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Proto-Sinaitic – Progenitor of the Alphabet

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If the recent BBC programme Ancient Worlds1 is to be believed, the initial stages in the evolution of the alphabet occurred around 3000 years ago with the Phoenician script. In fact, this was a relatively late stage in the development. The first steps were taken nearly 1000 years earlier and it is from these that the Phoenician script and all other alphabets, ancient and modern, derive. In this article I will attempt to show how the world’s first alphabetic script – proto-Sinaitic – developed and will offer some thoughts as to its likely date.

The proto-Sinaitic corpus consists of approximately forty inscriptions and fragments, the vast majority of which were found at Serabit el-Khadim, ‘a desolate mountain in the interior of the [Sinai] peninsula’,2 mined in ancient times for its, now depleted, turquoise deposits. The mountain is home to the ruins of a temple to the goddess Hathor, which, alongside its ancient mines, made it a popular, if hard to reach, area for study.

The first ten inscriptions to be recognised as proto-Sinaitic were discovered in 1905/6 by Flinders Petrie.3 One additional inscription was added by Grimme, though he proposed very many more that turned out to be shadows, discolouration or scratches on the rock.4 Three American expeditions and a Finnish one between

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1 Miles, R. Ancient Worlds: The Age of Iron. 17th November 2010. BBC.
2 Lake 1932: 95.
3 Thomas Palmer had found one inscription nearly forty years earlier than Petrie in the Wadi Maghara, around 11 miles southwest of Serabit el-Khadim, but failed to recognise its significance.
1927 and 1935 found a further twenty texts.\(^5\) In 1961, two previously overlooked inscriptions were discovered by Gerster\(^6\) in the Wadi Nasb, some way distant from Serabit el-Khadim. A further three inscriptions were found by an Israeli expedition in 1977/8,\(^7\) and, most recently, in 1998 two inscriptions were found in the Wadi el-Hol, on the desert highway between Thebes (modern Luxor) and Abydos.\(^8\) Several other inscriptions in a very similar, though not identical, script often called proto-Canaanite will not be dealt with here as they constitute more than enough for another article.

The language, or languages, which the script represents is unknown. From what we can see, however, it seems to represent an early northwest Semitic language, probably a dialect of Canaanite, as would have been spoken between three and four thousand years ago in the Levant. The first major breakthrough in the decipherment of proto-Sinaitic was made in 1916 by Gardiner.\(^9\) He recognised a repeated series of 5 characters in many of the proto-Sinaitic inscriptions. He was able to decipher this series as \(lb\text{'}lt (la baalat)\) - ‘for the lady.’ The fact that the inscriptions were carved onto what appeared to be votive offerings to the goddess Hathor – whose name in Semitic is Baalat – offered a reasonable degree of confirmation to the suggestion. This translation has been practically universally accepted in subsequent scholarship,\(^10\) and has thereby laid the groundwork for our understanding of proto-Sinaitic.

The characters used in the script were almost certainly drawn from a combination of two ancient Egyptian scripts: hieroglyphic and its cursive equivalent, hieratic. While the combination of Asiatic and Egyptian elements may appear unusual at first glance, the Sinai Peninsula is the logical point at which Semites and Egyptians might most readily interact. It is geographically central to the two cultures and contained mines that were extensively worked by the Egyptian state, for which Semitic and Egyptian labour, as well as Egyptian administration, were all employed.\(^11\)

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\(^6\) Gardiner 1962: 45.
\(^7\) Beit-Arieh 1982: 15.
\(^8\) Darnell, Dobbs-Allsopp, Lundberg et al. 2005: 73ff.
\(^9\) Gardiner 1916: 16.
\(^10\) To name only some of the most important: Sass 1988: passim; Albright 1966: passim; Cross 1967: passim.
\(^11\) Barrois 1932: 118.
The proto-Sinaitic script contains between 27 and 29 characters, the majority of which can be assigned phonetic values with something approaching certainty. It is not possible to be more accurate regarding this number as it is not yet known whether some signs represent new characters or merely versions of already known ones.\textsuperscript{12} Regardless, despite Gelb’s pedantic insistence to the contrary,\textsuperscript{13} the small number of characters shows that the script represents an alphabet, as all other types of script require a far greater number of characters in order to represent a full range of meaning. Gelb refuses to recognise the script or indeed any ancient script before Greek, and even some modern alphabets, as alphabets on the basis that none of the scripts represent vowels. Rather, he claims, they are syllabic systems as each sign represents a consonant with any vowel or no vowel. While on a point of pedantry this may be correct, so strict a definition would, as Diringer points out, require us to disregard the \textit{Oxford English Dictionary}’s definition of a syllable.\textsuperscript{14} Furthermore, as Cross makes clear,\textsuperscript{15} this argument detracts from and potentially obscures, the major importance of the earliest alphabetic scripts. The Greek adaptation of the alphabet to include independent vowel signs was ‘relatively speaking, [a] minor adaption’\textsuperscript{16} to the alphabet, the greatest step having been the separation of the individual consonantal signs. To ignore this puts us in danger of disregarding the true historic origin of the alphabet.

The proto-Sinaitic script almost certainly used the principle of acrophony to assign phonetic values to its signs. That is to say, the initial letter of the object represented by each sign gives that sign its phonetic value. For example, the sign  represents water, the word for which in Semitic languages is \textit{mem}, and so this sign represents the sound \textit{m}. Likewise,  represents a house, Semitic \textit{beth}, and is therefore a \textit{b}.

Several scholars\textsuperscript{17} have denied the existence of the acrophonic principle and it is therefore necessary, before we progress to the main discussion of the proto-Sinaitic script, to demonstrate that acrophony is by far the most likely explanation of the

\begin{itemize}
  \item\textsuperscript{12} Sass 1988: 106.
  \item\textsuperscript{13} Gelb 1963: 166.
  \item\textsuperscript{14} Diringer 1954: 422.
  \item\textsuperscript{15} Cross 1967: 11*.
  \item\textsuperscript{16} Cross 1967: note26.
  \item\textsuperscript{17} Gelb 1963: 138-147; Hallo 1958: 335-336; Tur-Sinai 1950: 88-90; Diringer 1949: 218-220.
\end{itemize}
script’s origin. This is necessary for two reasons. Firstly, if the proto-Sinaitic script was not based on the acrophonic principle, Gardiner’s universally accepted suggested translation of $lb\,lt$\(^{18}\) must be abandoned, or it must be considered a coincidence that Gardiner’s suggestions lined up so exactly with an acrophonic effect unintended by the script’s inventors. The second option seems hardly plausible, whereas, owing to the fact that all subsequent attempts at decipherment were based on the accuracy of $lb\,lt$, the first option would effectively invalidate almost all proto-Sinaitic scholarship. Secondly, as Gelb demonstrates,\(^{19}\) if the script is not acrophonic then the resemblance of its pictorial characters to later, linear, Phoenician ones need not represent a phonetic similarity. If the script is not acrophonic, there is no reason why a sign in the shape of a house (Semitic $beth$) need represent the letter $b$. As such, the characters of the proto-Sinaitic script and those of the Phoenician script could be linked by no more than geographical proximity and similarity of shape.

This link is much weaker than it appears to be. Letter shapes are often very similar in wildly unconnected alphabets. This might be expected considering the fact that the principal desirable qualities of a character are that it is reasonably simple to recreate, memorable and easy to distinguish from its fellow characters. There is a limited number of signs that will fit these criteria and, as such, it is likely that many will be used in any two alphabetic scripts. A good example of this can be found in Jensen’s table comparing the characters of the Indus Valley and Easter Island scripts.\(^{20}\) These two scripts were separated from each other by over twelve thousand miles and nearly four thousand years. As Friedrich points out ‘he who does not believe in supernatural connections had better ascribe the outward similarity of the two scripts to mere coincidence.’\(^{21}\) Admittedly, when combined with the geographical proximity of proto-Sinaitic to Phoenician, and the relative closeness of their dates, the similarity of the characters used does demonstrate more of a link than is likely between Indus Valley and Easter Island inscriptions. However, the same could be said of hieroglyphic Egyptian and the Meroitic script, a mostly undeciphered quasi-alphabetic script used in what is now Sudan and Ethiopia from the 2\(^{nd}\) century BC to

\(^{18}\) Gardiner 1916: 15-16.

\(^{19}\) Gelb 1963: 146.

\(^{20}\) See figure 1.

\(^{21}\) Friedrich 1957: 173.
the 4th century AD. These two are not stages in the development of the same script, despite their geographical and temporal proximity to one another and the fact that they share similar letterforms. They are two different, albeit related, scripts; a description that may be shared by the proto-Sinaitic and Phoenician scripts if the acrophonic principle is abandoned.

If we are to demonstrate, therefore, the fundamental importance of proto-Sinaitic in the development of the linear Phoenician script, it is first necessary to demonstrate the likelihood of the acrophonic principle in its inception. Those scholars that reject the acrophonic principle argue, in essence, that the phonetic values of early alphabetic signs were selected arbitrarily, and that the names of the letters were simply an afterthought rather than the guiding factor in the development of the script. Hallo maintains, alongside Gelb, that far from being acrophonic, the names of the characters as they are known from Greek and Hebrew – alef, beth, gimel &c. – are in fact later inventions representing nothing more than a useful mnemonic, the ancient equivalent of English a is for apple, b is for ball.

This is based primarily on three things. The first is, somewhat strangely, an Ugaritic abecedary of the 14th century BC. This abecedary contains two thirds of the alphabet as known in proto-Sinaitic, in near enough the standard order. It also contains a parallel inscription in a syllabic script – Akkadian Cuneiform – which explains the values of the Ugaritic signs. That is to say, parallel to Ugaritic b Akkadian be is written, Ugaritic p is coupled with Akkadian pu and so on. According to Hallo, this represents an alternate naming system for the alphabetic signs – Phoenician gimel, the throwstick, becomes the meaningless ga; the house, beth becomes meaningless be. Clearly, if this is correct, the acrophonic basis is unlikely – the signs have been given purely arbitrary names, precisely what would be expected from a non-acrophonic system.

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24 Gelb 1963: 140-150.
26 Hallo 1958: 334-338.
27 Hallo 1958: 335.
The second point, in Hallo’s view, is that there was no barrier to the development of the letter names at a later stage. Half of the signs, he argues, were still pictographic enough in 1100 BC to inspire their names then, while the other signs were never pictographic to begin with. Tur-Sinai emphasises this supposed lack of a pictographic nature, pointing out how unlikely it is that the Greeks would have been ‘careful to preserve’ an alien tradition of letter names simply because of the characters’ supposed resemblance to an object, which, in a foreign language, bears the same name. This, he argues, is evidence that the names are not related to the forms of the letters, and so, as Hallo claims, there is no barrier to the names being given at any stage. As such, just as in English it would be perfectly reasonable to decide *a* should be called *ant* and *b* called *bolt*, in Canaanite it would be perfectly reasonable to call *a alef* and *b beth* at any time after the creation of the script. Tur-Sinai goes even further than this, arguing that some letter names became words as a result of the sign with which they were linked. The word *taw* (mark), he argues, was given that meaning because the sign *taw* resembled a simple mark, similar to X in English. This clearly is not possible in an acrophonic system – in fact it is the opposite of one.

Hallo’s final point is that the standard letter names are not mentioned in Hebrew literature prior to 300 BC or in Greek literature prior to 500 BC. Hallo admits that the Semitic origin of the names of the Greek letters is clear – *alpha, beta, gamma* &c. are not Greek words. However, rather than expecting a joint root for both the Hebrew and the Greek names, as would be natural in the acrophonic system of Gardiner, he suggests that Hebrew borrowed the names from the Greeks, who had in turn received the names, alongside the alphabet, from the Phoenicians about 800 BC. The separate development of names this implies for the Hebrew and Greek characters as late as 300 BC, effectively precludes an acrophonic basis. Either Hebrew must have changed the names of its characters only to change them back under the influence of Greek, or must have received a different set of names for its characters, in which case the supposed acrophonic names were clearly a secondary...
addition, developed after the alphabet passed either to Hebrew or its developmental predecessor.

The entirety of this argument is extremely weak. The Ugaritic tablet is far easier to explain in other ways. It could reasonably be assumed to be an attempt to teach Ugaritic to someone familiar with Akkadian writing. Akkadian has no signs for independent consonants and so it would be impossible to represent the Ugaritic values in any other way. Alternatively, as Cross and Lambdin\textsuperscript{34} suggest, the Akkadian represented the first two letters of the standard names of the letters, an abbreviated or ‘clipped’\textsuperscript{35} list of names, not a different naming tradition. Thus, \textit{be} for \textit{b} becomes \textit{beth}, \textit{ga} for \textit{g} becomes \textit{gaml}.

Hallo is also incorrect in his assessment of the appearance of the characters. It is not true that the characters as they were known in 1100 BC were still pictographic enough to suggest their standard names, as a glance at the later proto-Canaanite signs will show.\textsuperscript{36} Moreover, it is not true that half of the signs were never pictographic – the vast majority of proto-Sinaitic signs are immediately recognisable as common objects.\textsuperscript{37} Furthermore, in the case of those that Hallo concedes are pictographic, it is difficult not to wonder why arbitrarily chosen signs should so neatly line up to an acrophonic effect not meant by the people who chose them. The idea that, from a choice of all things, the early users of the alphabet could have unintentionally chosen signs for practically every letter which depict objects beginning with that letter, is too far-fetched to entertain. As for Tur-Sinai’s suggestions, it is hard to know quite where one should begin dismissing them. To claim that the fact that the Greeks kept their letter names proves that the names do not represent the use of acrophony over a thousand years earlier seems eminently unlikely. To take an equivalent situation, which English speaker would suggest that the names of our letters need to be changed due to irrelevance? This is effectively what Tur-Sinai is suggesting for the Greeks – that as the names of their letters do not represent anything with which they are familiar, they must always have been so to all cultures. As for his suggestion that acrophony effectively worked in reverse,\textsuperscript{38}

\textsuperscript{34} Cross & Lambdin 1960: 26.
\textsuperscript{35} Hamilton 2006: 25.
\textsuperscript{36} See figure 4.
\textsuperscript{37} See figure 2.
\textsuperscript{38} Tur-Sinai 1950: 168.
Driver\textsuperscript{39} and Albright\textsuperscript{40} show that there is no evidence whatsoever for it. Indeed, Albright goes so far as to declare that the argument was ‘an index of [Tur-Sinai’s] nationalistic spirit, rather than of his philological insight.’\textsuperscript{41}

Moving to Hallo’s last point, as Driver points out, to argue from a lack of evidence is always risky.\textsuperscript{42} The mere fact that the names are not attested does not mean that they did not exist. This, in fact, has recently been shown with the discovery of a Late Babylonian school tablet, in which the standard letter names for both $\text{ayin} – \text{a-a-nu}$ in the tablet – and $\text{sade} – \text{sa-du-u}$ – are written in as full a way as syllabic Akkadian will allow, while the others are written in the ‘clipped’ format described above.\textsuperscript{43}

Finally, it is worth mentioning some evidence in favour of acrophony. Millard\textsuperscript{44} calls attention to the fact that the absence of independent vowel signs is exactly what should be expected from an acrophonic system. If consistently applied to a Semitic language, the acrophonic principle can never generate vowels, as no Semitic words begin with vowels. If, on the other hand, the system was based on arbitrary links between letters and signs, it is difficult to imagine why no vowel signs would have been included.

Hopefully it is clear from the above that it is by far the most likely explanation that proto-Sinaitic was developed on the acrophonic principle. The case against it is too weak to consider for more than the briefest of moments, while certain elements of the script – the sheer number of concordances between letterform and acrophonic value and the absence of vowels in particular – make it very difficult to deny that acrophony constitutes a fundamental part of the proto-Sinaitic script.

The principal significance of the proto-Sinaitic script is that it potentially represents the earliest known alphabetic ancestor of the alphabets in use today, and, to that end, an investigation into its likely date is essential. For reasons of space, as mentioned above, proto-Canaanite cannot be discussed here in any depth, though it is of some importance. Hopefully this can be rectified at a later date.

\textsuperscript{39} Driver 1976: 261. 
\textsuperscript{40} Albright 1950: 14. 
\textsuperscript{41} Albright 1950: 14. 
\textsuperscript{42} Driver 1976: 261. 
\textsuperscript{43} Hamilton 2006: 24-25 & note 40. 
\textsuperscript{44} Millard 1986: 395.
Although there are some more unusual suggestions as to the date of the earliest of the proto-Sinaitic writings, as we shall see, the principal debate is between an early date, around 1850 BC, and a late date, around 1550 BC. The choice of one or the other date decides whether it is proto-Sinaitic or proto-Canaanite which is older, and by extension locates the invention of the alphabet in Egypt or Palestine respectively. The two latest discoveries, those found in the Wadi el-Hol, north of Luxor, in Egypt’s western desert, can be dated with rather more certainty than the others and offer compelling evidence that the early date is the more likely of the two. Except for these recent discoveries, however, the arguments for both dates are based on wide-ranging but rarely unequivocal evidence, and it is generally impossible to decide in favour of one or the other. As such, although the Serabit texts are effectively impossible to date, it can still be said with reasonable confidence that an early date can be given to the script itself.

For the sake of completeness, it is necessary to deal first with some of the more outlandish theories as to the date of the proto-Sinaitic texts. Perhaps the strangest theory, and the one least justified by evidence, is that Moses and the first Israelites were responsible for the invention of proto-Sinaitic. While the original work in which this was suggested is not available to me, it is clear from the summaries in other scholars’ works, that this theory was ‘the product of a too-fertile imagination and utter disregard of established philological principles.’

A much more recent theory, based on an almost equivalent misunderstanding of the evidence, is that of Fischer. He argues that purely alphabetic writing had been used in Egypt since around 2200 BC. It seems to me that this is based on a fundamental misunderstanding of the nature of Egyptian hieroglyphic writing. It is Fischer’s contention that the ‘consonantal alphabet,’ which is one of four essential elements of Egyptian writing (alongside bi- and tri-literals and determinatives), was used separately from the other elements by Egyptian scribes at this early date. The only evidence Fischer puts forward for this theory are the two Wadi el-Hol inscriptions and the mysterious Kahun inscriptions. The Wadi el-Hol texts are

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47 May 1945: 98.
48 Fischer 2001: 84.
otherwise universally accepted as belonging to the corpus of proto-Sinaitic texts and so do not support Fischer in the slightest. As for the Kahun inscriptions, the merest glance is sufficient to show that they are not, as Fischer suggests, examples of the ‘consonantal alphabet.’ These inscriptions, in fact, bear no resemblance whatsoever to uni-literal Egyptian signs. To my knowledge, not one example exists of an inscription written solely in uni-literal Egyptian. As Gardiner points out, ‘the alphabet always remained auxiliary to the other elements in the combined ideographic and phonetic script.’

Hamilton is alone in assigning to the corpus not one, but three dates. He considers the earliest proto-Sinaitic texts to have been written c.1850-c.1700 BC, the ‘more typologically developed’ inscriptions to date from c.1700-c.1500 BC and a single inscription (Sinai 375) to date from c.1250 BC. Hamilton bases this development of texts almost completely on an analysis of the handwriting, which, while a legitimate method of dating texts, he takes to extremes. Rather than assigning a broad range of dates to what are, in essence, very similar texts, he creates narrow chronological boundaries and seems to crowbar all of the inscriptions into them. This is shaky enough for his first two categories, as, in such a small selection, supposed ‘developments’ could just as easily be variations of handwriting. A selection of fifty characters in English written by, say, twenty different hands would almost certainly contain very many variations which could be mistaken for developments. However, for the last category it verges on the ridiculous. Hamilton’s final category is based on the evidence of a single sign in a single inscription, part of which is restored by Hamilton himself. In an attempt to support his idiosyncratic dating system, Hamilton is overly selective in his use of a quote from Albright. He claims that ‘Albright (1966: 6) indicated the difficulty [of classing the proto-Sinaitic corpus as a single collection] : ‘...the Proto-Sinaitic texts are not themselves homogenous(sic) palaeographically, but show marked evolution in their script....’ He neglects to mention that, in a footnote immediately following this quote, Albright states that the ‘marked evolution’ is confined to a fifty year period ‘probably beginning with the Gerster text (ca. 1525)

50 Gardiner 1915: 67.
51 Hamilton 2006: 300.
52 Hamilton 2006: 289.
54 Hamilton 2006: 300.
and ending with the sphinx (ca. 1475). There is no reason that Hamilton’s dating cannot be correct, but his methods are questionable at best and his evidence is equivalently weak.

A fourth suggestion, that of Sethe, proposes that the Serabit texts originated in the time of the Hyksos (c. 1650-1550 BC). This theory, as Butin points out, flounders for lack of evidence. Unlike Grimme and Fischer, Sethe could very well be correct, but there is no evidence to support him. Because of this, little can be gained by repeating Sethe’s reasoning and Butin’s refutation here, and so we shall move onto the two more serious dating suggestions.

The best evidence that can be given for the early date, or indeed either date, is found in the two Wadi el-Hol inscriptions. These have been dated, more convincingly than any of the other proto-Sinaitic inscriptions, to the late Middle Kingdom (c.1850 BC). Their prominent position on a wall full of graffiti indicates that they probably predate the majority of the other writings in the area. While inscriptions have been found there which stretch from Egypt’s Predynastic era to the early Islamic age (c. 3100 BC – c.700 AD), the vast bulk of the writing dates from the late 12th and early 13th dynasties (c.1850 – c.1750 BC). Darnell backs this reasoning with a palaeographic analysis of the proto-Sinaitic inscription. He points out that certain signs, such as the ꜜꜜ, show hieratic-hieroglyphic combinations in their proto-Sinaitic form, as opposed to being drawn straight from hieroglyphic Egyptian. This is ‘most characteristic of Middle Kingdom’ writings, thereby lending credence to the early dating. Darnell argues further that the orientation of other signs demonstrates an early date for the Wadi el-Hol inscriptions. For instance, the šu stands vertically in the Wadi inscriptions, while in the majority of Egyptian inscriptions, as here, it is written horizontally. In Egyptian, the vertical orientation is evidenced only in the late Middle Kingdom, potentially adding weight to this argument.

Darnell’s final point is that the late Middle Kingdom is the first point in Egyptian history in which a large Asiatic presence can be detected. As the language represented in the

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55 Albright 1966: note 22.
56 Sethe 1918 Neuentdeckte Sinai-Schrift, referenced in Butin 1928:23.
60 Darnell, Dobbs-Alsopp, Lundberg et al. 2005: 86.
inscriptions is Semitic, it stands to reason that an Asiatic presence of some kind would have been necessary for the development of the script.  

Although Darnell’s overall argument is by far the strongest concerning the date of the proto-Sinaitic inscriptions, his latter two points are not as strong as they at first appear. As Sass and Cross both make clear, the direction of writing and the orientation of signs was not standardised in proto-Sinaitic. Indeed, the same signs sometimes face in different directions within a single inscription in those from Serabit el-Khadim, and as only two inscriptions are depicted in the Wadi el-Hol, it is unjustified to generalise from this characteristic. Further, while this may have been the first period during which a large Asiatic presence existed in Egypt, it was not the last, and all that this point actually demonstrates is that the development is unlikely to have taken place earlier than this date. Moreover, in their attempted decipherment of the texts, Wimmer & Wimmer-Dweikat claim to have found philological evidence for a later dating. Many of the words in their decipherment, such as the Egyptian definite article pa and šrj (son), were not in use in official inscriptions until much later.

This decipherment, however, is by no means certain. Altschuler has offered his own translation which does not suffer from the problematic anachronism of Wimmer & Wimmer-Dweikat’s, and Darnell et al have declared that neither translation inspires much confidence. That said, the fact that it is a possibility makes it worth considering for a moment whether Wimmer & Wimmer-Dweikat’s work actually presents a barrier to the early dating of these texts.

By their own admission, their work looks like a ‘Semitic-Egyptian salad,’ due to their method of reading the inscriptions as though written in a combination of the two languages. While this seems implausible, modern day creoles have a very similar basis and, considering the cultural composition of the Sinai, this is not an unreasonable suggestion. Instead, a potential explanation for the appearance of Late Egyptian words in a Middle Egyptian context may be the innate conservatism of

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63 Cross 1954: 18.
64 Wimmer & Wimmer-Dweikat 2001: 110.
65 Altschuler 2002: 201-203.
Egyptian scribal culture. While $pa$ and $šrj$ may not appear in the official inscriptions of Egypt until several hundred years later, there is no proof that they were not elements of everyday speech, and, as in many modern dictionaries, the ‘official’ language of Egypt did not necessarily accurately represent the language as it was spoken. The author of the inscriptions may have been unaware of the literary conventions of the day, or may have willingly chosen to disregard them, with the result that the inscriptions now appear anachronistic. This is, of course, mere supposition. However, it does not seem too great a leap to make considering the fact that the principal evidence on which the Darnell’s argument rests - the prominent position occupied by the inscriptions and the combination of hieratic and hieroglyphic - are, if not complete proof, very good evidence indeed for the early dating of these two inscriptions.

The Serabit el-Khadim inscriptions are of far less value for dating the script. Siegel suggested, long before the discovery of the Wadi el-Hol inscriptions made it possible to support the suggestion, that the Serabit inscriptions do not necessarily represent the earliest inscriptions in the proto-Sinaitic script.\footnote{Siegel 1932: 47.} However, Siegel’s suggestion, much like all others concerning the Serabit texts, is ultimately impossible to demonstrate, as the dating of the Serabit texts in essence comes down to a contest of inconclusive evidence. Gardiner\footnote{Gardiner 1962: 46.} used the proximity of the Wadi el-Nasb inscriptions to a stele of Amenemhet III (c.1831-c.1786) along an otherwise empty wall as evidence for a contemporaneous dating. Conversely, Beit-Arieh\footnote{Beit-Arieh 1982: 16.} used the proximity of some inscriptions to a New Kingdom potsherd and a hoard of tools and moulds most likely from the New Kingdom to support a late dating. These are both very clearly flawed. The tools and sherd could well have been put in the mine at any time before or after the inscriptions were carved, and there is little reason for thinking the two events contemporaneous. The Amenemhet III inscription, while it probably shows that the other inscriptions came after it, does not demonstrate how soon after it. The proto-Sinaitic could have been carved at any time after the royal inscription. Albright\footnote{Albright 1948: 7.} accepted the late date for the inscriptions, based solely on Leibovitch’s contention that the sphinx on which one of the inscriptions is carved ‘bears much
resemblance\textsuperscript{72} to statues of Hatshepsut (c.1473 - c.1458). Sass\textsuperscript{73} methodically destroys this argument, pointing out that Leibovitch never explained quite how the sphinx resembled Hatshepsut, but seemed simply to mean that they had similar faces. This argument was supported by several depictions of Hatshepsut, some of which did not particularly resemble the sphinx, and one of which did not even have a face anymore as it had been mutilated during the reign of her stepson Tuthmosis III. Moreover, as Sass makes clear, to compare a statue created by the finest royal sculptors with that of ‘a mason who had no pretensions to being an artist,’\textsuperscript{74} is frankly ridiculous.

However, Sass goes too far in claiming that the style of the eyes of the sphinx categorically prove that it dates to the Middle Kingdom.\textsuperscript{75} It seems obvious that to argue this in the light of what has been said about the sculptor is not reasonable. While the eyes may demonstrate that the sphinx came from the Middle Kingdom, to say, as Sass does, ‘there is no alternative ... to dating the sphinx ... to the late Middle Kingdom,’\textsuperscript{76} is risible. This also applies to Sass’ dating of another statuette to the Middle Kingdom,\textsuperscript{77} and without these two pieces of evidence his argument that the inscriptions date to the Middle Kingdom collapses as easily as Albright’s and Leibovitch’s.

For any argument ever used to date the Serabit el-Khadim texts, an equally strong one has been made to counter it, so that deciding one way or the other is more based on allegiance than evidence. Scholars such as Cross\textsuperscript{78} and Hamilton\textsuperscript{79} support Albright’s dating come what may, while others, such as Gardiner,\textsuperscript{80} held to their own view, defending it against all evidence to the contrary. As such, these texts are of limited use in assigning a date to proto-Sinaitic as a whole. It is necessary, therefore, to rely on the Wadi el-Hol inscriptions. Although they do not offer cast iron proof, these inscriptions demonstrate that proto-Sinaitic is very likely to have been in

\textsuperscript{72}Leibovitch 1963: 201.
\textsuperscript{73}Sass 1988: 136.
\textsuperscript{74}Sass 1988: 136.
\textsuperscript{75}Sass 1988: 136.
\textsuperscript{76}Sass 1988: 136.
\textsuperscript{78}Cross 1954: 18.
\textsuperscript{79}Hamilton 2002: \textit{passim}.
\textsuperscript{80}Gardiner 1962: 46.
use as early as c.1850 BC, and as such, according to our current knowledge, this makes it the first truly alphabetic script.
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Zeitschrift des Deutschen Palastina-Vereins

The Alphabet

Semitic Writing from Pictograph to Alphabet

A History of Writing

Extinct Languages
<table>
<thead>
<tr>
<th>Author</th>
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<th>Journal/Book</th>
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<td>Gardiner, A. H.</td>
<td>1916</td>
<td>“The Egyptian Origin of the Semitic Alphabet”</td>
<td>Journal of Egyptian Archaeology</td>
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<td>Gardiner, A. H.</td>
<td>1962</td>
<td>“Once Again the Proto-Sinaitic Inscriptions”</td>
<td>Journal of Egyptian Archaeology</td>
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<td>Gelb, I. J.</td>
<td>1963</td>
<td>A Study of Writing</td>
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<td>Hamilton, G. J.</td>
<td>2006</td>
<td>The Origins of the West Semitic Alphabet in Egyptian Scripts</td>
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<td>Lake, K.</td>
<td>1932</td>
<td>“Introduction”</td>
<td>Harvard Theological Review</td>
<td>95-100</td>
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<td>Liebovitch, M. J.</td>
<td>1963</td>
<td>“The Date of the Protosinaitic Inscriptions”</td>
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Figures

Figure One – Chart showing comparison between Indus Valley script and Easter Island script

Taken from Friedrich, J. 1957 Extinct Languages. New York. 173.
Note on the charts

Each of the following charts represents a comparison of a script with its immediate predecessor – the first pairs proto-Sinaitic with Egyptian hieroglyphic, the second, early proto-Canaanite with proto-Sinaitic and the third, later proto-Canaanite with early proto-Canaanite. Unfortunately, owing to the paucity of early proto-Canaanite inscriptions, it has been necessary for the sake of clarity to supplement the third table with characters found in the proto-Sinaitic corpus. The charts also show the phonetic value associated with the proto-Sinaitic and proto-Canaanite signs.

In every case, the characters represented are identified. In the case of Egyptian hieroglyphics the identifying number is that of Gardiner’s sign list, for proto-Sinaitic it is the catalogue number of the inscription in which the sign was found. The Proto Canaanite characters are identified by the a two or three letter abbreviation of the common name of the object on which they were found, as follows:

| LD  | Lachish Dagger          |
| GS  | Gezer Sherd             |
| SP  | Schechem Plaque         |
| NS  | Nagila Sherd            |
| ISO | Izbet Sartah Ostracon   |
| RH  | Raddana Handle          |
| RS  | Revadim Seal            |
| EK1-5 | El-Khadr Arrowheads 1-5 |
| AS  | Ahiram Sarcophagus      |

No other inscriptions are included in the tables.

---

81 Gardiner 1957: 544-547.
<table>
<thead>
<tr>
<th>Phonetic Value</th>
<th>Proto-Sinaitic</th>
<th>Egyptian Hieroglyphic</th>
<th>Phonetic Value</th>
<th>Proto-Sinaitic</th>
<th>Egyptian Hieroglyphic</th>
<th>Phonetic Value</th>
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<tbody>
<tr>
<td>c</td>
<td>מ</td>
<td>מ/ג</td>
<td>h</td>
<td>מ</td>
<td>מ/ג</td>
<td>c</td>
<td>מ</td>
<td>מ/ג</td>
</tr>
<tr>
<td>b</td>
<td>ב</td>
<td>ב/ס</td>
<td>b</td>
<td>מ</td>
<td>מ/ג</td>
<td>b</td>
<td>מ</td>
<td>מ/ג</td>
</tr>
<tr>
<td>g</td>
<td>ג</td>
<td>ג/ד</td>
<td>g</td>
<td>מ</td>
<td>מ/ג</td>
<td>g</td>
<td>מ</td>
<td>מ/ג</td>
</tr>
<tr>
<td>d</td>
<td>ד</td>
<td>ד/ג</td>
<td>d</td>
<td>מ</td>
<td>מ/ג</td>
<td>d</td>
<td>מ</td>
<td>מ/ג</td>
</tr>
<tr>
<td>h</td>
<td>ה</td>
<td>ה/ג</td>
<td>h</td>
<td>מ</td>
<td>מ/ג</td>
<td>h</td>
<td>מ</td>
<td>מ/ג</td>
</tr>
<tr>
<td>w</td>
<td>ו</td>
<td>ו/ג</td>
<td>w</td>
<td>מ</td>
<td>מ/ג</td>
<td>w</td>
<td>מ</td>
<td>מ/ג</td>
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<tr>
<td>z/d</td>
<td>ז/ד</td>
<td>ז/ד</td>
<td>z</td>
<td>מ</td>
<td>מ/ג</td>
<td>z</td>
<td>מ</td>
<td>מ/ג</td>
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Figure Two – Representative selection of proto-Sinaitic characters with comparison to Egyptian hieroglyphs
<table>
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<tr>
<th>Phonetic Value</th>
<th>Early Proto-Canaanite</th>
<th>Proto-Sinaitic</th>
<th>Phonetic Value</th>
<th>Early Proto-Canaanite</th>
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<th>Early Proto-Canaanite</th>
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<tbody>
<tr>
<td>c</td>
<td>A/A</td>
<td>(2)</td>
<td>h</td>
<td></td>
<td></td>
<td>c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td></td>
<td>(3)</td>
<td>h</td>
<td></td>
<td></td>
<td>p</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g</td>
<td></td>
<td>(3)</td>
<td>y</td>
<td></td>
<td></td>
<td>s/l/z</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>A/A</td>
<td>(2)</td>
<td>k</td>
<td></td>
<td></td>
<td>q</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h</td>
<td>NS</td>
<td>(3)</td>
<td>l</td>
<td></td>
<td></td>
<td>r</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>w</td>
<td>NS</td>
<td>(3)</td>
<td>m</td>
<td></td>
<td></td>
<td>t</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>z/d</td>
<td>=</td>
<td>(3)</td>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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**Figure Three** – Chart of all early proto-Canaanite letters with comparison to proto-Sinaitic signs
<table>
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<th>Phonetic Value</th>
<th>Later Proto-Canaanite</th>
<th>Proto-Sinaitic/Early Proto-Canaanite</th>
<th>Phonetic Value</th>
<th>Later Proto-Canaanite</th>
<th>Proto-Sinaitic/Early Proto-Canaanite</th>
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<tr>
<td>C</td>
<td>UseProgram</td>
<td>(?/A)</td>
<td>h</td>
<td>UseProgram</td>
<td>(?/D)</td>
<td>c</td>
<td>0/0</td>
<td>(?/C/0)</td>
</tr>
<tr>
<td>b</td>
<td>UseProgram</td>
<td>(?/A)</td>
<td>h</td>
<td>UseProgram</td>
<td>(?/D)</td>
<td>c</td>
<td>0/0</td>
<td>(?/C/0)</td>
</tr>
<tr>
<td>g</td>
<td>乙烯</td>
<td>(?/A)</td>
<td>h</td>
<td>乙烯</td>
<td>(?/D)</td>
<td>c</td>
<td>0/0</td>
<td>(?/C/0)</td>
</tr>
<tr>
<td>d</td>
<td>乙烯</td>
<td>(?/A)</td>
<td>h</td>
<td>乙烯</td>
<td>(?/D)</td>
<td>c</td>
<td>0/0</td>
<td>(?/C/0)</td>
</tr>
<tr>
<td>h</td>
<td>乙烯</td>
<td>(?/A)</td>
<td>h</td>
<td>乙烯</td>
<td>(?/D)</td>
<td>c</td>
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<tr>
<td>W</td>
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<td>(?/A)</td>
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<td>c</td>
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<td>Z</td>
<td>乙烯</td>
<td>(?/A)</td>
<td>h</td>
<td>乙烯</td>
<td>(?/D)</td>
<td>c</td>
<td>0/0</td>
<td>(?/C/0)</td>
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</table>

Figure Four - Representative selection of later proto-Canaanite letters with comparison to early proto-Canaanite and proto-Sinaitic signs.