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Chapter 4

Ancient Egypt and the earliest known stages of alphabetic writing

Ben Haring¹

Introduction

Ever since their discovery in the early twentieth century, the so-called Proto-Sinaitic inscriptions have fascinated Egyptologists and Semitists. Within a broader group of scholars interested in the history of writing systems, however, they never quite received the attention they deserve. The often-used reference work by Peter Daniels and William Bright merely devotes two paragraphs to Proto-Sinaitic, attributing a certain relevance to the early history of the alphabet, but not exactly suggesting its prime importance (Daniels 1996, 29; O'Connor 1996, 90). Shortly before the book appeared, and probably too recently for it to be included, a discovery had been made of inscriptions very much related to Proto-Sinaitic in the Wadi el-Hôl, in the Western Desert of Egypt (Darnell *et al.* 2005).² The discovery led to new discussions of the earliest alphabetic writing in the two decades that followed. The recent identification of an Egyptian ostracon as the earliest known alphabetic word list (Haring 2015) has proved to be another stimulus to these discussions.

These new discoveries and discussions, however, have not resulted in a clearer picture of the earliest development of alphabetic writing. Perhaps the main reasons for this are (1) that the Proto-Sinaitic inscriptions have largely remained undeciphered, the Wadi el-Hôl texts entirely so; (2) that the proposed datings of the texts in both locations are controversial. These circumstances make it very difficult indeed to appreciate the historical importance of the inscriptions, and of the script used for them. Thus, the earliest evidence for alphabetic writing remains a topic shrouded in mystery and controversy, and the extent of its inspiration by pharaonic Egypt, in whose cultural orbit the inscriptions were made, remains obscure.

¹ My English has kindly been corrected by Helen Richardson-Hewitt.

² Their discovery was in the 1994–1995 season of the Theban Desert Road Survey led by John Darnell; see Darnell *et al.* 2005, 73.

Proto-Sinaitic and its interpretation

During his winter campaign of 1905–1906 in the south of the Sinai Peninsula, Sir William Matthew Flinders Petrie discovered inscriptions of an unusual type at Serabit el-Khadim, the site of an Egyptian temple devoted to the goddess Hathor, 'Lady of Turquoise', and at the turquoise mines nearby (Fig. 4.1).³ Petrie instantly recognised the inscriptions as alphabetic, and thought it was a script locally developed by workers of the turquoise mines, in which linear signs⁴ were combined with Egyptian hieroglyphs (Petrie 1906, 131, 1932, 109). Indeed, some of the signs are reminiscent of hieroglyphs, although the actual extent of hieroglyphic inspiration remains uncertain (see below, Graphic and conceptual inspiration).

In an article published in 1916, Sir Alan Gardiner gave his interpretation of the inscriptions, arguing that the signary includes (1) graphs inspired by Egyptian hieroglyphs (*e.g.* \forall , $\neg \neg$, \bigotimes), (2) signs resembling later Semitic alphabetic letters such as Hebrew and Phoenician, and (3) icons apparently related to letter names known from Biblical Hebrew (*e.g. 'aleph 'ox', bêt 'house'*), while the writing system as a whole rendered a Semitic language (Gardiner 1916). Just as in later Semitic alphabets, the individual signs stood for single consonants, and the connection between graph and sound was made through acrophony, *i.e.* the consonant expressed was the first one of the word for the object represented. Thus a square sign, supposedly a house plan, stood for *b*, from *bêt* 'house', while an ox head was for ' (glottal stop, from 'aleph 'ox'). Such interpretations are supported by the letter names in Biblical Hebrew: 'aleph and *bêt* are the names of the first characters of the Hebrew alphabet.⁵

Several more characters could be explained in this way, but the phonetic reading and graphic derivation of others remain highly problematic to this day. Even the total number of different signs in this writing system remains unclear.⁶ As a result, there is no consensus on the interpretation of the Sinai inscriptions apart from a few clusters of signs. The most convincing of these clusters is the string b-i-t ($b\hat{e}t$ - iayin - lamed - taw), which is found in several inscriptions. Petrie, although not yet able to read the characters, already felt that the string was a phrase of religious significance (Petrie 1906, 129). Gardiner suggested that it should be read as Semitic *b*'lt 'lady',

³ Additional Proto-Sinaitic inscriptions have been discovered throughout the twentieth century, and even after. The most recent discoveries have been made by a French (IFAO-Sorbonne) expedition directed by Pierre Tallet, and discussed in Dalix 2012.

^{4 &#}x27;Linear' in this paper means: non-pictorial and non-cuneiform.

⁵ Obviously, the precise forms of the hypothetical letter names underlying Proto-Sinaitic characters are unknown.

⁶ Sass (1988, 183, table 4) lists 22 signs with phonetic identifications, five of them with a questionmark, beside several unidentified and unclear signs. The quasi-absence of g(imel) is especially disturbing (Sass 1988, 112–113; Hamilton 2006, 55–56). Its single occurrence in Sinai 367 (as supposed by Sass) is not convincing and was identified as y(od) by Hamilton (2006, 111). The latter author distinguishes 31 different signs in the Sinai corpus, not counting g(imel) and $\dot{g}(ain)$, and assuming that seven consonants (*b*, *d*, *h*, *y*, *n*, *s*, θ) were each expressed by two different signs (Hamilton 2006, 254–268).

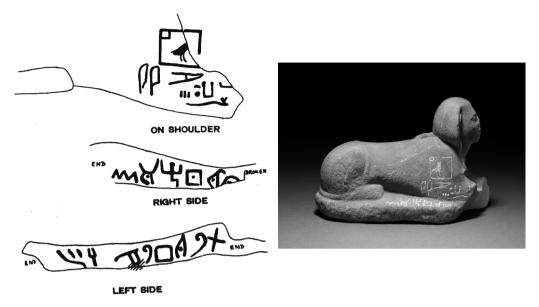


Figure 4.1. Hieroglyphic and Proto-Sinaitic inscriptions on sphinx BMEA 41748 from Serabiț el-Khadim. Facsimiles from Gardiner and Peet 1952, pl. lxxxii, no. 345. The chalk filling of the inscriptions is modern (photo © The Trustees of The British Museum). All rights reserved.

and probably referred to the same deity as the one called Hathor in the Egyptian hieroglyphic inscriptions from Serabit el-Khadim. Longer strings composed with this name are *l-b-'-l-t* 'for the Lady' and *m-'-h-b-'-l-t* 'Beloved of the Lady', both of which are known from several inscriptions, including the well-known sphinx from Serabit in the British Museum (Fig. 4.1).⁷ The longer string *m-'-h-b-'-l-t* is even an almost literal translation of the Egyptian inscription above it: 'Beloved of Hathor, [Lady] of Turquoise'. That inscription is an epithet of the Egyptian king represented by the sphinx, whose name was given on the base, between the sphinx's paws, but apparently consists of only one obscure sign that might be \checkmark (a sickle, phonetic *m'*).⁸ This circumstance adds to the chronological controversies connected with the inscriptions, for which see below. Gardiner did not venture beyond the suggested *b-'-l-t* 'lady'. The longer strings given above are

⁷ For a very recent analysis of the inscriptions on the sphinx see Wilson-Wright 2013.

⁸ Possibly to be connected with $\overline{a} \ll Nb$ -me.t, the Horus name of King Snofru of the Fourth Dynasty, whose deification is expressed in Middle Kingdom inscriptions from Sinai. The graphic and material quality of the hieroglyphic signs on the sphinx's right side is as poor as that of the Proto-Sinaitic ones (and indeed as poor as the sphinx itself), and suggests that they were not made by a very accomplished sculptor. This, together with the rough sandstone surface, makes reliable copying exceedingly difficult. Note, for instance, the discrepancy between the hand copy of \mathbb{Z} 'Hathor' by Gardiner and Peet (Fig. 4.1, left) and the same sign in modern chalking on the sphinx (Fig. 4.1, right).

the hypotheses by other scholars elaborating on Gardiner's hypothesis (*l-b-'-l-t*: Sethe 1917, 451–452; *m-'-h-b-'-l-t*: Eisler 1919, 32). The explanations by Gardiner, Sethe and Eisler were broadly accepted at the time, and stand to this day. Work by later scholars (*e.g.* Albright 1948; Sass 1988) included even more interpretations, ranging from the plausible and attractive to the speculative and idiosyncratic. The script is nowadays known as 'Proto-Sinaitic'; 'Proto-' serving to distinguish the script from the later Nabataean inscriptions from Sinai (Daniels 1996, 29).

Dating the Proto-Sinaitic script

From the moment they were discovered and tentatively deciphered, the Proto-Sinaitic texts have been assigned different dates by scholars. Petrie (1906, 131) saw the reign of Thutmose III of the Egyptian New Kingdom as the most likely period of their creation, and dated them about 1500 BC.⁹ Gardiner (1916, 13–14) suggested the reign of Amenmenhet III (Middle Kingdom, about 1800 BC) as an alternative, but drew no definite conclusions. Broadly speaking, both alternatives are still being upheld, besides even earlier and later dates.

Many Egyptologists and some Semitists are, in fact, still in favour of a Middle Kingdom date, even more specifically in favour of the reign of Amenemhet III. This is because hieroglyphic inscriptions from that reign at Serabit el-Khadim mention Egyptian expeditions coming to Sinai and including persons with non-Egyptian names and of non-Egyptian appearance. Most prominent among these on the Serabit stelae is a certain *Hbddm*, who is called 'brother of the Ruler (or: a ruler) of Retjenu'. 'Retjenu' is an Egyptian name for the Levant or part of it, so *Hbddm*, and other non-Egyptians at Serabit, were probably of Canaanite origin. The participation of these Canaanites in Egyptian expeditions in Sinai would seem to offer itself as a perfect background for the use, according to some even for the invention, of Proto-Sinaitic. Invention at Serabit el-Khadim in the nineteenth century BC has been argued by Orly Goldwasser (*e.g.* 2006, 2016) and Ludwig Morenz (2011). In a dispute with Christopher Rollston about whether the inventors were the Canaanite elite like *Hbddm*, who may have been perfectly familiar with Egyptian culture and writing, or rather the illiterate workers in the Sinai turquoise mines, Goldwasser decidedly opts for the latter (Goldwasser 2012).

Be this as it may, one may question the assumption that Proto-Sinaitic represents a writing system invented in Sinai, just as one may question the nineteenth century BC as the date of such an invention. The main argument against these assumptions is a set of two small inscriptions found in the Wadi el-Hôl, in the deep south of Egypt, with characters very similar to the Proto-Sinaitic ones (Fig. 4.2). These inscriptions have already been mentioned in the Introduction (see above). Although no convincing interpretation has yet been offered for either text, or even for substantial sequences within them, it is very likely that they represent a related, if not the same script.

⁹ The reign of Thutmose III is currently thought to have begun in 1479 BC.

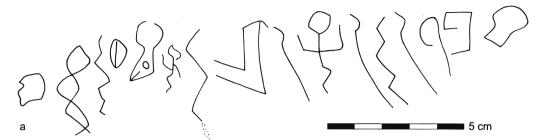


Figure 4.2. Alphabetic inscription no. 1 at Wadi el-Hol. From Darnell et al. 2005, 75 (reproduced with kind permission of J.C. Darnell and the American Schools of Oriental Research (ASOR), all rights reserved).

The discoverers favour a Middle Kingdom date, more precisely, again, the reign of Amenemhet III. This is not so much because of the similarity of the script to Proto-Sinaitic, but rather because Egyptian texts in the Wadi el-Hôl left by military expeditions include one mentioning an 'army general of Asiatics' called Bebi. 'Asiatics' is the usual Egyptological translation of *m.w.*, a designation of Levantine people. Just as in Sinai, the co-occurrence of Egyptians and Canaanites may explain the co-occurrence of Egyptian and alphabetic inscriptions in the same place (Darnell *et al.* 2005, 86–90, 102–105). But Darnell *et al.* went further and argued that the palaeography of the alphabetic signs betrays the origin of the script in an even earlier phase of the Middle Kingdom (*ibid.*, 90). More precisely, the signs would have found their origin in a mix of cursive and monumental hieroglyphic writing, with the nearest Egyptian prototypes of some of the signs being known from the early Middle Kingdom or even from the preceding First Intermediate Period (*c.* 2120–1980 BC). Thus, the Wadi el-Hôl texts 'would be among the earliest (if not the earliest) specimen of alphabetic writing discovered to date' (*ibid.*, 90).

The suggested derivation of the Wadi el-Hôl alphabetic signs from both cursive and monumental Egyptian writing is itself attractive, the more so since Egyptian rock inscriptions are often in a hybrid script that displays characteristics of monumental hieroglyphic as well as cursive writing (*i.e.* hieratic and cursive hieroglyphs). On the other hand, with only two short inscriptions that together amount to no more than 28 characters, which may be reduced to only 14 different signs, the basis for palaeographic comparison is even smaller than that of the Proto-Sinaitic corpus. A more extensive corpus might very well show more graphic diversity, as Proto-Sinaitic does, and make it more difficult to find prototypes of alphabetic characters within Egyptian monumental and cursive writing. We will return to this problem below (see 'Graphic and conceptual inspiration'). Meanwhile, the fact that very similar inscriptions are found so widely apart (Sinai and Wadi el-Hôl), in combination with a hypothetical dating to the (late) Middle Kingdom, would suggest that the underlying writing system, or at least its principles, were already widely spread before that time. From this earliest extreme we must jump to the (equally hypothetical) later datings. Petrie argued for a date about 1500 BC for the Proto-Sinaitic alphabet on the basis of early New Kingdom pottery and architecture found near Proto-Sinaitic inscriptions, and the material of the British Museum sphinx (red sandstone), which he argued was only used by Thutmose III (Petrie 1905, 131). The latter argument can be discarded – the use of any material is not likely to be unique to one reign specifically, and the sphinx is nowadays commonly dated to the late Middle Kingdom.

A different argument has been presented by Françoise Briquel-Chatonnet, who is in favour of a dating to the Second Intermediate Period (*c*. 1650–1550 BC). She argued that over fifty per cent of the alphabetic inscriptions are found near one mine (numbered L) where there is no sign of Egyptian presence. Rather than being the product of a bilingual Egyptian/Semitic milieu, the Proto-Sinaitic inscriptions would have been made in a period of Egyptian absence from the turquoise mines, such as the Second Intermediate Period (Briquel-Chatonnet 1998). Far from representing the birth of alphabetic writing, the Sinai texts would merely be one trace of its existence (*ibid.*, 59).

Gordon Hamilton, who has produced the most thorough palaeographic survey of Proto-Sinaitic and related Canaanite inscriptions so far, argued that the Sinai material reflects a palaeographic development that took place between *c*. 1850 and 1500 BC. One core group of 12 Sinai inscriptions, together with the Wadi el-Hôl texts, would represent an early stage (*c*. 1850–1700: Hamilton 2006, 300), while a further eight Sinai inscriptions, including the sphinx, are assigned by him to a later period (*c*. 1700–1500: Hamilton 2006, 304),¹⁰ and one highly linear text is even dated much later, *c*. 1250 BC (*ibid.*, 377–380).

Such a very late date had, in fact, already been proposed for the entire Sinai and Wadi el-Hôl corpus by Benjamin Sass. Sass, who in his seminal work *The Genesis of the Alphabet* still favoured a date in the Egyptian Twelfth Dynasty (*i.e.* twentieth to eighteenth centuries BC),¹¹ reconsidered this in a later publication and suggested a date around 1300 BC (Sass 2004–5, 157). By this redating, the hypothetical development of alphabetic writing in the Near East would lose the period of approximately six centuries that separated its supposed birth during the Middle Kingdom from the securely dated and interpreted cuneiform alphabet of Ugarit.¹² To Sass and to other scholars, those six centuries represented a 'standstill' in the sense that they show little or no palaeographic development, and virtual archaeological silence. Sass observed that 'No pre-14th-century, perhaps no pre-1300 BC alphabetic inscription from Palestine can be pointed out with any confidence' (*ibid.*).

¹⁰ More texts are tentatively assigned to the same stages in his Appendix 1 (Hamilton 2006, 323–400). Sinai inscription no. 363 is incorrectly mentioned for both periods (*ibid.*, 300 and 365).

¹¹ Sass 1988, 144 – by no means excluding a later date, in the Eighteenth Dynasty (seventeenth to fourteenth centuries BC). Sass made his choice on the basis of 'indirect and circumstantial evidence' which 'does not contradict, and to a certain extent it even reinforces, the dating of the Proto-Sinaitic inscriptions to the 12th Dynasty'.

¹² For the Ugaritic alphabet see the contributions to this volume by Silvia Ferrara and Philip Boyes.

Other relevant inscriptions from Egypt and the Near East

The above quote by Sass refers to possibly alphabetic material other than the Proto-Sinaitic and Wadi el-Hôl inscriptions, which has been found in the Levant, in Egypt, and even in Mesopotamia, and for which dates have been suggested that range from *c*. 1850 to 1300 BC. These supposed alphabetic inscriptions are all very short, including no more than a handful of signs. They occur on objects of different kinds, mostly on pottery sherds though also on clay tablets, as well as on stone and metal objects and surfaces. Most of them are described and discussed in the catalogues compiled by Sass (1988, 53–105)¹³ and Hamilton (2006, 322–400),¹⁴ with photos and drawings. Although each inscription offers little information in itself – indeed, every single one seems to add more riddles than it provides answers – together they indicate that the period between *c*. 1850 and 1300 BC is not entirely empty with respect to the continuation and historical development of alphabetic writing.

This article is not the place to discuss these inscriptions at length. For the period under consideration here, the relevant inscribed objects discussed by Sass and Hamilton are, more or less in chronological order: an incised wooden heddle jack from El-Lahun, Egypt, a bronze dagger from Lakhish, an incised pottery sherd from Tell en-Nagila, another one from Gezer, a decorated limestone plaque from Shekhem, marked pottery vessels from Gezer, an incised sherd from Tell el-Hesi, and a fragment of a pottery bowl from Lakhish. With the exception of the heddle jack, all of these objects were found during excavations in Israel, and some of these were in identified Middle and Late Bronze strata (Lakhish dagger MB II, Nagila sherd and Gezer jars late MB/early LB, bowl fragment Lakhish Stratum VI).

The Lakhish dagger (Fig. 4.3) may well be the oldest of the Near Eastern finds, with a suggested date of *c*. 1750–1650 BC (Sass 1988, 53–54; Hamilton 2006, 390–391; Goldwasser 2016, 14–142). The relevance of the Gezer pot marks (seventeenth/ sixteenth century BC) to alphabetic writing was refuted by Sass (1988, 98) but has been defended by Hamilton (2006, 18, note 30) and Goldwasser (2016, 142–143). The Lakhish bowl fragment may be from the thirteenth, or even the twelfth century BC (Sass 1988, 62–63). The wooden heddle jack found during Petrie's excavations at El-Lahun (Kahun) is inscribed with linear signs believed by many scholars to be alphabetic (Fig. 4.3). Petrie dated the object to the Twelfth Dynasty, stating that the sort of object was not in use in Egypt in later periods (Petrie 1912, 10; 1921, 2),¹⁵ but

¹³ Sass's catalogue includes many inscriptions from the last centuries of the second millennium and from the early first millennium, which are not considered here.

¹⁴ Here integrated with the Proto-Sinaitic and Wadi el-Hôl inscriptions. See also Goldwasser 2016, 139–156.

¹⁵ Petrie (1921) also includes an incised sherd from the same place and period (now kept at University College London like the heddle jack), which he and later authors have claimed to be a combination of alphabetic and Egyptian hieratic. I agree with Sass (1988, 104) that the entire inscription is Egyptian: it is a crude (because incised) hieratic, and apparently records a delivery from a palace treasury.

that is actually far from certain (Gallorini 2009, 118–119, with a recent drawing of the object and its inscription). The inscription has been read as 'hytb (Eisler 1919, 125 and 172), 'hysb (Dijkstra 1990, also allowing for a dating as late as the fourteenth century) or 'd'sb (Hamilton 2006, 331: eighteenth–seventeenth century). The object remains an isolated find of uncertain date, with an inscription of uncertain interpretation. A cylinder seal with linear signs known as the 'Grossman Seal' or 'St Louis Seal' comes from the art market and was dismissed as a forgery by Sass (1988, 99), but not by Hamilton (2006, 397–398), who dates it to *c.* 1400 BC.

Possibly older than 1300 BC is a pottery ostracon from the Valley of the Queens near ancient Thebes, Egypt, which is now in the Egyptian Museum in Cairo (Fig. 4.3). Sass (1988, 104) dismissed it as being a combination of hieratic characters and workmen's marks, but in fact neither of these notations seems to be used here.¹⁶ Joseph Leibovitch (1940, 119–120) interpreted the inscription as Proto-Sinaitic; Albright (1948, 12, note 33) suggested that the signs in the top compartment on the ostracon might be read 'mht 'maidservants' from right to left. There are also other New Kingdom ostraca from the Theban royal necropolis that may turn out in the future to be relevant to the history of alphabetic writing.¹⁷ The following, more recent finds from New Kingdom Egypt are also possibly relevant to the topic, but too recently discovered to be in the catalogues compiled by Sass and Hamilton. A statue from Aswan, dated to the reign of Amenhotep III by Hans Goedicke (2006, 125), bears a column of five signs, at least some of which resemble Levantine linear alphabetic signs. A sherd from the Ramesside residence at Oantir and dated to the thirteenth century BC bears two signs that might just be 'aleph and bet according to Dijkstra (2007). An inscription at Timna, admittedly not in Egypt but very much within Egypt's political and cultural reach, has been connected with alphabetic writing by Stefan Wimmer (2010), and dated by him to *c*. 1400–1150 BC.

A quite spectacular discovery is that of linear signs on the edges of several Babylonian cuneiform tablets of the late sixteenth or fifteenth century BC, first published and discussed by Stephanie Dalley (Dalley 2009, 15, pl. clxxv;¹⁸ see also

¹⁶ See Haring 2018, 19–20. The ostracon is incorrectly stated there to be in the Egyptian Museum in Turin. It was found by Giulio Farina, Director of that museum, in 1935, together with a limestone ostracon bearing a necropolis workman's mark (Leibovitch 1940, 119–120). The latter did end up in the Turin Museum, where it has the provisional number 6198. I wish to thank Susanne Töpfer for allowing me to search through the museum's unpublished ostraca.

¹⁷ Haring 2018, 20. Three are represented in Petrie 1912, pl. I (top right, middle left, bottom left), together with ostraca bearing necropolis workmen's marks. The ostracon depicted top right is very similar to Cairo JE 66837 by arranging groups of signs in compartments, and by using some identical signs (cross for *tau*, vertical zigzag for *mem*?). This is not the place to discuss Petrie's 1912 book *The Formation of the Alphabet*, which must have been considered idiosyncratic even at the time it appeared, arguing that the earliest alphabets were graphically inspired by identity marks (Haring 2018, 16–20). For such marks see below, 'Graphic and conceptual inspiration'.

¹⁸ Dalley refers to other, possibly comparable linear inscriptions including the Proto-Sinaitic and Wadi el-Hôl texts, and linear signs on clay cylinders (tags?) found at Umm el-Marra in Syria, dated

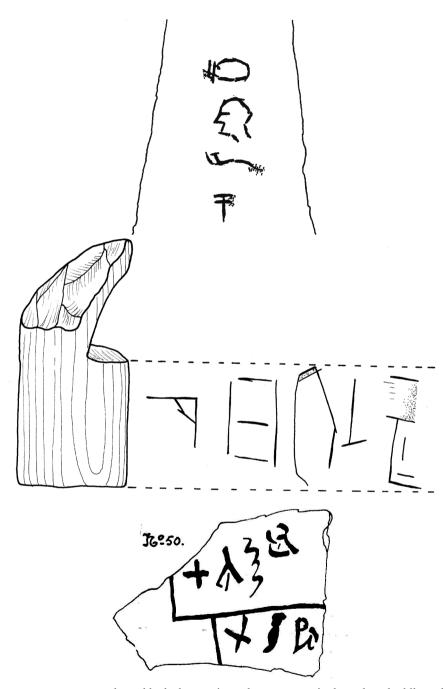


Figure 4.3. Inscriptions on the Lakhish dagger (Hamilton 2006, 390), the Lahun heddle jack (from Gallorini 2009, 119), and ostracon Cairo JE 66837 from the Valley of the Queens (Leibovitch 1940, pl. xix) (Lakhish inscription © J.C. Hamilton, reproduced with kind permission; image of Lahun heddle jack © C. Gallorini, reproduced with her permission. All rights reserved).

Colonna d'Istria 2012, and especially Hamidović 2014). The presence of these inscriptions in Babylonia at such an early date is unexpected, and their suggested interpretations are as tentative as those of the inscriptions mentioned so far.

Together, the finds mentioned in the previous paragraphs go far to suggest the widespread use, in the early and mid-second millennium, of one or more alphabetic writing systems, ranging from highly iconic (Wadi el-Hôl, Lakhish dagger, Shekhem plaque) to linear (*e.g.* Babylonian tablets, Aswan statue, New Kingdom ostraca). However, many of them lack clear datings, and none of them has been read convincingly, so that strictly speaking we cannot be certain that any of them is really an alphabetic text.

The halaham ostracon from Theban Tomb 99

Given our dramatically insufficient understanding of the supposed alphabetic inscriptions predating the thirteenth century BC, any additional source that promises a better foothold is more than welcome. A recently identified alphabetic list on a New Kingdom ostracon is therefore of paramount importance with respect to the presence of alphabetic writing in Egypt and/or its immediate surroundings (Haring 2015; Fischer-Elfert and Krebernik 2016; Schneider 2018). The ostracon is not associated with royal tomb-building like the ones mentioned in the previous section, but was found in a Theban private tomb, that of the treasurer Senneferi from the time of Thutmose III (1479–1425 BC). Although a secondary deposit (the ostracon comes from a shaft that was added to the tomb much later, together with other objects from different periods), it can be dated to the Eighteenth Dynasty by its hieratic palaeography (Haring 2015, 189–191).

It appears to be a list of words (some of which are known as Egyptian words, others of which are not) aligned to the right, with associated signs aligned to the left. The relation between the words and the signs appears to be semantic or iconic (with the sign depicting what the word says, *e.g.* a rejoicing man with the word *hy-hnw* 'to rejoice' a bird for *gr* 'bird'). In lines 1–4 on the obverse, the initial consonants of the words are *h-r-h-m* respectively. This sequence reflects the *halaḥam* alphabetical word order that is well known from demotic texts of Graeco-Roman Egypt, as well as from Ancient Arabian and Classical Ethiopic.¹⁹ It is also known from thirteenth-century

to the twenty-fourth century BC. Schwartz (2010) suggests these may be either semasiography or writing, but probably not alphabetic (perhaps the same is true for supposedly alphabetic signs on a third-millennium sherd from Tell Khuera (*ibid.*, 387; Moortgat-Correns 1978–1979, 198–199). Reference is also made by Dalley to the Balu^c stela, of uncertain date, from Moab. It is highly uncertain if the (rather iconic) signs on this stela are alphabetic, or even writing at all; see Bosshard-Nepustil and Morenz 2003, 83–84.

¹⁹ Egyptian hieroglyphic and hieratic writing originally had no specific sign for /l/ (meaning that /l/ was not a phoneme in Old and Middle Egyptian). By the New Kingdom, Egyptian writing had developed the habit of notating /l/ as a new phoneme and in foreign words and names with signs that originally stood for /n/ and /r/, or with a combination of these.

BC Ugarit, there together with the '-b-g order that would become our modern ABC (Haring 2015, 193–196). Three of the signs associated with these consonants are the same as in Proto-Sinaitic and in possibly related alphabetic inscriptions: \checkmark for h, $_$ for l, and \frown for m. They are an explicit confirmation of the consonantal readings of these signs as already proposed by Gardiner (1916), Sethe (1917) and Eisler (1919). Unfortunately the remaining signs cannot be clearly connected with Proto-Sinaitic and later alphabetic characters, but even the partial agreement noted makes the TT 99 ostracon an important landmark for any attempt to map the geographical spread and the historical development of alphabetic writing in the second millennium BC. It shows that the highly iconic forms of the signs for h, l and m were known and used in the fifteenth century BC, and in so doing it provides new fuel for discussions of the dating of inscriptions showing very similar signs.

Graphic and conceptual inspiration

Any reconstruction of the historical development of the earliest alphabetic script(s) and individual characters depends on the dating and relevance of the inscriptions discussed in the previous sections. It is thought by many, but is far from certain, that this development may be reconstructed between the eighteenth century BC (or even earlier) and the thirteenth century BC, the latter being the time of the cuneiform alphabet of Ugarit and of several dated linear alphabetic inscriptions.²⁰ It is tempting to think that there was an overall development from iconic to linear, but more clarity in the chronological controversies is required in order to test what may turn out to be a preconceived idea. Goldwasser (2016, 148-150) argues that it was precisely the iconicity that made the earliest alphabetic characters persist from the eighteenth until the thirteenth century, when professional scribes developed a standardised linear script. Iconic writing, she proposes, should not be thought of so much in terms of precise graphs, but rather as being worked with recognition cues, making *e.g.* a human head recognisable as such without sticking to fixed graphic conventions: the signified counted, rather than the precise form of the signifier. This brings us to the phenomenon of 'concrete' pictorial signs, for which see below. For the earliest users of alphabetic notation, who according to Goldwasser were not professional scribes, such a notation was relatively easy to master as long as the signifieds, and hence the names of the signs were sufficiently internalised (and for this in turn a fixed alphabetic order, such as *h*-*l*-*h*-*m* or '-*b*-*q*, would have been a help).

But what was the initial inspiration for such an iconic script, in which a limited set of pictorial characters was used to represent the consonants of a Semitic language? Ever since the discovery of Proto-Sinaitic at what is basically an Ancient Egyptian site, and a place very much dominated by hieroglyphic epigraphy, that inspiration has been traced by scholars to Egyptian hieroglyphs. Even if Serabit el-Khadim were

²⁰ In addition to the Lakhish bowl fragment (see above), there is the thirteenth century Lakhish ewer (Sass 1988, 60–61; Goldwasser 2016, 152–152 – there called 'the earliest example of the linear alphabet').

not the place where the alphabet was invented, other witnesses to early alphabetic writing still point to either Egypt itself or its immediate surroundings as the area where this invention took place. That area, even if outside Egypt proper, would have felt the dominance of Egyptian culture and writing in the Middle Bronze, and even more in the Late Bronze Age.

Petrie himself thought that the non-Egyptian users of the alphabetic script he had discovered had their own linear signs, and 'mixed many hieroglyphs with it, borrowed from their masters [*i.e.* the Egyptians]' (Petrie 1906, 131). Sass (1988, 142) stated that the Proto-Sinaitic characters were 'mostly derived from hieroglyphic prototypes'. 'Mostly' that is, but not all, and several signs even resist convincing hieroglyphic derivation. Egyptological researchers basically think of solutions to this problem in two different directions. One is to connect some Proto-Sinaitic and similar signs to cursive Egyptian writing (*i.e.* hieratic and cursive hieroglyphic inspiration in addition to monumental hieroglyphic; Kammerzell 2001, 145–151; Darnell et al. 2006. 76-82, 84-85).²¹ This approach has already been mentioned in the section 'Dating the Proto-Sinaitic script' above. Although certainly valid – cursive forms just might have inspired the inventors of the earliest alphabetic script - it poses the danger of self-confirming hypotheses. The search for prototypes in a vast Egyptian textual corpus of widely different genres, on different material supports, and in different sorts of monumental and cursive scripts is bound to be at least partly successful. But an even more compelling reason to be very cautious about this sort of analysis is that the corpus of Proto-Sinaitic and apparently related material is so very small, and therefore hopelessly insufficient for palaeographic comparison.

The other solution is to step away from Egyptian writing as the *exclusive* source of Proto-Sinaitic characters, and to allow for 'concrete', or 'real-life' inspiration in some cases (Goldwasser 2006, 135–146, 2016, 128–134). That is, the idea of iconic writing (including the forms of many signs, together with consistent scaling and the organisation of text in lines and columns) may have been taken from Egyptian examples, but the same idea possibly made the users of the new script develop their own iconic signs. Whereas some signs, such as the rejoicing man \mathcal{T} for h(e) and the lamp wick \mathcal{T} for h(arm?) find possible or even compelling prototypes in Egyptian hieroglyphs, others, like the hand for *kaph* and the 'corner' for *pe*, are unlikely to have been inspired by hieroglyphic signs (see Fig. 4.4). The *kaph* sign typically shows a vertical hand with four individual fingers, whereas the hieroglyphic 'hand' is usually horizontal, and concentrates on outline, with only the thumb separately indicated.

²¹ The approaches by Kammerzell and Darnell are different. Kammerzell's argument is in line with a scholarly tradition that goes back to the mid-nineteenth century, and which sees hieratic characters as the origin of linear alphabetic ones (such as Phoenician) and even of Ugaritic cuneiform signs (see also Hodge 1969). According to Kammerzell, the earliest alphabetic signs not only took their graphic shapes from Egyptian hieratic characters, but also their phonetic references, without the application of acrophony. Darnell, as we have seen, pleads for a combination of monumental hieroglyphic and cursive inspiration for the graphic shapes of the Wadi el-Hol alphabetic characters.



Figure 4.4. He, harm, kaph and pe in Proto-Sinaitic and their supposed hieroglyphic prototypes (facsimiles from Hamilton 2006 (see there for more samples of these and other signs) reproduced here with kind permission of the author. All rights reserved).

It is, therefore, extremely unlikely that the hieroglyphic or hieratic shape, or shapes of the Egyptian ideogram for 'hand' (which is also the phonogram for *d*) were the basis for the *kaph* sign in Proto-Sinaitic. The Proto-Sinaitic corner used for *pe* and the very similar Egyptian hieroglyph might appear to be a successful match (the Egyptian hieroglyph being the 'unambiguous' prototype according to Darnell 2005, 81), but that hieroglyph is a very rare sign (mainly used as the ideogram for *qnbt* 'council'), and the chances of finding it in hieroglyphic inscriptions at any given site are extremely small. Both this sign and the *kaph* hand, and possibly others, are therefore more likely to have had real life or concrete prototypes: a human hand, and perhaps the try-square as a craftsman's tool (both already suggested by Goldwasser 2006, 140–141, 154–155). If this is true, we may be dealing with a notation system that started off graphically as a mixed mode, some of the prototypes being characters of the Egyptian writing system(s), and others being concrete referents. Such a mixed-mode approach may be more productive than forcing all Proto-Sinaitic signs into a hieroglyphic matrix.²²

An exemplary case of a new notation system inspired by writing, though also including concrete signs, is the system of identity marks used by the royal necropolis workmen of the Egyptian New Kingdom. These workmen, who were living at what is now the site of Deir el-Medina near Luxor, each had their own personal mark, and used it to mark their property (such as tools, furniture, and pottery vessels and dishes), to mark their presence in the form of graffiti, and to compose administrative records on ostraca (see Haring 2018). Thousands of sources make it possible to reconstruct this system and its functioning during almost the entire New Kingdom. In the second half of the New Kingdom, the Ramesside Period, the system even developed into a pseudo-script, in which identity marks were combined with icons for commodities supplied to the workmen, with symbols for months, and with hieratic numbers for quantities and for calendar dates. In the same period, the number of marks inspired by characters of writing (mainly hieroglyphic) increased, but this never led to the disappearance of signs differently inspired. Concrete signs depict vessels, birds, other

²² The 'pseudo-hieroglyphic' inscriptions of Middle Bronze Age Byblos (so far undeciphered, and not likely to be an alphabetic notation; Daniels 1996, 29–30) may represent a similar graphic mix. Cf. Schwartz 2010, 388: '...this writing system includes several characters that might have been inspired by Egyptian hieroglyphs together with many others that seem to be of independent origin.'

animals and objects without having hieroglyphs for examples. As a consequence, their precise graphic shape was not important: it was the signified that counted (a 'vessel, a 'bird'), with its recognition cues. Graphic diversity of one and the same sign could therefore be considerable.

The Deir el-Medina marking system also included abstract signs, which do not depict anything, although some may go back to concrete icons that have been heavily stylised. In the Proto-Sinaitic repertoire, such may be the case with the cross for *tau* 'sign', which has not necessarily been derived from one or more cross-shaped hieroglyphs (themselves also highly abstract). The stance of the Proto-Sinaitic *tau* cross may be horizontal as well as diagonal (Hamilton 2006, 248–249), and Egyptian hieroglyphic signs include potential examples for both, but one may wonder if hieroglyphic derivation is necessary for such a basic geometric shape.

Admitting the possible presence of concrete and abstract signs together with prototypes from writing, within the same system of notation, obviously raises the questions of 1) whether one of these principles of derivation was dominant, and if so which one, and 2) how many signs precisely were actually inspired by Egyptian hieroglyphic or hieratic characters. In the case of the Deir el-Medina marks, hieroglyphic writing seems to have been the principal supplier of graphs, but it is difficult to establish the precise derivation for every individual sign. The divisions between the three types of signs are not always clear (Haring 2018, 227–231 for these 'fuzzy borders'), and it is sometimes difficult to establish the nature of a sign as truly abstract, and to distinguish hieroglyphs from other iconic signs. Indeed, the Egyptological mind may be inclined to see more hieroglyphic influence than was really there.

It has been suggested earlier in this section that Egyptian writing may have been the conceptual source of inspiration for the earliest known alphabetic writing as much as the graphic one. The very combination of iconic signs, consistent scaling, and organisation both in lines and columns, suggests a relation to Egyptian hieroglyphic. But conceptual inspiration probably also had a linguistic aspect. Before the consonantal alphabet emerged, Egyptian hieroglyphic and hieratic were the only scripts known to have been used in the Middle East whose phonetic notation was in consonants. In Old and Middle Egyptian, purely phonetic notation (*i.e.* writing words and names without ideograms) was even done with monoconsonantal signs, the total number of which was twenty-four. The same signs could be used as abbreviations of names in lists; in some cases they stood for the initial consonant. The 'alphabetic consciousness' thus reflected (Gardiner 1947, 12) may have been a major impulse in the creation of the consonantal alphabet, as was argued by Kammerzell (2001, 123–125). Even the principle of acrophony may have reached the inventors of the alphabet as part of the package that was Egyptian writing. The practice of abbreviating names by their initial consonants was known in Egypt as already stated, although it may not have been a prominent practice. A 'weak' form of acrophony was even involved in the development of the monoconsonantal hieroglyphic signs, some of these having been obtained by omitting the following vowel or weak consonant that was present in the

word for the object depicted (*e.g.* \frown *r* from /rV/ 'mouth'), or the feminine grammatical ending -*t* (*e.g.* \frown *d* from *dt* 'cobra'). This form of 'acrophony' was a linguistic process rather than a conscious practice such as abbreviating a multi-consonant word to a single consonant, which may be called 'strong' acrophony – this highly important distinction was pointed out by Pascal Vernus (2015). If the hypotheses by Gardiner (1916) and later scholars about Semitic consonantal notation and letter names are correct, the Proto-Sinaitic signary was the result of strong acrophony, a conscious and systematic process (Vernus 2015, 160). Future research will have to discover to what extent this and other aspects of alphabetic writing, conceptual and graphic, were inspired by pharaonic Egyptian writing.