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On the Origin of Alphabetic Writing

Over the past few years, several scholars have advanced new theories regarding the origin of the alphabetic writing. Douglas Petrovich (2016) and Paul LeBlanc (2017), for example, both argue that the ancient Israelites invented the alphabet during their sojourn in Egypt.¹ And in a 2019 article for *Bible and Interpretation*, Robert Holmstedt suggests that the inhabitants of Byblos developed the alphabet from the earlier Byblos Script, an undeciphered writing system found at the Phoenician city of Byblos. As part of this article, he articulates several important questions about the invention of the alphabetic writing that should guide all future inquiries into the topic: Who invented the alphabet? Where did they come from? Were they familiar with any of the other writing systems used in the ancient Near East? In this article, I will review the inscriptional and historical data that can help us answer these questions, evaluate Holmstedt's arguments, and present my own theory of alphabetic origins.

I. Review of the Evidence

The earliest alphabetic inscriptions furnish the primary evidence regarding the invention of the alphabet. These inscriptions come from the Egyptian sites of Serabit el-Khadem and Wadi el-Hôl (see map). In 1905, Sir Flinders Petrie (1906: 129–30) discovered ten early alphabetic inscriptions while excavating the Egyptian temple and turquoise mining facility at Serabit el-Khadem. Subsequent excavations at Serabit el-Khadem—from 1920s to the 2000s—have uncovered an additional 37 early alphabetic inscriptions (Lindblom 1931; Butin 1932; Starr and Butin 1936; Gerster 1961: pl. 65; Sass 1978; Tallet 2012: 1.51, 60–61, 151–52, 2.21, 23, 118). More recently, the members of the Theban Desert Road Survey (2005: 73) discovered two early alphabetic inscriptions incised in the limestone walls of Wadi el-Hôl, a ravine that served as a military road during the Egyptian Middle Kingdom (2055–1650 BCE).

¹ For a review of Petrovich 2016 see, among others, Wilson-Wright 2017 and Wilson-Wright forthcoming b.



Figure 1: Map of Egypt and the Sinai (Aren M. Wilson-Wright)

A century of scholarship on these inscriptions has yielded three key insights into their content and origin: 1) they record a Semitic language similar to Hebrew and Arabic; 2) they most likely date to the reigns of Pharaohs Amenemhat III and Amenemhat IV (1831–1777 BCE); and 3) the letters of these inscriptions were based on Egyptian hieroglyphics.

Sinai 345—an inscribed sandstone sphinx from Serabit el-Khadem (see fig. 2)—provides the key for interpreting the other alphabetic inscriptions as Semitic. This object features two inscriptions—one written in hieroglyphs and the other in alphabetic script. The hieroglyphic text reads "beloved of Hathor, [Lady] of Turquoise" (*mrj hwt-hr* [*nbt*] *mfk.t*) and refers to the patron goddess of the mining installation at Serabit el-Khadem, while the alphabetic inscription contains a Semitic paraphrase of the hieroglyphic text, as Robert Eisler (1919: 32–33) first recognized. It reads "beloved of the lady" (*m²hb^clt*). The agreement between the two inscriptions on Sinai 345 provides substantial confirmation of Eisler's interpretation. Furthermore, the phrase m²hb^cltreoccurs in at least six other inscriptions (Sinai 348, 351, 353, 356, 374), suggesting that these texts also record a Semitic language. Building on Eisler's work, W. F. Albright (1948: 13–14, 17) identified a few other Semitic words and phrases in the Sinaitic inscriptions that fit the context of a turquoise mining operation, including *nqb* 'mine, miner' and *rb nqbm* 'chief of miners'. The two inscriptions from Wadi el-Hôl also contain several plausibly Semitic words, such as ²l 'god' and *rb* 'chief' (Darnell et al. 2005: 85).





Figure 2: Sinai 345 (Butin 1932: plate x)

Of course, the production of Semitic language texts requires the presence of Semitic-speaking people. At Wadi el-Hôl, the only direct evidence for such individuals comes from an Egyptian inscription dated to the reign of Amenemhat III (1831–1786 BCE). The author of this inscription, "Bebi, general of the Asiatics" (*bbj jmj-r mš^{c f}3m.w*), led a contingent of Semitic-speaking soldiers through the Wadi. Accordingly, the members of the Theban Desert Road Survey (Darnell et al. 2005: 86–90) date the two alphabetic inscriptions from Wadi el-Hôl to the reign of Amenemhat III and hypothesize that the soldiers under Bebi's command produced these texts.

Dating the inscriptions from Serabit el-Khadem proves more controversial. The Egyptologist Alan Gardiner (1916: 13–14) originally dated these texts to the reigns of Amenemhat III and Amenemhat IV (1831–1777 BCE) since the Egyptian inscriptions from this 54 year time period contain more references to Semitic-speaking individuals than inscriptions from any other time period.² They mention four individuals with Semitic names, a visiting foreign dignitary called "Habidadum, brother of the prince of Retenu," Asiatics, and men of Retenu (Wilson-Wright 2016: 248–49).³ One these monuments (Sinai 112W) even depicts Habidadum and two of his retainers (fig. 3; Černy 1935; Goldwasser 2012: 354–58). Taken together, this evidence suggests that Habidadum was a junior partner in the mining expeditions to Serabit el-Khadem and led a contingent of Semitic-speaking individuals to Serabit in order to procure turquoise for export to Retenu (McCarter 2001: 16–17).

² The New Kingdom inscriptions from Serabit el-Khadem contain only a single reference to Semitic-speaking individuals (Giveon 1981), although as Sass (1988: 137) notes, the New Kingdom inscriptions contain less historical information that their Middle Kingdom counterparts

³ For the social and geographic scope of the terms "Asiatic" and "men of Retenu," see page six below.



Figure 3: Sinai 112W, Showing Habidadum and his Two Retainers (Goldwasser 2012: 353)

Several decades later, however, J. Leibovitch (1963: 201) re-dated the inscriptions from Serabit el-Khadem to the New Kingdom (1550–1065 BCE) based on art historical grounds. He claimed—without much evidence it turns out—that the sphinx on which Sinai 345 is carved represented the New Kingdom Queen Hatshepsut (1473–1458 BCE). At the time, almost all scholars adopted his new dating. In 1988, however, Benjamin Sass (1988: 135–37) showed that Leibovitch based his arguments on two badly-mutilated, anthropomorphic statues of Hatshepsut—hardly a reliable source of evidence for such a drastic re-dating. Sass (1988: 139) also concluded that the 19th century BCE represents the most plausible date for the early alphabetic inscriptions from Serabit el-Khadem and several scholars (Darnell et al. 2005: 90; Goldwasser 2011: 267; Wilson-Wright 2016: 248–49) have followed his lead.⁴ If they are correct, then the inscriptions from Serabit el-Khadem are roughly contemporary with the two inscriptions from Wadi el-Hôl and were most likely produced by members of Habidadum's entourage sometime between 1831–1777 BCE.

Most of the letters found in these inscriptions resemble hieroglyphic signs (fig. 4). This is no accident. As the Egyptologist Allen Gardiner (1916: 14) first pointed out, the inventors of the alphabet borrowed the shapes of the letters from the hieroglyphic script, but assigned them names and sounds based on their own language. For example, they adopted the house pictograph (see fig. 5 below) to represent the sound *b* because the word for 'house' in their language, *bêtu*, began with a *b. bêtu* also served as the original name of this letter, which survives down to the present day as Hebrew *bêt*, Greek *beta*, and English *bee*. Ninety years later, Gordon Hamilton (2006) identified the hieroglyphic models of almost all of the letters found in the early alphabetic inscriptions and reconstructed their names and sounds.

⁴ Recently, Sass (2004/2005) has adopted a 13th century BCE date for the early alphabetic inscriptions.



Figure 4: Some Correspondences between Hieroglyphic and Alphabetic Signs (Aren M. Wilson-Wright)



Figure 5: An Alphabetic bêt from Sinai 359 (Aren M. Wilson-Wright)

II. Tentative Conclusions

We can draw several conclusions from this brief overview of the data. First, the inventor(s) of the alphabet spoke a Semitic language, which served as the source for the names of the letters. Second, they worked in an Egyptian environment, where they had ample opportunity to observe and adapt hieroglyphic signs. Third, they must have worked in a centrally located site withing Egypt sometime in the 20th or early-19th century BCE in order for alphabetic writing to spread to remote corners of the Egypt by the mid-19th century BCE. There are several possibilities, but in my opinion, the city of Avaris (modern Tell el-Dab^sa) in the eastern Nile delta represents the most plausible option for this site. As the Egyptologist Manfred Bietak (2010b) has shown, many Semitic-speaking individuals called this city home during the Middle Kingdom, including perhaps

Habidadum's brother, "the prince of Retenu." Excavations at Tell el-Dab^sa have yielded a scarab seal that originally belonged to "the prince of Retenu, Di-sobek-em-het" (Martin 1998) and a seal impression bearing the title "the prince of Retenu" (Bietak 2010a; 2010c). These objects provide a potential link between the Semitic-speaking community at Avaris and Habidadum's contingent at Serabit el-Khadem.

Despite this connection, the exact ethnic and social identity of the alphabet's inventors proves harder to pinpoint. We can glean some data from the identity of the earliest *users* of alphabetic writing. At Serabit el-Khadem, these individuals belonged to Habidadum's retinue of "Asiatics" and "men of Retenu"; at Wadi el-Hôl, they were "Asiatics." Such descriptors are not particularly helpful, however. In the Middle Kingdom, the term Retenu designated a large swathe of the modern Middle East, ranging from today's Israel and Jordan in the south to Syria in the north (Gardiner 1947: 142–149; Posener 1949: 72–73; Fecht 1984: 473–477). This area did not constitute a single unified territory. The Middle Kingdom execration texts—a series of curses directed at the Pharaohs' foreign enemies—refer to dozens of smaller kingdoms located within Retenu itself (Sethe 1926: 43–54; Posener 1940: 62–94; Koenig 1991: 111–12). The term "Asiatic" was similarly broad. It could refer to anyone from the wider ancient Near East (Ryholt 1997 293–94; Schneider 2003: 5).

The social class of the alphabet's earliest users is easier to determine. At Serabit el-Khadem, script use was stratified by class. Only upper class Semitic-speakers, such as Habidadum, had the financial means to hire the highly-trained scribes and stone-carvers who could produce a hieroglyphic inscription.⁵ The men under his command weren't so lucky. These individuals quite literally occupied the bottom of the socio-economic order. Five Middle Kingdom Egyptian inscriptions from Serabit el-Khadem (Sinai 85N, 110W, 114S, 115, 120N) list the members of the expeditionary forces and without fail, the two Semitic-speaking groups, "Asiatics" and "men of Retenu," appear at the end, right before the pack animals. As a result, these individuals never appear as the authors of hieroglyphic texts at Serabit el-Khadem, and instead opted for cheaper, DIY-alphabetic inscriptions. What little we can read of the alphabetic inscriptions support this conclusion: several texts identify their author as either a "miner" (*nqb* in Sinai 350) or a "chief of miners" (*rb nqbn* in Sinai 346 and 349).⁶

Given the prestige attached to hieroglyph writing, it seems unlikely that the alphabetic writers at Serabit el-Khadem could also write hieroglyphs. If they could use the more prestigious hieroglyphic script, why would they have bothered with alphabetic writing at all? Nevertheless, many of the alphabetic writers at Serabit el-Khadem sought to capture the prestige of hieroglyphic writing by imitating the form and phrasing of the Egyptian inscriptions. Many of the Egyptian inscriptions from Serabit el-Khadem appear on monumental pillars. Similarly, many of the alphabetic inscriptions appear on crude pillars, pillar-shaped plaques, or within the two-dimensional outline of a pillar (Sass 1988: 10). The alphabetic writers at Serabit el-Khadem also imitated the common Egyptian formula "Beloved of Hathor, lady of Turquoise" (*mrj hwt-hr nb.t*

⁵ But even Habidadum couldn't afford the best of the best. The inscriptions bearing his name are of relatively low quality compared to some of the other hieroglyphic inscriptions found at Serabit el-Khadem.

⁶ On these texts see most recently, Wilson-Wright forthcoming a, Wilson-Wright forthcoming c. Chief of miners was not as lofty of a position as it sounds. According to the Egyptian inscriptions from Serabit el-Khadem, a "chief of miners" oversaw a group of only nine other workers.

 $mfk\mathfrak{X}$) in their own inscriptions; seven of the alphabetic inscriptions include the Semitic formula "beloved of the Lady" $(m[\mathfrak{X}]hb[b]\mathfrak{X}lt$ Sinai 345, 348, 351, 353, 356, 361, 374).

III. Review of Holmstedt's Proposal

We can use the evidence from the earliest alphabetic inscriptions to evaluate Holmstedt's recent theory of alphabetic origins. He argues that the inhabitants of Byblos derived the alphabet from the earlier Byblos script and brought it with them to Serabit el-Khadem. In support of this argument, he cites three pieces of evidence: 1) the similarity between the Byblos Script and the letters of the earliest alphabetic inscriptions; 2) the equation of Hathor with the Semitic goddess "the Lady" (b^{clt})—whom he identifies as "the Lady of Byblos" ($b^{clt} gbl$)—on Sinai 345; and 3) the unlikelihood of illiterate (i.e., pre-literate) individuals inventing a new writing system (Holmstedt 2019: 10). Upon closer inspection, all three pieces of evidence prove problematic.

The Byblos script is an undeciphered, syllabic writing system from the Phoenician city of Byblos.⁷ It appears on 14 inscriptions, which contain approximately 783 letters in total (Vita and Zamora 2018: 77). The date of these inscriptions is debated. The excavator of Byblos, Maurice Dunand (1945: 87) dated them between 1900 and 1600 BCE; Georges Posener (1969: 239) proposed a 19th century BCE date; and James Hoch (1991: 119) favors a date before 1900 BCE. Many of the signs in the Byblos script resemble Egyptian hieroglyphs (fig. 6), which suggests that the Byblos script—like the alphabet—was based on the hieroglyphic writing system (Vita and Zamora 2018: 97)). Several of the signs in the Byblos Script also resemble early alphabetic letters (Vita and Zamora 2018: 97; see fig. 7 below).

Signes phéniciens	Hiéroglyphes égyptiens	Écriture hiératique	Signes phéniciens	Hiéroglyphes égyptiens	Écriture hiératique	Signes phéniciens	Hiéroglyphes égyptiens	Écriture hiératique
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Figure 6: Correspondences between Hieroglyph Signs and Signs from the Byblos Script (Dunand 1945: 122–23)

⁷ In a syllabic script, letters represent entire syllables, such as "ba" or "ku," rather than single consonants or vowels, as the do in an alphabetic script.

ğ	\mathcal{B}	(ox-head)
П		(house)
Ž	\sim	(fish)
*	Ŷ	(rejoicing man)
m	III	(fence? ³⁵)
بد		(arm)
¥	¥	(hand)
ጵ	Ŵ	(palm of the hand
~	~~~~	(water)
B	لے	(serpent)
4 0-	0	(eye)
Ô	Ô	(vessel)
4	$\langle \Sigma \rangle$	(head)
~	ώ.	(teeth)
†	+	(mark)

Figure 7: Correspondences between Signs from the Byblos Script (left column) and Early Alphabetic Letters (middle column) (Hoch 1990: 119)

Despite this similarity, there are two obstacles to seeing the Byblos script as the mother of alphabetic writing. In general, letters tend to change over time, often becoming less pictographic in the process (Cross 2003: 345–47). A lowercase "a," for example, looks nothing like its early alphabetic progenitor, the ox-head pictograph (see fig. 8 below). But, in several cases, the signs in the Byblos script are more developed than their proposed alphabetic counterparts (fig. 8). This means that the alphabet cannot derive from the currently attested form of the Byblos Script, but would have to come from an earlier, more pictographic form of this writing system. Second, eight of the alphabetic letters (i.e., d, h, l, p, s, s, w, and z) lack a clear counterpart in the Byblos script. To maintain the connection between the two writing systems, we would need to assume that the Byblos Script either lost these letters or the users of the alphabet invented them. But there is no evidence for doing so.



Figure 7: Comparison of the Ox-head Sign from the Alphabet and the Byblos Script (Aren M. Wilson-Wright)

In light of these complications, I follow Dunand (1945: 122–131) in seeing the Byblos Script as the sister of alphabetic writing, rather than its mother. Such an arrangement helps explain the similarity between the two writing systems—they both derive from the same hieroglyphic parent system—while avoiding the difficulties with treating the alphabet as the direct descendant of the Byblos script. In this scenario, the inventor of the alphabet and the inventor of the Byblos Script worked independently and adapted a slightly different subset of hieroglyphic signs, leaving certain alphabetic letters without an equivalent in the Byblos Script. The process of simplification then took place at different rates in the two writing systems: certain alphabetic letters remain more pictographic than their counterparts in the Byblos Script.

Holmstedt argues that the alphabetic writers at Serabit el-Khadem equated Hathor with the "Lady of Byblos," the patron goddess of Byblos. As Sinai 345 shows, the Semitic title "the Lady" (*b*?*lt*) served as a translation and abbreviation of the longer Egyptian title for Hathor "the Lady of Turquoise." It does not necessarily suggest an identification between Hathor and a Semitic goddess, such as the "Lady of Byblos" (*b*?*lt gbl*). And even if it did, there is no guarantee that the title *b*?*lt* in these inscriptions refers to the Lady of Byblos. Many Semitic goddesses bore the title "Lady" (*b*?*lt*) in the 2nd and 1st millennia BCE, including Anat (Rahmouni 2007: 108–117), Nanay (van der Toorn 2018: 69–70), and an otherwise unnamed goddess from the Aramean kingdom of Hamat (Payne 2012: 64). Furthermore, there is no evidence that any of the Semitic -peaking individuals at Serabit el-Khadem came from Byblos, which might tip the scales in favor of treating *b*?*lt* as an abbreviation of *b*?*lt gbl*. The Egyptian word for Byblians (*kbnj*) never appears in any of the Egyptian inscriptions at Serabit el-Khadem from the Middle Kingdom.⁸ Nor did the broader term "men of Retenu" include Byblians during the Middle Kingdom. The execration texts from this time period distinguish between Byblos and Retenu—indicating that Byblos did not fall under the umbrella of Retenu.

According to Holmstedt, it is unlikely—or even impossible—for pre-literate individuals to invent a new writing system. He writes (Holmstedt 2019: 7):

how can we call those who invented a writing system "illiterate"? Is it logical to speak of people who cannot by definition write inventing a writing system? If they were illiterate, then their products cannot be texts and their forms cannot be a writing system, but only an incoherent set of scratches that reflects either an attempt at crude art or simple mimicry of what they witnessed produced by literate scribes. But then, why would they go to such trouble? And is this reasonable as an activity that unfolded over half a millennium?

He concludes on the basis of this argument that the inventors of the alphabet must have known another writing tradition because pre-literate individuals cannot invent new writing systems. But as mentioned above, this is not necessarily the case. At least two other writing systems—the Cherokee syllabary and the Pahawh Hmong alphabet—were invented by pre-literate individuals. Furthermore, Holmstedt's arguments make it difficult to explain the existence of writing at all: if only literate individuals can invent new writing systems, how did the practice of writing originate in the first place? The inventors of the first writing systems—cuneiform, Mayan hieroglyphs, and

⁸ This term only appears in a single New Kingdom inscription from Serabit el-Khadem (Sinai 275 NE 2, dated to 1148 BCE), where it describes a certain class of ocean-going ship, rather than an ethnic group.

Chinese characters—must have been preliterate. There simply weren't any existing writing systems for them to imitate.

IV. An Alternative Scenario

Although Holmstedt's theory of alphabetic origins is problematic, his work highlights several important questions regarding the invention of alphabetic writing: Who invented the alphabet? Where did they come from? And what other writing systems, if any, were they conversant with? Based on the evidence from the earliest alphabetic inscriptions themselves, I propose the following scenario as a tentative answer to these questions: unable to write hieroglyphs themselves, a Semitic-speaking individual or individuals at Avaris or another centrally located site sought to recreate the prestige of the Egyptian script by inventing a new writing system. As the basis of this new system, they adopted a subset of Egyptian hieroglyphs, but gave them new sounds corresponding to the sound system of their own language.

This scenario receives support from several historical parallels. Sequoyah, the inventor of the Cherokee syllabary, adopted and adapted characters from the Latin script (Walker and Sarbaugh 1993: 83–4), while Shong Lue Yang, the inventor of the Pahawh Hmong alphabet, drew on the existing Lao alphabet for inspiration (Smalley 1990: 86–90). As mentioned above, both men were pre-literate prior to inventing a new writing system (Walker and Sarbaugh 1993: 71; Smalley 1990: 86–90), which suggests that the inventor(s) of alphabetic writing may have been pre-literate as well (Goldwasser 2015). This makes sense. Pre-literate individuals have a bigger incentive to invent a new writing system than literate individuals. Literate individuals can always fall back on the writing tradition they already know. So why reinvent the wheel? Therefore, I would tentatively attribute the invention of the alphabet to a lower class, possibly pre-literate Semitic-speaker working at Avaris. With luck, future discoveries will bring this portrait into sharper resolution.

References

- Albright, W. F. 1948. "The Early Alphabetic Inscriptions from Sinai and their Decipherment." BASOR 110: 6–22.
- Bietak, Manfred. 2010a. "A Palace of the Hyksos Khayan at Avaris." In Proceedings of the 6th International Congress of the Archaeology of the Ancient Near East: 5 May–10 May 2009, Sapienza, Universita di Roma, Vol 1., edited by Paolo Matthiae and Licia Romano, 99–109. Wiesbaden: Harrossowitz.
- Bietak, Manfred. 2010b. "From Where Came the Hyksos and Where Did They Go?" In *The* Second Intermediate Period (Thirteenth-Seventeenth Dynasties): Current Research, Future Prospects edited by M. Marée, 139–81. Leuven: Peeters.
- Bietak, Manfred. 2010c. "Le Hyksôs Khayan, son palais, et un letter cunéiforme." Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres 2010, II: 973–90.
- Butin, Romain F. 1932. "The Proto-Sinaitic Inscriptions." *Harvard Theological Review* 25: 130–203.
- Černý, Jaroslav. 1935. "Semites in Egyptian Mining Expeditions to Sinai." *Archiv Orientálni* 7: 384–389.
- Cross, Frank Moore. 2003. Leaves from an Epigraphers Notebook: Collected Papers in Hebrew and West Semitic Epigraphy. Winona Lake: Eisenbrauns.
- Darnell, John C. et al. 2005. "Two Early Alphabetic Inscriptions from the Wadi el-Hôl: New Evidence for the Origin of the Alphabet from the Western Desert of Egypt." *Annual of the American Schools of Oriental Research* 59: 73-124.
- Dunand, Maurice. 1945. *Byblia grammata: documents et recherches sur le développement de l'écriture en Phénicie.* Beirut.
- Eisler, Robert. 1919. Die kenitischen Weihinschriften der Hyksoszeit im Bergbaugebiet der Sinaihalbinsel und einige andere unerkannte Alphabetdenkmäler aus der Zeit XII. bis XVIII. Dynastie. Freiburg: Herdersche Verlagshandlung.
- Fecht, Gerhard. 1984. "Sinuhes Zweikampf als Handlungskern des dritten Kapitels des Sinuhe-'Romans'." In *Studien zu Sprache und Religion Ägyptens*, I: *Sprache. Zu Ehren von Wolfhart Westendorf überreicht von seinen Freunden und Schülern*, 465–84. Göttingen: Junge.
- Gardiner, Alan H. 1916. "The Egyptian Origin of the Semitic Alphabet." *Journal of Egyptian Archaeology* 3: 1–16.
- Gardiner, Alan H. 1947. Ancient Egyptian Onomasticon, I. Oxford: Oxford University.
- Gardiner, Alan H., and Peet, T. E., eds. 1952. *The Inscriptions of Sinai*, I: *Introduction and Plates*. Egypt Exploration Society 9. London: Egypt Exploration Society.
- Gardiner, Alan H., Peet, T. E., and Černý, Jaroslav, eds. 1955. *The Inscriptions of Sinai*, II: *Translations and Commentary*. London: Oxford University.
- Gerster, Georg. 1961. Sinai: Land der Offenbarung. Berlin: Darmstadt.
- Giveon, Raphael. 1981. "A New Kingdom Stela from Sinai." EJ 31: 168–171.
- Goldwasser, Orly. 2011. "The Advantage of the Cultural Periphery: The Invention of the Alphabet in Sinai (Circa 1840 B.C.E.)." In *Cultural Contacts and the Making of Cultures: Papers in Homage to Itamar Even-Zohar*, edited by Rakefet Sela-Sheffy and Gideon Toury, 255–322. Tel-Aviv: Tel-Aviv University Unit of Culture Research.
- Goldwasser, Orly. 2012. "Out of the Mists of the Alphabet Redrawing the 'Brother of the Ruler of Retenu'." Ägypten und Levante 22: 353–374.

- Goldwasser, Orly. 2015. "The Invention of the Alphabet: On 'Lost Papyri" and the Egyptian 'Alphabet'." In Origins of the Alphabet: Proceedings of the First Polis Institute Interdisciplinary Conference, edited by Claudia Attucci and Christophe Rico, 124–140. Cambridge: Cambridge Scholars.
- Hamilton, Gordon J. 2006. *The Origins of the West Semitic Alphabet in Egyptian Scripts*. The Catholic Biblical Quarterly Monograph Series 40. Washington D.C.: The Catholic Biblical Association of America.
- Hoch, James E. 1990. "The Byblos Syllabary: Bridging the Gap between Egyptian Hieroglyphs and Semitic Alphabet." *Journal for the Society of the Study of Egyptian Antiquities* 20: 115–124.
- Holmstedt, Robert D. 2019. "The Invention of the Alphabet: Historical Sleuthing and the Power of Naming." *Bible and Interpretation*. https://bibleinterp.arizona.edu/articles/invention-alphabet-historical-sleuthing-and-power-naming-0
- Koenig, Yvan. 1991. "Les textes d'envoûtement de Mirgissa," *Revue d'Égyptologie* 41 (1991): 101–125.
- LeBlanc, Paul D. 2017. Deciphering the Proto-Sinaitic Script: Making Sense of the Wadi el-Hol and Serabit el-Khadim Early Alphabetic Inscriptions. Ottawa: Subclass Press.
- Leibovitch, J. 1963. "The Date of the Proto-Sinaitic Inscriptions." Le Muséon 76: 201-203.
- Lindblom, J. 1931. "Die altsinaitische Inschrift, Nr. 358." Le Monde Oriental 25: 90-101.
- Martin, Geoffrey T. 1998. "The Toponym Retjenu on a Scarab from Tell el-Dab^sa." Ägypten und Levant 8: 109–112.
- McCarter, P. K. 2001. "The Early History of the Alphabet." Paper presented at the Samuel Iwry Lecture, Baltimore.
- Payne, Annick. 2012. Iron Age Hieroglyphic Luwian Inscriptions. Atlanta: Society of Biblical Literature.
- Petrie, W. M. Flinders. 1906. Researches in Sinai. New York: E. P. Dutton and Company.
- Petrovich, Douglas N. *The World's Oldest Alphabet: Hebrew as the Language of the Proto-Consonantal Script.* Jerusalem: Carta.
- Posener, Georges. 1940. *Princes et pays d'Asie und de Nubie*. Brussels: Fondation Égyptologique Reine Élisabeth.
- Posener, Georges. 1949. "Le pays Retenou au Moyen Empire." In Actes du XXI^e Congrès international des orientalistes, Paris, 23–31 Juillet 1948, 72–73. Paris: Imprimerie Nationale
- Posener, Georges. 1969. "Sur les inscriptions pseudo-hiéroglyphiques de Byblos." In *Mélanges* offerts à Maurice Dunand, vol. I, 223–239. Beirut: Imprimerie Catholique.
- Rahmouni, Aicha. 2007. Divine Epithets in the Ugaritic Alphabetic Texts. Leiden: Brill.
- Ryholt, Kim. 1997. *The Political Situation in Egypt during the Second Intermediate Period, C.* 1800–1550 B.C. Copenhagen: Carsten Niebuhr Institute.
- Sass, Benjamin. 1978. "Two Previously Unknown Proto-Sinaitic Inscriptions." *Tel Aviv* 5: 183–187.
- Sass, Benjamin. 1988. *The Genesis of the Alphabet and Its Development in the Second Millennium B. C.* Ägypten und Altes Testament 13. Wiesbaden: Harrassowitz.
- Sass, Benjamin. 2004/2005. "The Genesis of the Alphabet and Its Development in the Second Millennium B.C.–Twenty Years Later." *De Kêmi à Birît Nâri 2*: 147–166.
- Schneider, Thomas. 2003. Ausländer in Ägypten während des Mittleren Reiches und der Hyksoszeit, vol. 2. Wiesbaden: Harrassowitz.

- Sethe, Kurt. 1926. Die Ächtung feindlicher Fürstern, Völker und Dinge auf altägyptischen Tongefäss-Scherben des Mittleren Reiches. Berlin: de Gruyter.
- Smalley, William A. 1990. *Mother of Writing: The Origin and Development of a Hmong Messianic Script*. Chicago: University of Chicago Press.
- Starr, Richard F. S., and Romain F. Butin. 1936. *Excavations and Proto-Sinaitic Inscriptions at Serabit el Khadem*. London: Christophers.
- Tallet, Pierre. 2012. *La zone minière pharaonique du Sud Sinaï I: Catalogue complémentaire des inscriptions du Sinaï*. 2 vols. Mémoires publiés par les membres de l'Institut Français d'Archéologie Orientale 130. Cairo: Institut Français d'Archéologie Orientale.
- van der Toorn, Karel. 2018. Papyrus Amherst 63. Münster: Ugarit-Verlag.
- Vita, Juan-Pablo, and José-Ángel Zamora. 2018. "The Byblos Script." In *Paths in Script Formation in the Ancient Mediterranean*, edited by Silvia Ferrara and Miguel Valério, 75–120. Rome: Consiglio Nazionale delle Richerche.
- Walker, Willard, and James Sarbaugh. 1993. "The Early History of the Cherokee Syllabary." *Ethnohistory* 40: 70–94.
- Wilson-Wright, Aren M. 2016. "Sinai 357: A Northwest Semitic Votive Inscription to Teššob." Journal of the American Oriental Society 136: 247–263.
- Wilson-Wright, Aren M. 2017. "Hebrew or Not?: Reviewing the Linguistic Claims of Douglas Petrovich's *The World's Oldest Alphabet.*" *Bible and Interpretation*. https://www.bibleinterp.com/articles/2017/07/wil418006.shtml
- Wilson-Wright, Aren M. Forthcoming a. "Beloved of the Lady Are Those Who…": A Recurring Memorial Formula in the Sinaitic Inscriptions. *Bulletin of the American Schools of Oriental Research*.
- Wilson-Wright. Forthcoming b. "Facts Matters: A Review of D. Petrovich, *The World's Oldest* Alphabet: Hebrew as the Language of the Proto-Consonantal Script." Journal of the American Oriental Society 140.
- Wilson-Wright, Aren M. Forthcoming c. "Māt Gets a Promotion: Sinai 349 and the Date of the Sinaitic Inscriptions." In a Festschrift.