

## The Invention of the Alphabet: Historical Sleuthing and the Power of Naming

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Cognitively as well as sociologically, writing underpins ‘civilization’, the culture of cities. (Jack Goody, *The Interface Between the Written and the Oral* [Cambridge: Cambridge University Press, 1987], 300)

### **Introduction**

There may be no greater technological invention in human history than writing. Every hour of every day we write (and take writing for granted), whether by the old-fashioned technique of using a mechanical instrument on a relatively hard surface or the new-fangled method of using just thumbs on an electronic screen. How often, though, do we lean back from our task and ask ourselves *what* we are actually doing or *how* representing language by an arbitrary set of shapes on a surface developed?

Think about it—writing is an odd activity. We take what belongs to the world of sound and translate it to the visual and material world with ink, graphite, or pixels. Certainly it is an incredibly useful activity, for taking notes, recording grocery lists, tracking finances. For some people, such as scholars and journalists (not to mention the twitter obsessed), it is much more than useful; it is an essential part of their livelihoods, if not identities. For those of us in a post-Gutenberg (and now digital) world, where print and

screen have taken the activity of writing and the dissemination of its product to almost unimaginable heights, to say that writing is “useful” may be the understatement of the century. Even apart from our print-saturated culture, writing is critical to the existence of civilization itself, as the linguist and philosopher John Searle asserts:

... the big step between us and animals is in the language. But the big step between civilization and more primitive forms of human society is written language.... It is a constitutive element of civilization in that you cannot have what we think of as the defining social institutions of civilization without having written language. You cannot have universities and schools. But not just the pedagogical institutions, but you can't even have money or private property or governments or national elections ... without a written language. (Searle 2005)

Embedded in Searle's comment is the notion that *language* and *writing* are not the same thing. Humans are genetically wired to acquire and use language, even in contexts that do not provide a wealth of language stimulus. But we must *learn* writing, and though it's easy to forget what it was like during those first years of grade school, it takes a great deal of work and time to master writing, which requires manual dexterity and abstract cognitive processing, and it is worth noting that the same abstractness and difficulty of mastery apply to the cognate activity of reading (see O'Connor 1996b: 787; Rollston 2010a: 68-69). The salient point is that we cannot exaggerate the creativity of those who innovated writing systems.

Searle's description has a noticeably modern cast to it, but much of it rings true even for world before the iPhone, the Macintosh, the IBM Selectric, Gutenberg's press, or codices. His description addresses the *why* of the story—complex institutions are the necessary and sufficient condition for the use (or, initially, the innovation) of writing. The question it prompts is the *who*?

For the independent development of writing itself, there are three recognized innovators: the great ancient civilizations of Sumer (fourth millennium B.C.E.) and China (second millennium B.C.E.) and the later great civilization of the Mayans (first millennium B.C.E.). Some also include early dynastic Egypt on this list, making four first innovators of writing (Woods

2010). All other systems are arguably derived from or inspired by these three or four first systems. But these earliest systems are syllabaries that emerged from logographies, which leaves the question: where did our Western writing system develop—who invented the alphabet?

The *where* of the alphabet seems clear enough: the earliest examples of alphabetic writing come from locations in Egypt, the Sinai Peninsula, and Canaan, all of which date from the mid-nineteenth century B.C.E. (for the Wadi el-Hol inscriptions) to the sixteenth century B.C.E. (for the Serabit al-Khadem inscriptions). The *who* and *why* of the earliest alphabetic texts is where the sleuthing begins. Among the various proposals, a very recent one stands out, if for no other reason than its audacity: the creators and the language of the texts were Hebrew (Petrovich 2016).

Is this new proposal cogent? Did the “Hebrews” innovate the alphabet in the early second millennium B.C.E.? If not them, then who? Let’s find out.

## Towards the Invention of the Alphabet



Scholars have long known about and discussed the role of apparently alphabetic inscriptions discovered in various excavations and locations in Egypt and the Sinai Peninsula (see map at left; Petrovich 2016: x). Most of the texts are securely dated to the mid-second millennium.

A consensus emerged fairly early that these early alphabetic forms were derived from Egyptian writing and used for a West Semitic language. The ensuing discussion centered primarily on whether the letter forms were derived from hieroglyphic or hieratic and, of course, on who was responsible (for an overview of scholarship, see Hamilton 2006: 5-12).

But before we address the *who* of this new alphabet, it is important to note that it was not the only innovation at this time. Intriguingly, two writing system innovations appeared at roughly the same time and in the ancient Near

East. Moreover, from what we can deduce, both represent essentially the same type of language: some second millennium West Semitic language.

The earlier of the two writing systems appears to be a syllabary, not an alphabet. But, unlike the alphabetic texts, the syllabic texts are more clearly associated with a speech community: Byblian Phoenicians. In the late 1920s fourteen texts inscribed on bronze tablets and carved in stone were discovered during excavations at the ancient Phoenician city of Byblos (Dunand 1945: 139-157; Hoch 1990). The bronze tablets in particular were found in a clear archaeological context that corresponds to the Egyptian Middle Kingdom (ca. 2050-1800 BC).

Due to the pictographic nature of the writing, the excavator called it “pseudo-hieroglyphic,” but it is now generally agreed that it is a syllabic writing system. That is, an innovative system in which signs represent *only* consonant-vowel sequences, such as *ba*, *bi*, *bu*, etc. Unlike the previous writing systems, in which syllables could be represented by re-tasked logographs, this system has no apparent logographic layer. This innovation is now typically called the Byblos syllabary and though this late third or early second millennium writing system has not been entirely deciphered, enough likely correspondences have been determined to consider it the first major writing innovation since the fourth millennium.

If the Byblians were the inventors of the new syllabary (this is the logical conclusion given the find-spot of the texts—Byblos), *why* did they feel compelled to develop a new writing system? Circling back to the necessary and sufficient causes for writing development helps us propose a reasonable broad sketch.

During the Old Kingdom period of Egypt (ca. 2700-2200) there was significant Egyptian trade with the new cities developing on the northern coast of the Levant, in modern Lebanon (Bard 2000: 58). Chief among these cities, at least from the Egyptian perspective, was Byblos, or “Gubla” in its own language. In fact, “the earliest inscriptional evidence of an Egyptian king at the Lebanese site of Byblos belongs to the reign of Khasekhemwy, the last ruler of the 2nd Dynasty” (Bard 2000: 71). And even before the Old Kingdom, one of the oldest buildings discovered in Egypt, “Narmer’s Temple” at

Hierankopolis in Upper Egypt at the end of the fourth millennium (ca. 3400) was built with cedar timbers imported from Byblos.<sup>1</sup>

And First Dynasty rulers used Byblian timbers in the construction of their tombs (Bard 2000: 71). Though the early history of Byblos has been largely neglected, a recent study points out that “a range of evidence suggests that Byblos was a prosperous and powerful city during the Early and Middle Bronze Ages” (Kilani 2017: 2). Byblos’ commercial prominence continued through the Late Bronze Age, though if it was at least partially dependent on Egypt for its stability, the end of the Old Kingdom and the ensuing decentralization of the First Intermediate Period (ca. 2200-2050 B.C.E) would very likely have brought about changes.

This period of instability may be the crucible from which both the syllabic and alphabetic writing systems were forged. Just as with the increase of regional art in Egypt in the absence of the forceful centralization of the Old Kingdom dynasties, the withdrawal of the Egyptian dominance in the Levant might have encouraged Byblos to search in new directions to replace lost Egyptian trade. This, in turn, is a plausible context for the kind of creativity needed for Byblian scribes trained in hieroglyphics to create their own writing system for administrative purposes in a period of relatively new independence.

Within a century or two of the Byblian syllabic texts, the earliest alphabetic texts appeared in the Turquoise mines of Serabit el-Khadem. In 1869 E. H. Palmer discovered the first alphabetic inscription, and Flinders Petrie found eleven inscribed objects in 1905 in the temple area; the rest were discovered on stone slabs near two of the mine-shafts (see Albright 1969: 1-9). Also, one inscription was discovered on a sphinx statue, which, as we will see, provided the key to partial decipherment. The Serabit el-Khadem texts mostly date from the seventeenth to fifteenth centuries B.C.E. (see Hamilton 2006).

After the Serabit el-Khadem texts were found, fragments of other texts in similar script were found in Canaanite sites such as Lachish, Gezer, and Shechem. Notably, some of these latter texts have been dated to the eighteenth-sixteenth centuries B.C.E.; the earliest of these, then, are over a century older than the Serabit el-Khadem texts. Appropriately, the forms of some of the letters in the early Canaanite texts appear less schematized than

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<sup>1</sup> <https://interactive.archaeology.org/hierakonpolis/temple.html>.

the Sinaitic texts, viz. the *yod* looks more like a human hand, the *rosh* more like a human head, etc. (see Hamilton 2006 for a thorough discussion of all the texts).

Finally, in the late 1990s in northern upper Egypt, in the Wadi el-Hol (see map above), archaeologists discovered what appear to be an even earlier version of this same alphabet, which they date to ca. 1850-1700 B.C.E. The result is that we have what appear to be alphabetic texts appearing in Egypt, the Sinai, and scattered Canaanite sites (all major settlements on established routes), ranging from the nineteenth to fifteenth centuries B.C.E.

Of course, the question of *who* was responsible for the alphabetic innovation and *what* motivated it has engendered significant speculation. And it's worth reminding ourselves that this was not a trivial innovation. The move from a logo-syllabic writing system to an alphabetic one involves a significant amount of abstraction. Reconstructing the general (ethnic, national, and/or linguistic) identity of the innovators is certainly added by the Egyptian connection: many texts appear in an Egyptian geographic context or are associated with Egyptian-style art (a sphinx, a block statue, an *ankh*-sign), and the case that the letter forms were derived from a variety of Egyptian hieroglyphic and hieratic forms is strong.

### **The Alphabet—Who Dunit?**

Sadly, as is the case with so many artefacts, the creators (both of the system and of the individual inscriptions over the centuries) did not leave a detailed explanation or transparently sign their names. Because the first millennium alphabet is used for Phoenician, Hebrew, Moabite, Ammonite, Edomite—all Canaanite languages—as well as Aramaic, the consensus is that the inventors were Canaanites and most have suggested (or assumed) that those responsible were literate, perhaps with some scribal training.

Defending the hypothesis that the inventors were illiterate Canaanite workers is one of the most indefatigable contemporary scholars working on the early alphabet, Orly Goldwasser (see most recently Goldwasser 2006, 2011, 2012, 2015, 2016). She argues that the lack of standardization in the letter forms over the five-hundred-year stretch of their attestation weighs against trained scribes as the innovators. Christopher Rollston has mounted a

cogent counter-argument in which he argues that “writing in antiquity was an elite venture and those that invented the alphabet were Northwest Semitic speakers, arguably they were officials in the Egyptian apparatus, quite capable with the complex Egyptian writing system” (Rollston 2010b).

Rollston’s strongest argument may be his discussion of literacy in the ancient Near East. He cites numerous studies, including his own on Hebrew epigraphs, that place literacy not only at very low levels (e.g., well below five percent of the population) but limited to a very specific educated class of elites.

What the issue of literacy brings to the discussion is a point of logic that Rollston could have highlighted: 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?

No, it makes little sense that those who understood the abstract nature of writing and had the creativity and motivation to innovate a new, more abstract system were illiterate miners. And it makes even less sense that multiple generations of illiterate workers engaged in such mimicry.

And so we are back to the basic question: well, then, *who*? In his 2016 monograph, Douglas Petrovich has provided a new analysis of the early alphabetic texts as the product of Hebrews and representing the direct ancestor of Biblical Hebrew. Petrovich’s argument so challenges the consensus with both its readings of the texts and conclusions that it is worth pausing to review his argument.

Petrovich argues that the language of the “PCH” script can be confidently identified as ancient Hebrew, for three distinct reasons. First, Petrovich has identified the proper noun “Hebrews” in the caption text of Sinai 115. Second, “every single proto-consonantal letter was found to have a M[iddle] E[gyptian] hieroglyphic exemplar from the ME sign list, and to match with a corresponding Biblical Hebrew (BH) word that is logically and acrophonically connected to the meaning of the pictograph.” And third, in

three separate texts Petrovich reads three proper names he identifies as biblical persons: *Ahisamach* (Sinai 375a; see Exod 31:6), *Asenath* (Sinai 376; see Gen 41:45), and *Moses* (Sinai 361; see Exod 2:10).

Alan Millard, Christopher Rollston, and Aren Wilson-Wright have responded online to Petrovich's claims (Millard 2017, Rollston 2016a,b, Wislon-Wright 2017), and Petrovich has countered with his own online comments posted on his *academia.edu* site. The details are fascinating, but do not need to be repeated here. The nut of the argument boils down to three issues, not all of which have been adequately addressed by any of the participants. First, are all the signs Petrovich identifies as "proto-consonantal Hebrew" part of the alphabetic texts? Second, do a "Hebrew" people exist in the early second millennium such that they would have a distinct language and have the necessary and sufficient conditions for innovating a writing system? Third, even if the last point were granted, does the content of the alphabetic texts clearly indicate the "Hebrews" as the source?

On the first point, both the Egyptologist Thomas Schneider and Petrovich's own Egyptian language teacher, my colleague Professor Ronald Leprohon, disagree with many of his readings.<sup>2</sup> It will be enlightening to consider two texts representative of Petrovich's argument: the Lahun ostrakon (UC 59712) and the Serabit el-Khadem text #115. The former Petrovich identifies as a bilingual text, not in the sense of containing two languages, but in the sense of the script alternating between Middle Egyptian and Hebrew but always communicating Hebrew! Not only is this not bilingualism, Petrovich provides no other ancient example of such a switch in writing systems, the randomness of which transparently defeats the purpose of communication. Perhaps more importantly, Stephen Quirke, the specialist in cursive Egyptian writing at University College London, where the Lahun Ostrakon is housed, has communicated to Ron Leprohon that the text is simply hieratic.

As for Sinai 115, Professor Leprohon confirmed that the text is straightforward Egyptian script, but that Petrovich cropped the image in a way that obscures the full picture. He wrote me, "The beginning of the caption of graffito Sinai 115, on the right side, as is clear to see, is broken today, but is

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<sup>2</sup> My comments in this section summarize a set of email exchanges between Ron Leprohon and me and between Ron Leprohon and Stephen Quirke that unfolded between September 26 and October 2, 2017.



easily reconstructed from the similar caption in Sinai 112, followed by a similar scene, albeit without the same caption in Sinai 405.”

On the first issue, whether what Petrovich reads as “proto-consonantal Hebrew” is actually alphabetic and non-Egyptian, the expert analysis weights strongly against him. On the second issue, Petrovich is silent, though the scholarship on the reference of the term “Hebrew”/ *‘apiru* is substantial and well-known. The current consensus is that from its origins well into the first millennium (including a number of uses in the Bible itself), Hebrew is not an ethnic term, but a socio-economic one. It is plausible that a socio-economic group that has no ethnic-specific ties would have its own language? And further, is it likely that such a group would develop its own writing system given the conditions in which writing innovation occurs? The burden for making such a case belongs to Petrovich and its absence in his monograph is a critical weakness.

On the third and final issue, if “Hebrew” is an inaccurate reading for the Sinai 115 text (and it seems to be incorrect), then there is nothing in the texts, even in Petrovich’s speculative readings, that connects the texts to the Israelites. Even if the names Ahisamach, Asenath, and Moses were correct readings in the texts as Petrovich reads them, the first reflects typical West Semitic name formation and the other two are Egyptian in origin anyway. Thus, the presence of such names themselves provides little specific direction. (For further technical issues with Petrovich’s analysis, concerning the grammar of Biblical Hebrew, see Holmstedt 2019).

Overall it simply makes no sense to assign the innovation of the alphabet to the biblical “Hebrews.” We could stop here and leave the innovators nameless barring further discoveries. But I take one hint in the texts as more suggestive than others appear to have deemed. The Egyptologist Alan Gardiner, who first deciphered the initial finds 10 years after Petrie discovered them, identified a sequence of letters that occurred in more than one text as *B’LT*, which seems to be the feminine version of Ba‘al “lord” and so the West Semitic word for “Lady.”



suffered the same fate of complete decay (see Rainey and Goldwasser 2010; Lehmann 2012: 31-33). The evidence may be absent, but identifying the Byblians as the innovators certainly addresses Goldwasser's question: "for what state, what administration, and what audience was this alleged script invented?" (2015: 129).

Finally, what were the early alphabetic *texts* for? They do not appear to be administrative texts or any sort. Instead, the genre of most is best identified as graffiti, short texts meant to proclaim that the writer existed and wanted to leave some small but lasting impact beyond the moment (Coulmas 2013: 30). Unlike speech, which plays out over time, writing plays out over space and is arguably "timeless." Writing endures beyond the moment (Schmandt-Besserat 1996: 1). Thus, the early alphabetic texts, like the proverbial "Kilroy was here," reflect an apparently primal, universal human urge to be known, whether they reflect the urge of scribes assigned to the various work locations or they were written at the *behest* of (but not by!) the miners.

## Conclusion

The issue of naming the script (if not language) of these early alphabetic texts may seem a trivial issue, but it is far from it! Names are incredibly powerful words, since they contribute to categorizing the entity and assessing its value, whether historical, political, social, linguistic, and so on. What we name the early alphabetic texts both reflects and influences our reconstruction of ancient Near history, ancient Israelite history, and even our use of the Bible as historical source (especially in light of Petrovich's arguments). Since I consider the Byblian connection to be not only reasonable but strongly suggested by the few specific hints in the texts (the Lady of Byblos as Hathor), I favor being clear with my tentative historical reconstruction and calling the writing "early alphabetic Byblian."

As for Hebrew writing, it is clear from Hebrew epigraphs that this language borrowed and then adapted an existing script early in the first millennium, when the necessary and sufficient conditions for writing existed, i.e., the early Israelite monarchy. And there is no doubt that this, like the advent of writing itself, was momentous in human history, since it eventually resulted in the Bible, a book which, though its current influence is arguably on the wane, lies at the heart of the ideas and institutions of Western Civilization. However,

neither the importance of the Bible nor the sensible reconstruction of ancient Israelite history (including the existence of pre-monarchic people and events) depends on any connection to the innovation of alphabetic writing in the second millennium to be so.

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