

Wandering in the Desert?: A Review of Charles R. Krahmalkov's "[The Chief of Miners Mashe/Moshe, the Historical Moses](#)"

The Sinaitic inscriptions do not contain evidence of the historical Moses. But they are some of the earliest alphabetic inscriptions ever found and therefore constitute important evidence for studying the invention of alphabetic writing, which forms the basis for so much of modern Western society. In particular, they bear witness to the genesis of the alphabet from Egyptian hieroglyphs during the Middle Kingdom.

See Also: [The Chief of Miners Mashe/Moshe, the Historical Moses](#)

By Aren M. Wilson-Wright

Postdoctoral Researcher

University of Zurich

March 2017

I. Introduction

Beginning in in 1905 and continuing until the 2000s, excavators uncovered a series of early alphabetic inscriptions associated with the Egyptian turquoise mining installation at Serabit el-Khadem in the Sinai desert.¹ Scholars quickly identified the language of these inscriptions as Semitic due to the presence of marquee Semitic words like ‘lady (BꜣLT), ‘chief’ (RB), and ‘miner’ (NQB), but a full decipherment has remained elusive. Decipherment attempts by such scholars as Romain Butin (1928; 1932) and W. F. Albright (1966) have not won widespread acceptance.

Recently, Charles R. Krahmalkov (2017b) has proposed a new interpretation of the Sinaitic material. He reads the inscriptions as the records of a community of Israelite turquoise miners operating in the Sinai desert during the 13th century BCE (2017b: 2). He also claims that

¹ For the history of discovery see Sass 1988: 8 and Dalix 2012: 298.

these inscriptions refer to the historical Moses and overlap in many ways with the biblical description of Moses's career (2017b: 3–12). If Krahmalkov is correct, his discovery heralds a paradigm shift in biblical studies: biblical scholars like William G. Dever (2003: 253) and John Van Seters (1987: 116) would no longer be able to dismiss the biblical account of the Exodus as a pious fiction. However, extraordinary claims require extraordinary proof, and unfortunately, Krahmalkov's claims do not stand up to scrutiny. As I will show in the following sections, the Sinaitic inscriptions do not contain the name Moses and do not refer to events from the Exodus narrative.² Nevertheless, the Sinaitic inscriptions are still interesting and worthy of study, even if they do not contain evidence for the historical Moses.

II. MŠ or MT? That is the Question

The two letter sequence that Krahmalkov transcribes as MŠ appears in five of the Sinaitic inscriptions: Sinai 349, Sinai 351, Sinai 353, Sinai 360, and Sinai 361.³ Already in 1928, Romain Butin (1928: 47) identified MŠ with the name Moses, but cautioned that “the official in question has nothing except the name in common with the great Lawgiver of Israel; the M-SH of the inscriptions antedates the Old Testament Moses by several hundred years.” Subsequent scholars have not followed Butin's identification.

Following Butin's 1928 article, epigraphers recognized that the Sinaitic script contained at least four more letters than the Phoenician alphabet (Albright 1948: 8–9). These extra letters represented sounds that were lost in Phoenician, but were preserved in other Semitic languages

² This, of course, does not imply that the biblical account of the Exodus *is* a pious fiction, only that the Sinaitic inscriptions do not contain any evidence for the historicity of the Exodus.

³ Krahmalkov also identifies MŠ in Sinai 346, but I could not find these letters in the images available to me.

such as Arabic, Ugaritic, and the language of the Sinaitic inscriptions. One of these letters was \bar{T} , which represented the sound found at the beginning of the English word “thin.”⁴ The letter that Butin and Krahmalkov transcribe as Ṣ̌, no doubt based on its visual resemblance to the later Phoenician Ṣ̌ (see Figure 1 below), is actually a \bar{T} . The name Moses (Hebrew *mōšē*), however, comes from the Egyptian word *mś.y* meaning ‘child’ and has an S as its middle letter (Brown, Driver, Briggs, 1906: 602). Because of this, the consonantal sequence M \bar{T} cannot represent the Biblical name Moses. But it can represent the name Māṭ, which is found in Ugaritic and means ‘twin’ (del Olmo Lete & Sanmartín 2015: II.596).



Figure 1: A comparison of Sinaitic \bar{T} (left) and Phoenician Ṣ̌ (right)⁵

III. Moses’s Miracle’s versus Māṭ’s Memories

Krahmalkov (2017b: 3–12) claims that the Sinaitic inscriptions refer to several important events in the Exodus narrative, including Moses’s staff turning into a snake (Sinai 360; cf. Exod 4:1-5, 17, 29–31), his construction of a snake of bronze (Sinai 361; cf. Num 21:6–9; 2 Kgs 18:4), and the miraculous appearance of manna in the desert (Sinai 377; Num 16:13–14, 21, 31). He also argues that the inscriptions mention Yahweh (Sinai 351 and 375a) and the paschal sacrifice

⁴ The others are \bar{D} , the sound found at the beginning of the English word “the,” \bar{H} , the sound found at the end of Scottish “loch,” and \bar{T} , an emphatically pronounced version of \bar{T} . Krahmalkov transcribes these sound as Z, H and Š respectively.

⁵ All images are my own unless otherwise noted.

(Sinai 357 and 349). As I have shown above, the Sinaitic inscriptions do not contain the name Moses, but it is theoretically possible that they record the exploits of a man named Māt, who provided the inspiration for the biblical Moses. A closer examination of these inscriptions, however, shows that Krahmalkov's readings, presented in his article as secure and unproblematic, are extremely tendentious. They rely on numerous, often unmentioned restorations at crucial places in the inscriptions, misidentify some of the letters, and invent meanings for certain words. Krahmalkov's treatment of Sinai 360 provides a good illustration of these problems.

Sinai 360 consist of a single horizontal column of text written on a roughly hewn stone tablet. It was found in a pile of debris on the outskirts of Serabit el-Khadem in the Sinai desert (Hamilton 2006: 361). Krahmalkov translates this inscription as: "This is the site of (where took place) the sign that Mashe Mahub-Baalt performed with the snake" (Z ŠḤ ?T ZT BŠN MŠ [MHBṢLT] BBŠN) and interprets it as memorial inscription commemorating Moses's miraculous ability to turn his staff into a snake (2017b: 11). His reading suffers from several problems, however.

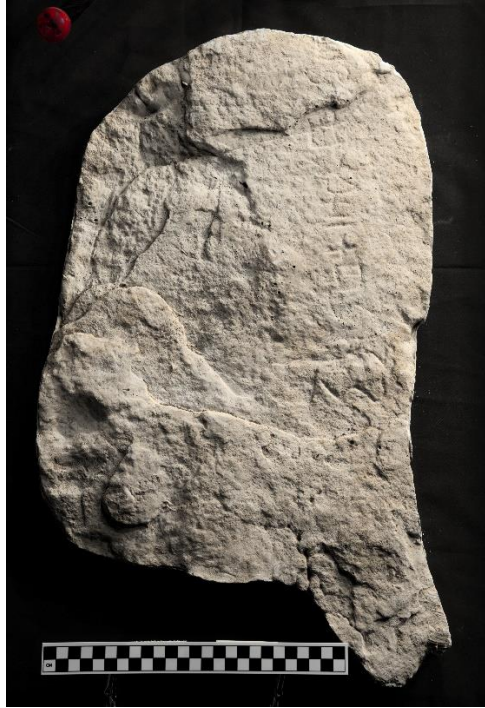


Figure 2: A plaster cast of Sinai 360⁶

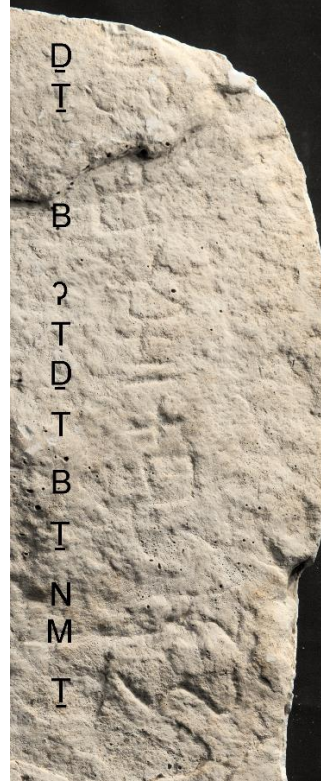


Figure 3: Sinai 360 with the letters labeled

The square brackets around [MHBLT] in Krahmalkov's transcription mark these letters as a restoration: the sequence MHBLT do not appear in the inscription, but has been restored based of the parallel inscriptions Sinai 351, 353, and 361.⁷ Interestingly, Krahmalkov does not mark BBŠN as a restoration, even though these letters do not appear in Sinai 360 either. As the following photo shows, the inscription ends after the T of MT. The surface of the stone became

⁶ During the 1930 expedition to Serabit el-Khadem, the excavators produced plaster casts of most of the known inscriptions. These plaster casts were kept in storage at the Harvard Semitic Museum and the Catholic University Semitics Library until 2013 and 2015 when I had a chance to examine and photograph them. Because

these casts were kept in storage, they are often in better condition than the original inscriptions, which have become damaged over time.

⁷ Interestingly, Krahmalkov does not mention these parallels as a reason for restoring MHBLT.

too difficult to incise at this point and the author gave up without completing the inscription. Unlike MHBLT, there is no evidence for restoring BBŠN at the end of the inscription, which makes Krahmalkov's inclusion of BBŠN in the inscription an unwarranted restoration.



Figure 4: A close-up of the bottom half of the tablet

Krahmalkov's reading also relies on a misidentification of the third letter in the inscription as a H̄ instead of a B. Although some forms of the letter H̄ closely resembles the letter B in the early alphabetic script, it is still possible to distinguish between the two. B consisted of a square or rectangle, while some forms of H̄ consisted of a rectangle bisected by a horizontal or vertical line (Hamilton 2006: 46–47, 97–99). As the following close up shows, the second letters consists of a single inscribed square, but irregularities in the rock surface give the impression of a second square stacked on top of it.

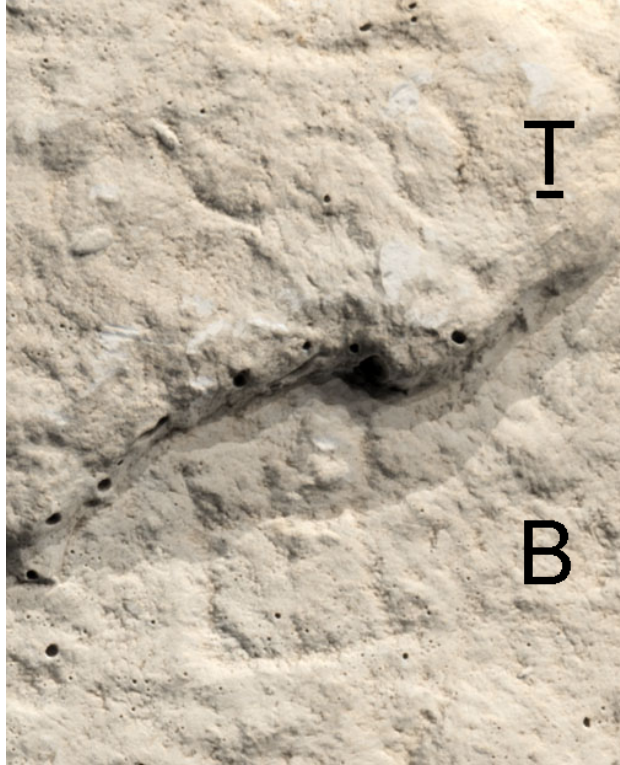


Figure 5: A close-up of the third letter in Sinai 360

Krahmalkov also invents meanings for some of the words in the inscription. His translation of Sinai 360 implies that ŠḤ means ‘site’ and BŠN means ‘to make’ or ‘to do’, but he does not cite any comparative evidence from other ancient Semitic languages to support this conclusion. Nor do these words appear in Krahmalkov’s own dictionary of Phoenician and Punic (2000: 128, 459). In fact, a search of the various Semitic language dictionaries shows that these words are not attested in any Semitic language. Akkadian *bašāmu* ‘to create, form’ resembles BŠN, as Krahmalkov (2017a: n. 12) notes, but the two words differ in their final consonant. This lack of supporting evidence severely undermines Krahmalkov’s interpretation. If Krahmalkov can claim that ŠḤ means ‘site’ without cross-linguistic evidence, what’s to stop someone else from reading ŠḤ as a completely different word?

When we take these problems into account, very little is left to support Krahmalkov’s reading. MT’s snake turns out to be an unwarranted restoration of the inscription and the

meanings of certain words cannot be verified. Unfortunately, these problems occur again and again in Krahmalkov's translation of the Sinaitic inscriptions, including the ones which supposedly confirm the Exodus account. I have included a list of these problems in an appendix for those who are interested. I have also included my own interpretations of these inscriptions as a positive contribution to the discussion.

Along these lines, it is worth noting that Krahmalkov is right to interpret Sinai 360 as a commemorative inscription. It just commemorates a different person for a different reason. In a forthcoming SBL presentation, I will argue that Sinai 360 reads: $\overline{D} \overline{T} \overline{B} \overline{?} \overline{T} \overline{D} \overline{T} \overline{B} \overline{T} \overline{N} \overline{M} \overline{T}$ [MHBṢLT] "O you who return (here), those who tell people about Māt are [beloved on the Lady]." Sinai 360 thus expresses a sentiment also found in contemporary Egyptian inscriptions from Serabit el-Khadem: the author of the inscription invokes the Egyptian goddess Hathor to reward the reader if they perform a specific speech act on their behalf. Sinai 36, for example, states: "O ye who live and are upon [earth, who shall come] to this mining district, Hathor, lady of Turquoise, reward you [according as ye say: A thousand of bread and beer] libation and burning of incense to the ka of the stone-carver Hori" (Gardiner, Černý, and Peet 1955: 72).

IV. The Sinaitic Inscriptions and the Invention of Alphabetic Writing

The Sinaitic inscriptions do not contain evidence of the historical Moses. But they are some of the earliest alphabetic inscriptions ever found and therefore constitute important evidence for studying the invention of alphabetic writing, which forms the basis for so much of modern Western society. In particular, they bear witness to the genesis of the alphabet from Egyptian hieroglyphs during the Middle Kingdom. In this section, I will discuss the date of the Sinaitic inscriptions as well as the genesis and development of alphabetic writing.

Most scholars date the Sinaitic inscriptions to either the Egyptian Middle Kingdom (2055–1650 BCE) or the New Kingdom (1550–1069 BCE). I tend to favor a Middle Kingdom date for two reasons. First, the Sinaitic inscriptions do not resemble securely dated alphabetic inscriptions from the New Kingdom. Compared to the Tell el-Hesi Sherd from approximately 1350 BCE, for example, the Sinaitic inscriptions are far more pictographic. A dating in the New Kingdom allows too little time for the alphabetic script to develop into the linear form seen in the Tell el-Hesi inscription. Second, many Semitic-speaking individuals travelled to Serabit el-Khadem during the Middle Kingdom, compared with only a handful during the New Kingdom (Wilson-Wright 2016: 248–9). Middle Kingdom Egyptian inscriptions from Serabit el-Khadem mention several Semitic-speaking individuals by name, including “Ḥabîdādu(m), the brother of the prince of Reṭenu”—a high-ranking official from Syria—and members of his entourage. The Middle Kingdom inscriptions also mention additional men of Reṭenu, Asiatics, and translators. Taken together, these two factors suggest that the Sinaitic inscriptions date to the Middle Kingdom.

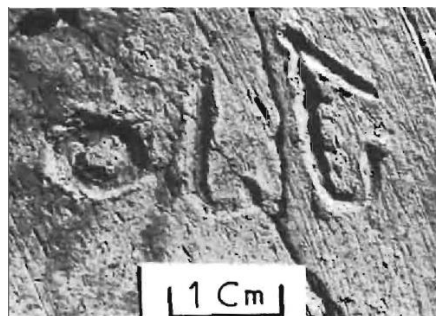


Figure 6: The Tell el-Hesi Sherd (Image from Sass 1988: fig. 247)

Properly contextualized, the Sinaitic inscriptions provide crucial information about the origin of the alphabet. Already in 1916, the Egyptologist Alan Gardiner (1916) noticed that many of the letters of the Sinaitic script resembled hieroglyphic signs and suggested that the alphabet derived from Egyptian writing. Ninety years later, Gordon Hamilton (2006: 29–253)

confirmed Gardiner's suspicions by documenting the extensive parallels between the Sinaitic script and the hieroglyphic and hieratic scripts. Like Gardiner, he concluded that the alphabet derives from Egyptian writing systems. In recent years, Gardiner and Hamilton's conclusions have led to several hypotheses regarding the invention of the alphabet. The leading hypothesis is that a Semitic-speaking individual picked a subset of Egyptian hieroglyphs and then assigned them consonantal values based on their own, Semitic language. The Egyptologist Orly Goldwasser (2006) even argues that this process took place at Serabit el-Khadem, which would make the Sinaitic inscriptions the first alphabetic texts ever composed. Her proposal has not met widespread acceptance, however (Rainey 2010; Rollston 2010).

The legacy of the Sinaitic script endures to this day. Alphabetic writing was only invented once and so every alphabetic system is either a direct descendant of the Sinaitic script or was inspired by a derivative of the Sinaitic script. The Roman alphabet that we use today, for example, is a direct descendant of the Sinaitic script. The Romans borrowed the alphabet from the Etruscans, who borrowed it from the Greeks, who borrowed it from the Phoenicians, who inherited it from their Late Bronze Age predecessors (Fischer 2001: 82–89). Some of the letters in the Roman alphabet, such as A, even retain traces of their pictographic origin in the Sinaitic and hieroglyphic scripts (see figure 7 below). The forebear of our modern "A" was hieroglyph F1, which depicted a bull's head (Hamilton 2006: 29). The inventors of the alphabet adopted this sign to represent *ʔ*, the sound found in the middle of "uh-oh!", since the Semitic word for bull, *ʔalp-* began with this sound.⁸ Over time, users of the alphabet simplified this letter from a

⁸ This coordination of pictograph and sound-value is what is known as the acrophonic principle. Of course, "A" does not represent the glottal stop in the Roman alphabet, but rather a vowel sound. When the Greeks borrowed the Phoenician alphabet, they repurposed letters denoting non-Greek sounds to represent vowels.

pictogram to a linear sign resembling an inverted “A” because it was easier to write. The letter then underwent a series of rotations as it was transmitted by the Phoenicians and Greeks. Similar transformations account for most of other the letters of the Roman alphabet—or, to put it differently—we still write “hieroglyphs” to this day.

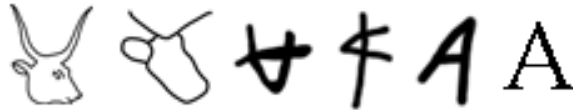


Figure 7: The evolution of the letter “A” (from left to right: hieroglyphics, Sinaitic script, Late Bronze Age script, Phoenician script, Greek script, Times New Roman font)

V. Conclusion

Krahmalkov’s claim that the Sinaitic inscriptions refer to the historical Moses is untenable. The Sinaitic inscriptions do not contain the name Moses nor do they refer to the Moses’s exploits as narrated in the Hebrew Bible. They do, however, constitute important evidence for understanding the invention of alphabetic writing, a technological development which underpins much of modern Western society. They are worthy of study even if they do not confirm the biblical narrative.

VI. Appendix: Problems with Krahmalkov’s Interpretation of Sinai 349, 351, 357, 361, 375a, and 377

Sinai 349

“<These are> the offerings that the Chief of Miners, Mashe placed <and> arranged <on the altar> for Baalt [together with] his brothers: Ten [x-animals], nine [y-animals], ten [z-animals]”

(?NT Z-ŠM RB NQBN MŠ ʕRQM LBʕLT [ʕ]?HN Z-L... ʕŠR [...] TŠʕ [...] ʕŠR [...])
 (Krahmalkov 2017b: 23–24)



Figure 8: A plaster cast of Sinai 349

-The first M is a restoration. Given the parallels between Sinai 349 and Sinai 360 and 361, it is better to restore a B here.

-There is no comparative Semitic evidence for translating ?NT as ‘offering’.

-The supposed L in line 4 is not visible in photographs.

-The words “nine” and “ten” are all mostly restored because the last three lines are in an abysmal state of preservation.

-My reading:

?NT D-T[B]
 RB NQBN MT
 ʕRKM LB[ʕL]
 [T]

“You who have returned (here), the chief of miners, Māt prepared for the Lady...”

Sinai 351

“Mashe (Moses), the Miner [the son of] Ma[hub-B]aalt made this” (Z BŠN MŠ NQB [BN] M?HBB?LT YHW) (Krahmalkov 2017b: 4, 13)

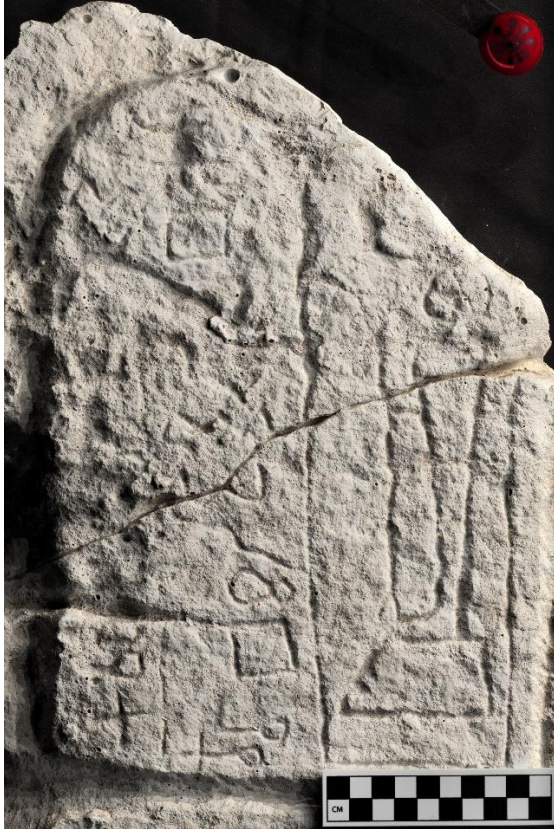


Figure 9: A plaster cast of Sinai 351

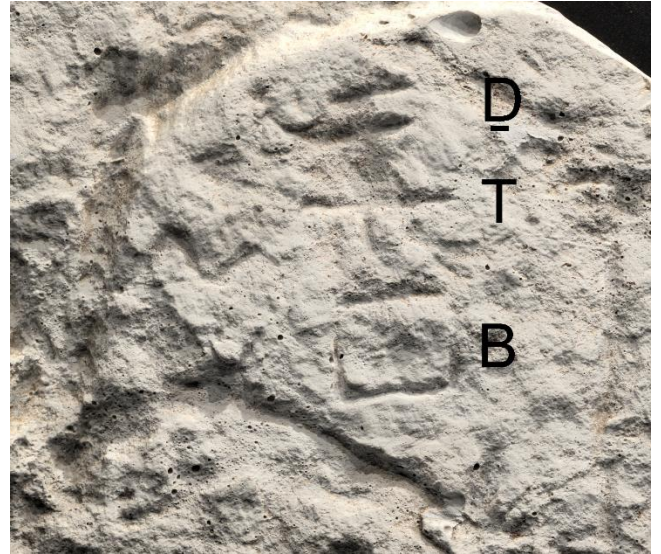


Figure 10: A close-up of the upper half of the inscription with the letters labeled

-Krahmalkov’s transcription leaves out the clear T after the initial D (see Figure 10).

-The letters that Krahmalkov reads as YHW run in the opposite direction as the rest of the inscription.

-My reading:

M?HBB?LT
DT BŠN MŠ NQB WLT

“Beloved of the lady are those who tell people about Māt, the miner and extractor.”

Sinai 357

“<These are> the offerings that Malkishama sacrificed in <the month of> Abib: Four lambs”
(?NT Š-YNSKM MLKŠMŠ L?BB ?MR ?RB?T) (Krahmalkov 2017b: 22–25)



Figure 11: Sinai 357 (image from Inscriptifact)

- There is no comparative Semitic evidence for translating ?NT as ‘offering’.
- The root NSK refers to the pouring of libations, rather than animal sacrifice.
- The letter Y is more likely to be a P based on epigraphic parallels.
- MLKŠMŠ and L?BB appear in the opposite order in the inscription.
- My reading:

?L TTP NDR ML? BBMN
K SMŠ ?MR WRB?N

“BBMN fulfilled a vow to Teššōb because he heard my voice and gave me rest.” (Wilson-Wright 2016: 255)

Sinai 361

“This is the site of (where stood) the snake of bronze that Mashe Mahub-Baalt made” (Z ŠḤ
?BŠN Z-NḤ[ŠT] ZT BŠN MŠ MHBṢLT) (Krahmalkov 2017b: 10)



Figure 12: A plaster cast of Sinai 361 with the letters labeled

-The letters ?, Z-NḤ, BŠN and are unwarranted restorations. They do not appear in the inscription and there is no comparative basis for restoring them.

-As mentioned in the main text, ŠḤ doesn't mean 'site' and BŠN doesn't mean 'to make'.

-My reading:

D ṬB BṬN MṬ

{DT}⁹ MHB[ϚLT]

“O returner, those who tell people about Māt are beloved of the Lady”

Sinai 375a

“This is the [P]riest of the [G]od Yahweh” (Z [K]HN [ʔL]HN YHW) (Krahmalkov 2017b: 17)

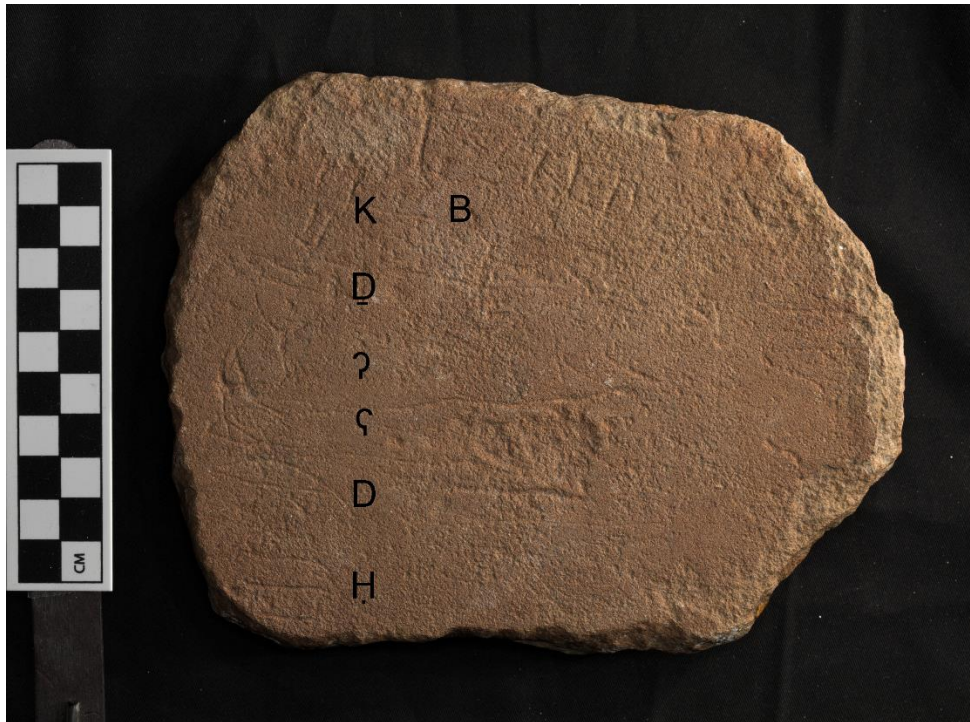


Figure 13: Sinai 375a with the letters labeled

⁹ Judging from the parallels between Sinai 361 and Sinai 351, 353, and 360, the author of Sinai 361 most likely forgot to write these letters after D TB and inserted them at the beginning of the second column.

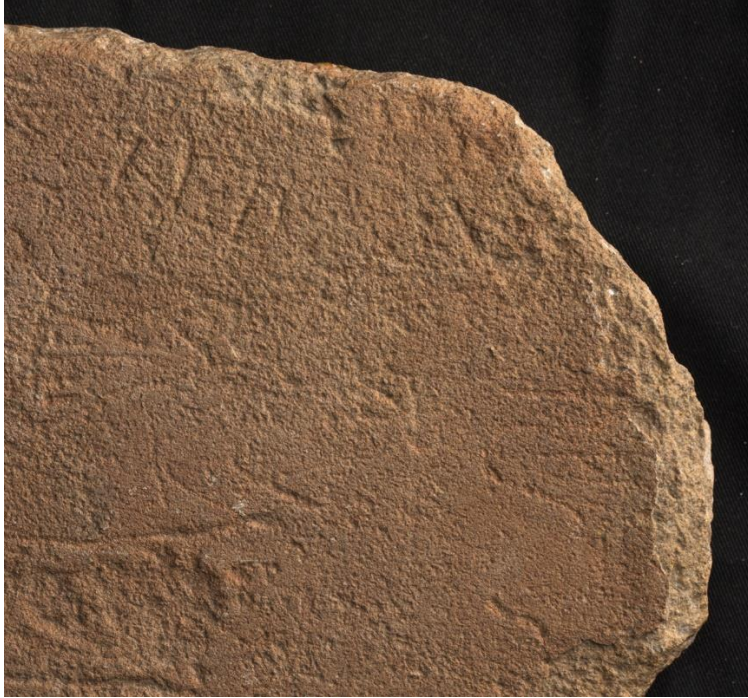


Figure 14: A close-up of the upper left corner of the inscription

-HN YHW is an unwarranted restoration. These letters do not appear in the inscription—in fact, only a few faint lines appear after the first N (see Figure 14)—and there is no comparative basis for restoring them.

-Krahmalkov's interpretation ignores the four clear letters on the left-hand side of the plaque: ?SDH .

-The strokes that Krahmalkov reads as HN probably form a B instead.

-I haven't developed my own interpretation of this inscription yet due in part to its poor state of preservation.

Sinai 377

“This is the site of (where appeared) the manna” (Z ŠH ?MN) (Krahmalkov 2017b: 11)

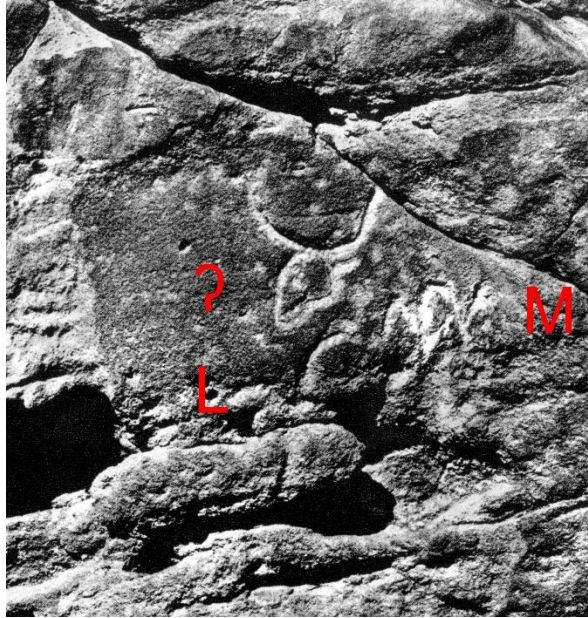


Figure 15: Sinai 377 with the letters labeled (image from Gerster 1961: pl. 65)

-The letters Z ŠH are an unwarranted restoration. They do not appear in the inscription and there is no comparative basis for restoring them.

-As mentioned in the main text, ŠH doesn't mean 'site'.

-The letter N is more likely to be a L based on epigraphic parallels.

-The Biblical Hebrew word for 'manna' is *mān*, which would be written MN, not ?MN.

-My reading:

?LM

“?Ilum” (a personal name)

Bibliography

- Albright, W. F. 1948. "The Early Alphabetic Inscriptions from Sinai and Their Decipherment." *Bulletin of the American Schools of Oriental Research* 110, 6–22.
- . 1966. *The Proto-Sinaitic Inscriptions and Their Decipherment*. Cambridge: Harvard University.
- Brown, Francis, S. R. Driver, and Charles A. Briggs. 1906. *A Hebrew and English Lexicon of the Old Testament with an Appendix Containing the Biblical Aramaic*. Oxford: Clarendon.
- Butin, Romain F. 1932. "The Proto-Sinaitic Inscriptions." *Harvard Theological Review* 25, 131–203.
- . 1928. "The Serâbît Inscriptions: II. The Decipherment and Significance of the Inscriptions." *Harvard Theological Review* 21, 9–67.
- Dalix, Anne-Sophie. 2012. "Annex II: Notes sur les inscriptions protosinaïtiques." In Pierre Tallet, *La zone minière pharaonique du Sud-Sinaï – I: Catalogue complémentaire des inscriptions du Sinaï*, vol. 1, 297–328. Cairo: IFAO.
- del Olmo Lete, Gregorio and Joaquín Sanmartín. 2015. *A Dictionary of the Ugaritic Language in the Alphabetic Tradition*. 3rd rev. ed. Trans. Wilfred G. E. Watson. 2 vols. Leiden: Brill.
- Dever, William G. 2003. *Who Were the Ancient Israelites and Where Did They Come From?* Grand Rapids, Mich.: Eerdmans.
- Fischer, Steven Roger. 2001. *A History of Writing*. London: Reaktion Books.
- Gardiner, Alan H. 1916. "The Egyptian Origin of the Semitic Alphabet." *Journal of Egyptian Archaeology*, 1–6.

- Gardiner, Alan H., T. Eric Peet, and Jaroslav Černý. 1955. *The Inscriptions of Sinai II: Translations and Commentary*. London: Egypt Exploration Society.
- Gerster, Georg. 1961. *Sinai: Land der Offenbarung*. Berlin: Darmstadt.
- Goldwasser, Orly. 2006. "Canaanites Reading Hieroglyphs. Part I-Horus is Hathor? Part II-The Invention of the Alphabet in Sinai." *Ägypten und Levant* 16, 121–60.
- Hamilton, Gordon. 2006. *The Origins of the West Semitic Alphabet in Egyptian Scripts*. Washington, D.C.: The Catholic Biblical Association of America.
- Krahmalkov, Charles R. 2000. *Phoenician-Punic Dictionary*. Leuven: Peeters.
- . 2017a. "The Chief of Miners, Moses (Sinai 346, c. 1250 BCE)." *Bulletin d'Académie Belge pour l'Étude des Langues Anciennes et Orientales* 6.
- . 2017b. "The Chief of Miners Mashe/Moshe, the Historical Moses." *The Bible and Interpretation*. <http://www.bibleinterp.com/articles/2017/02/kra418007.shtml>
- Rainey, Anson F. 2010. "Turquoise Miners Did *Not* Invent the Alphabet." Online discussion with Orly Goldwasser. *Biblical Archaeology Review*. <http://www.bib-arch.org/scholars-study/alphabet-rainey-critique.asp>.
- Rollston, Christopher A. 2010. "The Probable Inventors of the First Alphabet: Semites Functioning as Rather High Status Personnel in a Component of the Egyptian Apparatus." <http://www.rollstonepigraphy.com/?p=195>.
- Sass, Benjamin. 1988. *The Genesis of the Alphabet and its Development in the Second Millennium B.C.* Wiesbaden: Harrassowitz.
- Van Seters, John. 1987. "Moses." In *Encyclopedia of Religion*, edited by, vol. 10, edited by Mircea Eliad, 115-117. New York: MacMillan.

Wilson-Wright, Aren M. 2016. "Sinai 357: A Northwest Semitic Votive Inscription to Teššob."

Journal of the American Oriental Society 136, 247–263.