Coptic as to how a word should be transliterated, one must determine which of the hieroglyphs are determinatives and which are phonetic complements. This can be very difficult to establish because many hieroglyphs can play either role, and which are used is often arbitrary.

**Traditional Hieroglyphic Transliterations**
Here is my chart of the common Egyptian hieroglyphs and their transliterations by scholars over the last 170 years:

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Linguistic Change over Time
Champollion’s work represents a monumental achievement which subsequent Egyptologists have built on. The sounds that he assigned to hieroglyphs seem to be largely correct for the Ptolemaic period. The sounds and meanings of this late period, derived from comparison with Coptic equivalents, have then been extrapolated.
backwards to the hieroglyphic writing of two millennia earlier. Champollion believed that the sounds and meanings of the hieroglyphs never changed at all throughout all Egyptian hieroglyphic history: “La valeur individuelle, aussi bien que la forme de chaque signe, ne paraissent point avoir éprouvé d’altération sensible.” He adduced no proof for this unusual claim, which seems to have gone largely unquestioned by later Egyptologists. The assumption that the sounds of early hieroglyphs were identical to those of late ones arises not from any compelling evidence that the language remained unchanged over time: to the contrary, vast differences are seen in the orthography and language of early and late Egyptian. Rather, it arises from the lack of any suitable equivalents for the early Egyptian language that would serve the role that the Coptic equivalents with known pronunciations and the Rosetta Stone with known translations served for late Egyptian.

All languages change over time. We have seen significant changes in the pronunciation of letters and words in our own language over just the past few hundred years. Champollion’s own observations undermine his assertion that hieroglyphic sounds and meanings remained constant throughout history. Champollion noted that in the late state of Egyptian, hard and soft sounds were represented indifferently by the same hieroglyphs. Many of the characters have a hard sound and a soft sound. Champollion’s fascinating observation suggests that at the end of Egyptian hieroglyphic history, the only sound variations were according to Egyptian speech at the time. A similar linguistic phenomenon is seen in Hebrew, e.g. S=Sh, T=Th, B=Bh (Castillian Spanish B), C = Ch, and so on. Many Hebrew words can be found by simply hardening or softening the consonants of early Egyptian, such as Hebrew Jasher and Egyptian Yaker, both meaning perfect or upright. The early Egyptian language had a system by which consonants were hardened or softened to produce alternate readings, although the rules differed from those of the Ptolemaic era. I have found many instances where the mouth hieroglyph ⊕, to which the “R” sound is attributed by Egyptologists, should be read P or PH. Years after making this discovery, I found that Champollion assigns these same sounds to this character. This earlier alternate reading seems to have been forgotten by modern Egyptologists.

Champollion observed that hieroglyphic spellings varied widely in the Greco-Roman period, while earlier spellings were more regular. Egyptian hieroglyphs were initially pictograms used for their logographic meaning, while in later times the initial connotations were lost and hieroglyphs were used primarily for their sounds. In the late period, characters with similar sounds were used virtually interchangeably, leading to a proliferation of alternate spellings. For example, in his “Egyptian Hieroglyphic Dictionary,” the great Egyptologist Sir E.A. Wallis Budge presents eleven singular and twelve plural spellings of the word “MER” which he translates as "any collection of

1 Grammaire Egyptienne, ou Principes Généraux de l’écriture sacrée égyptienne appliquée a la représentation de la langue parlée, par Champollion le jeune; publiée sur le manuscrit autographe, par l’ordre de M. Guizot, ministre de l’instruction publique, Paris, typographie de firmín Didot frères, MDCCXXXVI, p. 47.
2 see http://72languages.com/anglosaxonandgaelic.pdf
3 Champollion, op. cit., p. 112.
water, lake, pool, cistern, reservoir, basin, canal, inundation, flood, stream.”

For "MET, METUT," which he translates as descendants or posterity, eighteen alternate spellings are given. Similar trends observed in other early languages. One source notes of Sumerian: “From about 2900 BC, the pictographs began to lose their original function, and a given sign could have various meanings depending on context. The sign inventory was reduced from some 1,500 signs to some 600 signs, and writing became increasingly phonological. Determinative signs were re-introduced to avoid ambiguity. This process is directly parallel to, and probably not independent of, the development of Egyptian hieroglyphic orthography.”

These observations suggest considerable change in the Egyptian language over time, and give us cause to reconsider the longstanding assumption that the pronunciation of hieroglyphs experienced no change for a period of more than two millennia even while original meanings were discarded and orthography became less standard.

Limitations of Early Egyptian Transliterations
In the introduction to his hieroglyphic dictionary, E.A. Wallis Budge noted: “In the transliterations of the Egyptian words in this dictionary, I have followed the order of the letters of the Egyptian words, but I cannot think that these transliterations always represent the true pronunciation of the words.” He then provides many examples of likely inadequacies in the pronunciation of hieroglyphs based on Coptic equivalents, but does not attempt to address the much more substantial issue of change in sound and meaning of some hieroglyphs between early hieroglyphic writing and the Ptolemaic era.

Akkadian scholar John Huehnergard similarly acknowledged: “Since there have been no native speakers of Akkadian for some two millennia, it is impossible to determine exactly how the language was pronounced. The pronunciation used by scholars is merely an educated guess, based largely on comparisons with languages related to Akkadian, such as Arabic, Amharic, and Hebrew.” With evidence of considerable change in the Egyptian language over time but few contemporary sources from which to derive the precise sounds of the hieroglyphs in the earliest stage of the language, it must also be acknowledged that the extrapolation of hieroglyphic sounds from the Ptolemaic era to early Egyptian is similarly an “educated guess.” This is not a criticism of pioneers in the field, who have contributed immensely to modern knowledge of Egyptology, but a recognition that their pioneering efforts must be taken to the next step by seeking clues and convergences to refine our understanding of the earliest form of Egyptian.

The foundation of Egyptology is built largely on what renowned linguist Cyrus Gordon

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5 Budge, op. cit, p. 331.
called the "impoverished Coptic language." Several important links have not been consulted, or have been consulted only peripherally, in the reconstruction of early Egyptian. Sir E.A. Wallis Budge had observed that “the Semitic scholars who have written about it have lacked the Egyptological knowledge necessary....and the Egyptologists, with the exception of the lamented Burchardt, have no adequate knowledge of Semitic languages and literature.”

The German lexicographer Adolf Erman, author of the most comprehensive hieroglyphic dictionary ever printed, “pointed out in a systematic manner the details of Egyptian grammar that have their counterparts in the Semitic languages” as well as vocabulary, although Erman himself was not a cuneiform scholar. Budge attempted to further comment on this relationship, but acknowledged that his own knowledge of the Semitic languages was limited. Cyrus Gordon lamented: "... even among the senior citizens of academia it is exceedingly hard to find anyone well-versed in both cuneiform and Egyptian. Since those two fields remain the cornerstones of our topic, the limitation is serious." As Gordon came very close to saying, knowledge of Sumerian is necessary to understand Egyptian, and vice versa, yet very few individuals are skilled in both languages. With the knowledge that the earliest forms of Egyptian and old cuneiform share close commonalities but that late Egyptian and late Semitic languages bear far less resemblance, one can appreciate the fallacy of failing to account for changes in the pronunciation and meaning of hieroglyphs over a period of two millennia.

Alternate Readings in Early Egyptian
Careful study of the original writings of Champollion and others, as well as evaluation of homologies between Egyptian and other early languages, suggest that some hieroglyphs may have originally been pronounced much differently than they are commonly rendered. When investigating such possibilities, Occam's razor should be used and dispensable assumptions should be eliminated. One should also assume, in the absence of good evidence to the contrary, that the pronunciation in any language is the same as its descendant, ancestral, and peripheral languages. For example, the Egyptian negative is NN, with no knowledge of the vowels. It is therefore reasonable to propose that this word would have been pronounced NON like all descendant and peripheral languages. Proposed alternate readings should never be arbitrary or contrived, but must be documented from specific linguistic evidence, and must consistently produce similar results when applied across a wide range of documents from the same period.

I have found that specific principles that substantiate Joseph Smith’s translations and transliterations of early Egyptian documents as correct, and repeatedly produce more meaningful renditions of a wide range of ancient Egyptian documents. My purpose here is not to enumerate comprehensively the sounds of all characters in early Egyptian, nor to introduce evidence of all of the instances in which these same associations of characters and sounds produce more meaningful readings. It is rather to demonstrate that Joseph Smith’s transliterations of the names of the “Four Sons of Horus” accurately reflect the

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earliest form of the Egyptian language.

Reconsidering the Four Sons of Horus
Many years ago, I had no difficulty in proving to myself that the correct transliteration of \( \text{\textcircled{A \textcircled{H}}} \) (“Hapi”) is Mahmackrah and that \( \text{\textcircled{Q \text{\textcircled{E}}}} \) (“Akeset” or “Imset”) is Korash. Reconciliation of two others with Facsimile No 1 was more difficult. In fact, it was impossible. Some years later, I discovered that two of the four sons of Horus as reported by Egyptologists were completely wrong: they were reversed!

Figure 2. The Four Sons of Horus\(^{12}\)

A photograph by Wm. MacQuitty of the four hieroglyphs with their names spelled out was published in Richard Patrick’s All Color Book of Egyptian Mythology (Figure 2).\(^{13}\) Since they are all facing right, the text must be read from left to right. The order of the hieroglyphs is: 1. Human headed KORASH, called by Egyptologists IMSET, god of the west; 2. Ape headed MAHMACKRAH, called by Egyptologists HAPY or HAPI, god of the east; 3. Falcon headed ELKENAH, presumably called by Egyptologists DUAMUTEF, god of the north, but here erroneously called QEBEHSENUF by Patrick;

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and finally, 4. The jackal headed LIBNAH, presumably called by Egyptologists QEBEHSENUF, god of the south, but here erroneously called DUAMUTEF by Patrick!

In “The Hieroglyphs of Ancient Egypt,” Aidan Dodson claims that the four sons of Horus mentioned above are respectively IMSETI, HAPY, QEBEHSENUF, and DUAMUTEF. Note that he makes exactly the same mistake as Patrick. Egyptian Mythology (Prague, 1965) originally from Larousse Mythologie Générale has the four sons of Horus respectively as IMSET, HAPY [called dog headed!], QEBEHSENUF [here called a hawk], and DUAMUTEF - exactly the same mistake as the later Patrick and Dodson, respectively.

Figure 3. Canopic Jars

In the British museum there are four canopic jars with hieroglyphs (Figure 3) rendered by Quirke and Spencer as follows: 1. Human headed IMSET [Korash], 2. Ape headed HAPY [Mahmackrah], 3. Jackal headed QEBEHSENUF [Libnah], and 4. Falcon-headed DUAMUTEF [Elkenah]. This is estimated at 1000 B.C. Yet in this same work they are called: 1. Human head: IMSETY containing the liver; 2. “baboon head” HAPY containing lungs; 3. jackal DUAMUTEF [!] containing the stomach; 4. falcon QEBHSENUF [!] containing the intestines. Lewis Spence (1915) gives the four canopic jars as: 1. human MESTI, stomach and large intestines, north; 2. ape HAPI, small intestines, south; 3. falcon QEBHSENUF, liver and gall bladder, west; 4. jackal TUAMUTEF, lungs and

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16 op. cit., p. 92.
heart, east. Now we have Spence, Larousse, Patrick, Quirke, Spencer, and Dodson all making exactly the same mistake, mindlessly perpetuating the errors of predecessors even with the spelled out hieroglyphs at hand.

Sir Ernest Alfred Wallis Budge (The Mummy, 1893) gives us: 1. human MESTI or IMSET [Korash], stomach and large intestines, south; 2. “dog” HAPI [Mahmackrah], small intestines, north; 3. “hawk” QEBHSENUF [Libnah] (yet we know these hieroglyphs are always written on the jackal), liver and gall bladder, west; 4. jackal TUAMUTEF [Elkenah] (yet we know these hieroglyphs are always written on the falcon), lungs and heart, east. In Dwellers on the Nile (1926), Budge spelled out the hieroglyphic names of each of the four, yet even here he again reversed the last two: 1. Human IMSET, 2. ape HAP, 3. “hawk” QEBHSENUF, 4. jackal TUAMUTEF.

Budge wrote that the four sons of Horus represented respectively the south [AMSET], the north [HAPY], the east [DUAMUTEF], and the west [QEBHSENUF]. Later scholars have rotated them all exactly 90 degrees to the left, or counterclockwise as viewed from above. Elsewhere in the same book, Budge calls them AKESET, HAP, TUAMUTEF and QEBHSENUF. This was taken from a bas relief at Philae. Notice that AKESET is much closer to KORASH - requiring only an infixed R, recalling that the final H and T(H) are the same letter, as preserved in modern Arabic - than the transliteration scholars adopted later, IMSET. The spelled out names are much easier to match with the versions given in Facsimile № 1.

Budge, Spence, Larousse Ltd., Patrick, Quirke, Spencer, and Dodson have all made exactly the same mistake. The first scholar is most forgivable because he may simply have made an absent-minded mistake. For the others, it is an unforgivable blunder because it proves a mindless repetition of their predecessors without paying any attention at all to the hieroglyphs themselves. How could anyone make such a blunder with the hieroglyphs right in front of him? It also demonstrates the folly of plagiarism, repeating what a predecessor said without ascribing appropriate credit. I take no joy in documenting over a hundred years of mindless parroting of a very basic mistake in Egyptology. There are few things more basic in Egyptology than the four sons of Horus. To get half of them wrong for over a hundred years is inexcusable. But perhaps this will go some little way toward explaining why some of my findings are not commonly known. Original translation is immensely more difficult than transliteration or retranslation.

After recognizing this foundational blunder and correctly associating the original hieroglyphs with each figure, we are now in a position to evaluate Joseph Smith’s transliteration. The correct association of names and figures is human-headed Korash (called by scholars IMSET or AKESET), ape-headed Mahmackrah (called by scholars

21 Budge, *Egyptian Religion*, p. 117.
HAP or HAPY), falcon or hawk-headed Elkenah (called by scholars DUAMUTEF), and jackal-headed Libnah (called by scholars QEBEHSENUF).

**Korash**

Egyptian was written in both directions. Usually, though, it was written right to left unless there is some adjacent text and you need to change the subject. Let’s home in on Figure 2 because it is correct. The figures are all facing to the right, which means we should read everything from right to left. So the first one is the one on the far right. In the running text below, however, the hieroglyphs will typically be given in a left to right order for convenience and to avoid confusion.

Let’s look at the first pagan god, the human-headed one on the far right, called by scholars IMSET or AKESET. Its name is written with these five hieroglyphs:

\[ \begin{align*}
& \text{IMSET} \\
& \text{AKESET}
\end{align*} \]

As the right-facing hieroglyphs must be read right to left, the order when written left to right is \[ \begin{align*}
& \text{IMSET} \\
& \text{AKESET}
\end{align*} \]. These hieroglyphs are read IMSET by Egyptologists, previously MESTHI which makes more sense, because there is no leading I sound. They say \[ \begin{align*}
& \text{M,} \\
& \text{S}
\end{align*} \] is M, \[ \begin{align*}
& \text{S}
\end{align*} \] is S, but where do they get the T? And what is \[ \begin{align*}
& \text{?}
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& \text{represents a T sound?}
\end{align*} \] And what is the \[ \begin{align*}
& \text{doing?}
\end{align*} \]

Gardiner chides Egyptologists for not having a clue what the hieroglyph represents, and then says that \[ \begin{align*}
& \text{can represent an M sound, but he also finds it representing a guttural sound approximated by G.} \]

Gardiner documents \[ \begin{align*}
& \text{, G, as an alternate spelling, interchangeable in some words, with} \]

The original pronunciation of \[ \begin{align*}
& \text{and therefore} \]

was KOR with the addition of \[ \begin{align*}
& \text{as a phonetic complement in many cases. Champollion documents} \]

as having a transliteration KOR. This is not surprising because so many words in Egyptian hieroglyphic that start with \[ \begin{align*}
& \text{are}
\end{align*} \]

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23 ibid.
24 Champollion, op. cit., p. 130.
immediately followed by 🗒️, and in the oldest stages of the language this would not be the case. The original lone hieroglyph 📚 seems to carry the notions of live, abide, lack, etc.

The 📚 hieroglyph is recognized by scholars as having the S sound, but can also be read as SH. This hieroglyph corresponds to the cuneiform ➞ ASH. Voicing or devoicing of a consonant is common. For example, we find that 🎵 has a voiced sound in DEES but a devoiced sound T when used as a feminine suffix. The difference between S and SH was more dialectical than grammatical. Both the Hebrew ⓔ and the Arabic ⤒ carried the sounds of both S and SH, the difference depending only upon context. It fact it is recorded in Judges that the Ephraimites altogether dropped and forgot the SH variant:

“And the Gileadites took the passages of Jordan before the Ephraimites: and it was [so], that when those Ephraimites which were escaped said, Let me go over; that the men of Gilead said unto him, [Art] thou an Ephraimite? If he said, Nay; Then said they unto him, Say now Shibboleth: and he said Sibboleth: for he could not frame to pronounce [it] right. Then they took him, and slew him at the passages of Jordan: and there fell at that time of the Ephraimites forty and two thousand” (Judges 12:5-6).

What of the 📚? Gardiner conjectures that it is a pestle, from its similarity to an identical character with a practically invisible curve under it, which he says has a hard S (we might say SH) sound,25 although he also cites numerous examples where, as a determinative, it has no sound at all. S and SH are the same letter in unpointed Hebrew. A point in Hebrew has the effect of doubling the consonant, which in that language distinguishes S from SH. And here we have a doubled consonant, with both 📚 and 📚 known to represent the S sound, or in other words, SH. Whether we read the 📚 hieroglyph as SH and the 📚 as a soundless determinative as Gardiner suggests is often the case, or whether we read the 📚 and 📚 as a double S carrying the SH sound, the result is the same.

The 📚 can represent any vowel sound, or can be a determinative with no sound, as it is in this case.

The final character 📚 is a “God” determinative and has no sound. 📚 📚 📚 is the

25 Gardiner, op. cit., p. 520.
idolatrous god of KORASH.

In Figure 3, we have an alternate spelling:

or (written left to right)  

Here indeed IMSET makes some sense according to Egyptologists’ rules. However, this is a very late specimen, and an unusual spelling. It is possible, even likely, that the name changed somewhat over two thousand years. The reading is correct according to Ptolemaic Egyptian, and it is during the Ptolemaic period.

Mahmackrah

Second from the right is the canopic jar with a baboon head (Figure 2). We have a nice three dimensional specimen in Figure 4.

Figure 4. The Idolatrous God of Mahmackrah.\(^26\)

Near the top of the left column, these three hieroglyphs are found:

I have enlarged these to fonts to facilitate identification. Because the figure is facing right, the hieroglyphs must be read from right to left, which is the usual order anyway.
Egyptologists call this HAP or HAPY. There is no H here, but that does not seem to bother anybody. Nor is there a Y.

In Figure 2, we find the second idol on the right with this spelling:

The can be read H, and the can be read Y. There are several problems with this. Most Egyptologists read this backwards (but compare the spellings on p. 93 of Lamy, who gets the names right as thought by Egyptologists).27 Hieroglyphs should be read from the direction they are facing. Three of the six hieroglyphs are facing to the right (the other three are symmetric about a midline vertical axis). They must all be read from the right to the left. In the original, the braided rope hieroglyph extends down below the small square . So it must be read after it. And it is. Thus we have as the correct order of these hieroglyphs, written left to right here for convenience.

The name of the idol is not HAP nor HAPY.

The is completely ignored without explanation. These two ^& hieroglyphs , one atop the other, are a short form of writing the wavy lines for water and have the M consonantalsound, with the vowels derived from context (in this case, MAH). and are very short forms of which are in turn short forms of the most common expression for water , just as N was originally a short form of M. The cuneiform character is identical to the hieroglyphic character in its single form, and both mean water. This is an Egyptian dual, “the two waters.” The same thing is preserved in Hebrew MAIM, water. In fact, Hebrew has no grammatical singular for the word. There are two of them because there are waters above in the clouds, and there are waters below in the rivers, lakes, and oceans (Genesis 1:6). The wavy hieroglyphic lines for water (and its derivatives, and ) are the ancestor of our letters M and N. M is usually represented as three wavy lines of water , while N is usually

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represented by a single wavy line for water  воды. The Phoenician alphabet and its predecessors were derived from Egyptian hieroglyphs, and so it is important to consider Phoenician in the reconstruction of early Egyptian. The Phoenician  MEM (water) and NUN (fish) are derived from the Egyptian hieroglyphs  and  , respectively. Close similarities of M and N are also seen in later languages (Etruscan M: М, N: Ё, Latin M/N) reflecting early Egyptian origins. In each case, the representation of N is a shortened or abbreviated form of the letter M. M/N shifts are also frequently seen in transitions between languages, also suggesting an earlier common origin. For example, the suffix for the plural and dual plural, respectively, are –IM and –AIM in Hebrew and –IN and -AIN in Chaldaic and Arabic.

Champollion equated  and  with the Coptic character  [= a]. Yet there are additional indications that the right angle hieroglyph  should be transliterated M and the double right angle hieroglyph  should be transliterated MM. Champollion stated that the compound hieroglyph [or ], the verb can also be placed first:  or  has the sound / or [LM or RM], further suggesting that the  and  hieroglyphs had the M sound. The hieroglyph of a figure with raised hands  means “to pray,” corresponding to the Sumerian expression for prayer (“SHU IL”), literally, “to raise the hands.”

The small square  is read by Egyptologists as P. This is appropriate for the 198 B.C. Rosetta Stone, but it does not work for 1830 B.C. Egyptian hieroglyphs. In this case the square is pronounced R, just as our letter P was pronounced R by the Greeks 2500 years ago. In the earliest form of Egyptian, this  character had a P or PH sound in its hard form, and an R sound in its soft form. This is seen with the Phoenician  Resh, which appears like a backwards P. The Greeks (P/rho), the Etruscans (_rho), and later the Cyrillic alphabet (P) took the sound of this character as R, the Latins as P. The very shape of the Latin letter R reveals its origin. It was originally P. The diagonal line was added later to indicate the alternate pronunciation R when the two sounds were separated into different characters.

The braided rope hieroglyph  is correctly read as H.

So far, we have  (MAH MAH),  (R),  (AH), or  MAHMAHRAH. The determinative  is not pronounced. But what of the CK before the R in the

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28 Champollion, op. cit, p. 46.
MAHMACKRAH of Facsimile 1? Why is the second aspirate not the same as the first, seeing that the two hieroglyphs signify the same sound?

The ancient Egyptians treated the R sound exactly the same way the Greeks did, or more precisely, the Greeks continued the tradition of the Egyptians. The Greek R sound is always aspirated. That means that it is always preceded by an H sound. In ancient Greek it was understood. In Christian era Greek after lower case letters were invented, it was represented by a ‘’ over the Greek letter ρ that we call rho, although hρo would be more correct. Words we borrow from Greek with an R in them carry the extra baggage of the H: Rhodes, rhesus, rhythm, diarrhea, rheumatism. Ever notice how much easier it is to trill a European R if you make an H sound first? This practice is preserved in names like Hrōlf in early European languages, and in Anglo-Saxon words like hrófum, “roof.”

In we have an aspirate followed by an aspirate, equaling a strong aspirate. A strong aspirate can be represented by CH, as in German ACH, however, that sound does not exist in English. CK is the closest we have in English. We don’t attempt to pronounce hard C or K in the slightest degree differently from CK, but the two letters together remind us that a hard aspirate is intended.

Thus we have (MAH MAH), (R, preceded by the obligatory hard aspirate represented in English by CK), (AH), or MAHMACKRAH, “God of the Waters.”

But wait - two names are written instead of MAHMACKRAH, “God of the Waters.” What of the two superfluous feathers? They are perfectly appropriate according to the rules of Egyptology. MAHMACKRAH ends in a long AH sound, indicated, appropriately enough, by AH. We are used to thinking of as I or Y in modern Egyptology. But here it simply indicates the long AH sound following the R sound . Budge documented: “represents a short sound of A, E, and I in English.” So two of them two of them represent a long sound. MAHMACKRAH is the correct, and the only correct, reading.

Elkenah
The third idol god (Figure 2) is cited variously by Egyptologists as being either falcon or hawk-headed. His name spelled out is and said by Egyptologists to be QEBEHSENEF but by their own reading of the hieroglyphs it should be DUAMUTEF. They have gotten these two mixed up for over 120 years even though the Egyptians

spelled them out clearly! In Figure 3 it is spelled exactly the same, with the addition of the “god” determinative \[\mathcal{F}\].

Champollion correctly stated that the five pointed star hieroglyph \[\mathcal{X}\] represented a God or divine essence. The \[\mathcal{X}\] is of the same meaning as the Sumerian \[\mathcal{T}\] AN and the Akkadian \[\mathcal{L}\] ILU, arguably pronounced EL, ancestor of the Hebrew \[\mathcal{X}\], EL. In the first two languages it refers to any heavenly body, planet, star, or deity. In Old Egyptian it was pronounced the same as in Hebrew and had the meaning of “god” or “God.”

The vulture \[\mathcal{B}\] is commonly understood to be pronounced MUT and mean “mother,” which it does in most cases. Gardiner can not understand why it should have this meaning when it is also associated with death, but I have explained this elsewhere. Budge documents that this idol god has many alternate spellings, almost all of which are simple variants of \[\mathcal{X}\]. \[30\] Gardiner certifies that the pronunciation of \[\mathcal{D}\] is a double heavy aspirate, KHKH, or in other words, simply K. \[31\]

Although the horned asp \[\mathcal{H}\] is held by Egyptologists to have an F sound, there is no F in Old Egyptian nor in any other contemporary ancient language; like Hebrew, there is only hard and soft P, i.e. P and PH. F is a relatively recent invention. That’s why none of the words we borrow from Greek have any Fs in them. F was at its birth christened digamma, because it was gamma with an extra member. Gardiner \[32\] asserts that the F sound is generally only documented from Demotic times, that it was originally known to be a determinative, hence it is not pronounced by Egyptologists in \[\mathcal{Q}\], ITF, but pronounced as IT. Champollion documents having found the sounds \[\mathcal{N}\] and \[\mathcal{N}\] (NBH and NF) for the horned asp hieroglyph \[\mathcal{H}\]. \[33\] In both cases the final sound after the N is a light aspirate.

The correct reading of the \[\mathcal{H}\] horned asp hieroglyph in 1800 B.C. Egyptian hieroglyphs is therefore NAH, not EF as given by Egyptologists from 198 B.C. Coptic. The etymology of this hieroglyph is preserved in Arabic, wherein the letter for N \[\mathcal{H}\] is easily mistaken for the Arabic letter for F \[\mathcal{H}\] if the loop is closed by a speck of ink.

\[30\] Budge, op. cit., p. 871.
\[31\] Gardiner, op. cit., p. 449.
\[32\] Gardiner, op. cit., p. 476.
\[33\] Champollion, op. cit., p. 120.
The proper reading of or of its equivalent (left to right) is therefore EL KE NAH, “The God of Kenah.”

The Egyptians often named their idol gods for places. Both Kenah and Libnah are mentioned during the Israelite exodus from Egypt (Libnah) or shortly thereafter (Kenah): “And they departed from Rimmonparez, and pitched in Libnah” (Numbers 33:20); “And Nobah went and took Kenath, and the villages thereof, and called it Nobah, after his own name” (Numbers 32:42). Kenath is an alternate way of writing Kenah in Egyptian. Just as in Arabic, the H and TH sounds are distinct in the initial and medial portions of a word, but are written identically in the final position.

**Libnah**

The fourth idol god (jackal-headed) is spelled (Figure 2) as:

Figure 3 has a much later Ptolemaic era spelling which does not occur in early documents:

This is said by Egyptologists to be DUAMUTEF but by their own rules for reading of the hieroglyphs it should be QEBEHSENEF, as previously noted.

Gardiner documents the first two hieroglyphs and as having a B sound in most cases. He likewise documents [ibid.] an RB, RP sound in many cases for the first hieroglyph. The foot hieroglyph in the alternate spelling is also known to have a B sound.

For the Egyptians, R and L were the same letter. This is widely known to Egyptologists and is seen even in the Rosetta Stone text. This same dialectical trend is seen in major East Asian languages today, where Japanese and some other languages today do not have separate sounds for R and L. A similar Iberian R-L dialectical equivalency is seen with

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34 Gardiner, op. cit. p. 529, 509 respectively.
Spanish and Portuguese (obligar/obrigar, plazo/prazo, plata/prata, placer/prazer, etc.).

Gardiner’s rendition of the ē hieroglyph as RB therefore implies LB or LIB as an equivalent.

As previously noted, the ḫ horned asp hieroglyph was read NAH in 1800 B.C. hieroglyphics rather than F.

Thus we have ē (LIB) + ḫ (B as phonetic complement) + 𓊩𓊩𓊩 (determinatives) + ḫ (NAH) + ḫ (determinative) = LIB NAH. The correct pronunciation of this idol god in 1830 B.C. Egyptian is LIBNAH.

Conclusion
Joseph Smith’s transliterations of the names of the four idolatrous gods on canopic jars known to Egyptologists as the “Four Sons of Horus” are linguistically accurate representations of the respective hieroglyphs in early Egyptian. Joseph Smith’s transliterations can be validated as accurate even where close linguistic scrutiny demonstrates traditional readings by Egyptologists to be in error, or where the readings of Egyptologists reflect the pronunciations of a much later period. In view of considerable errors that have been perpetuated in the translations and transliterations by scholars, a meticulous reexamination of the primary source foundations of Egyptology is needed, with a focus on refining knowledge of the meanings and pronunciations of characters in the earliest stage of the language. As a professional translator for many years, I have been able to prove to my own satisfaction that every one of Joseph Smith’s translations is precisely correct. Joseph Smith’s translations and transliterations may provide far more accurate renditions of early Egyptian words than has previously been recognized by either LDS or non-LDS scholars, and require additional study.