ON THE INVENTION OF THE ALPHABET

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Cognitively as well as sociologically, writing underpins “civilization,” the culture of cities.¹

INTRODUCTION²

Writing is arguably among the greatest of human technological inventions. Once writing was invented, the chisel, pen, and then keyboard have moved inexorably towards dominating human communication. Though writing is nearly ubiquitous in the twenty-first century, how often do we step 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? If we pause to think about it, writing is a patently 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 in forms that have an arbitrary relationship to the sounds they represent.

More than simply being useful—writing allows us to record grocery lists, track finances, and so on—life without writing is practically unthinkable. And beyond its utility, for many people their careers, if not also their identities, are rooted in writing (beyond those of us in the academy, this would also include, among others, journalists and accountants, not


² I am grateful to Ron Leprohon, Gary Rendsburg, Aaron Schade, John Cook, and Melech Halberstadt for their feedback on this study and for encouragement from Chris Rollston, whose expertise in this area is unmatched. All controversial ideas and any errors are my sole responsibility.
to mention the social-media obsessed). Indeed, we now live in a world so dominated by the imprinted form of writing (no doubt well past what Gutenberg could have imagined) that to say that writing is “useful” may be the understatement of the century. Even if we peeled some of these layers back, writing would remain an essential part of our existence, since, as John Searle opines, writing and civilization go hand-in-hand:

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\ldots \text{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. \ldots 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 \ldots without a written language.}\]

Note Searle’s distinction between language and writing. 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 is 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. The 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 is applicable to the world before the iPhone, the personal computer, the electric typewriter, the printing 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. (And it may well be that writing is a necessary condition for sustaining complex institutions.) The historical question this prompts concerns the who.

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5 Peter T. Daniels points out that the Incas of Peru had a complex civilization, but did
For the independent development of writing itself, there are three known places of initial invention: 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—whether completely independently or by stimulus diffusion, resulting in four initial innovators of writing. 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 leads us to the next question and the question at the heart of this essay: who invented the alphabet?7

The where of the alphabet seems clear enough: the earliest examples of alphabetic writing come from locations in Egypt and the Sinai Peninsula, dating from the mid-nineteenth century B.C.E. (for the Wadi el-Hol inscriptions) to the sixteenth century B.C.E. (for the Ṣerābîṭ el-Khâdim 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.8

Is it plausible that the “Hebrews” innovated the alphabet in the early second millennium B.C.E.? If not the Hebrews, who else might have achieved this technological advance?

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7 Throughout this essay, I use the term “alphabet” purely for convenience, since that the term most readers will be familiar with. Yet Daniels (Peter T. Daniels, “Fundamentals of Grammatology,” JAOS 110.4 [1990]: 727–731) makes a compelling case (now adopted in many typologies of writing systems) that the Hebrew “consonantary” (which he coins an “abjad”) should be distinguished from the Greek style alphabet (consonants and vowels), which are both different from the consonant+vowel script used for Ethiopians (which he calls an “abugida”).

WRITING AS A TECHNOLOGY

Apart from the oft-forgotten challenges of learning to read and write, it is also important for one to recognize the fundamentally abstract nature of writing. While the means of visually representing things and activities is found in the earliest human records (e.g., cave paintings, clay tokens to record goods\(^9\)), visually representing words, groups of sounds (e.g., syllables), or even individual sounds is a relatively recent development for humans. All but the most abstract artwork retains some iconic relationship to the object represented, and though writing seems to have had an initial iconic quality, developed writing systems are far from iconic. This is especially true of alphabetic writing.

Moreover, as psycholinguistic research on the relationship of orthography and the process of reading has begun to turn its attention away from languages with alphabetic writing systems, the status of the phoneme as dominant in writing has rightly been questioned.\(^{10}\) Contrary to common assertion, the alphabet is not an inherently better or more economical writing system—this view reflects ignorance, prejudice, and an alphabetic chauvinism.\(^{11}\) The research suggests that, instead of the phoneme as the primary vehicle of reading, it is the syllable that humans more readily recognize.\(^{12}\) While an alphabet may be more economical in terms of the number of distinct written signs, syllabaries are more economical

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the result of the process is always a syllabary emerging from logography, never an alphabet. . . . This phenomenon seems to originate in the way people use and process speech: various psycholinguistic and phonetic observations and experiments indicate that it is in syllables and not any shorter stretches of speech (i.e., “segments,” the result of phonological analysis and roughly equivalent to letters of the alphabet) that people can consciously hear—unless they have learned to read in an alphabetic script (Daniels, “The Invention of Writing” [n 5]: 585).

Michael P. O’Connor also cites studies from 1934 and 1969 to support the assertion that “the phoneme is itself a by-product of the alphabetic system it is so often made to explain” (Michael P. O’Connor, “Writing Systems and Native-Speaker Analyses,” in *Linguistics and Biblical Hebrew* [Walter R. Bodine, ed.; Winona Lake: Eisenbrauns, 1992]: 232–233).
in terms of the cognitive processing involved in reading. The distinction between how we perceive language psycho-acoustically (i.e., that words and syllables have greater “reality” than phonemes) highlights the distinction between how language works deep in the mind and how we perceive it in pre-theoretical ways. Reading and writing language are not natural in the same way that speaking and hearing language are.

Just as we must distinguish the process of writing versus speaking, so also should we distinguish the name of a writing system from the name of the language it represents.13 For instance, we refer to our language as English and our alphabet as the English alphabet. But there are multiple dialects or grammars that we conveniently call English and the alphabet we use for all of them is actually the Latin alphabet, itself derived from Greek, which was borrowed from Phoenician.14 Indeed, the earliest known writing system in Mesopotamia, established by the Sumerians, was borrowed by others to write a completely unrelated language, Akkadian. We will return to the issue of naming at the end of this essay.

That writing is part of an analytical process and not inherently attached to a linguistic system, a particular language, likely explains the nearly simultaneous advent of the formally unrelated Sumerian and Egyptian writing systems. Writing systems can be borrowed and adapted to languages they were not created for; even more so, the idea of writing is easily transferable.15 The traveling nature of the idea of writing lies at the heart of the innovation of alphabetic writing.

TOWARDS THE INVENTION OF THE ALPHABET

Recording information in increasingly complex and increasingly urban environments seems to be the motivation for the advent of writing, which we trace to the late fourth millennium in southern Mesopotamia, if not also simultaneously in the Nile Valley. Although the earliest Mesopotamian texts cannot be fully read, because the signs can be

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14 See Powell (n 3): 6–7.
15 “If writing represents a variety of delinguistic behavior, rather than a special variety of linguistic activity, it is at least as likely for the notion of a writing system to be borrowed as for the system itself to be taken over” (Michael P. O’Connor, “Writing Systems, Native Speaker Analyses, and the Earliest Stages of Northwest Semitic Orthography,” in The Word of the Lord Shall Go Forth: Essays in Honor of David Noel Freedman in Celebration of His Sixtieth Birthday [Carol L. Meyers and M. O’Connor, eds.; ASOR, No. 1; Winona Lake: Eisenbrauns, 1983]: 441).
connected to later forms, it is generally agreed that they are in origin Sumerian.

The writing is linear and consists of picture-like signs inscribed on clay tablets. Many of the symbols are pictographic—each sign represents an object, such as a stalk of grain for wheat or a circle with a cross for a sheep. However, other signs represent the abstraction of writing. That is, a sign that depicts an object could also be used to represent the word, that is, the articulated sound of the name for the object. For example, if English had used a logography (or, as in the game of Pictionary), a drawing of an eye (.eye) could also be used of the pronoun “I,” a can (\(\text{\textcopyright}\)) used for the modal verb “can,” waves (\(\text{\textcopyright}\)) representing the sea used for the verb to “see,” and so on.

More than a game, this was an important path of development from a logographic writing system to one that also incorporated syllables. So, in Sumerian, the picture of an arrow /ti/ became used not only for the (near) homonym, /ti(l)/ “life,” but also for the syllabic sound segment /ti(l)/, which could be used as one segment in a multi-syllable word. Similarly, the picture of a garden /sar/ came also to be used for the verb /sar/ ‘to write’. This process employs the rebus principle, or “phoneticization.” Finally, Sumerian added to these layers a special kind of sign to indicate word classes, such as “human,” “god,” or “city.” The result was an elaborate system of just under two thousand logographs (“word signs”), syllabographs (“syllable signs”), and determinatives (“class signs”).

As the writing system was used over time, it became more stylized, and the signs lost their pictographic quality by becoming more abstract and linear (fig. 1).\(^{16}\) This is what most people know and study as cuneiform (“wedge-shaped”) script, which was created for Sumerian but then adopted for the Babylonian and Assyrian forms of Akkadian.

A similar story of writing development occurred at roughly the same time in Egypt. And it is Egyptian writing that appears to have been modified into an alphabetic system. Scholars of the ancient Near East have long known about and discussed the role of apparently alphabetic inscriptions discovered in various locations in Egypt and the Sinai Peninsula (fig. 2).\(^{17}\) They attracted the attention of notable scholars like the Egyptologist Alan Gardiner and Northwest Semitic specialist William F. Albright, and the latter’s student Frank Moore Cross, followed by at least two generations of students in the Cross-ian tradition.

Though some features of the texts still defy interpretation, a consensus emerged fairly early that these early alphabetic forms were derived from

\(^{16}\) Woods, “The Earliest Mesopotamian Writing” (n 9): 38, fig. 2.5.

\(^{17}\) Petrovich (n 8): x.
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 the identity of the innovators.18

But before we can 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.19 The bronze tablets in particular were found in a clear

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19 Maurice Dunand, *Byblia Grammata: Documents et recherches sur le développement*
archaeological context that corresponds to the Egyptian Middle Kingdom (ca. 2050–1800 B.C.E.).

Figure 2: Find sites of alphabetic inscriptions

(Douglas Petrovich)

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.

Aside from hoping someone is able to finish the decipherment of these texts, either when additional texts are found or perhaps by the use of computer-aided statistical analysis, the real question is, “Why?” If the Byblians were the inventors, and the consensus is that this is the logical conclusion given the find-spot of the texts, 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 B.C.E.) there was significant Egyptian trade with the new cities developing on the northern coast of the Levant, in modern Lebanon. Chief among these cities, at least from the Egyptian perspective, was Byblos, or “Gubla” in its own language. In fact, “the earliest inscriptive evidence of an Egyptian king at the Lebanese site of Byblos belongs to the reign of Khasekhemwy, the last ruler of the 2nd Dynasty.” And even before the Old Kingdom, one of the oldest buildings discovered in Egypt, “Narmer’s Temple” at Hierakonpolis in Upper Egypt at the end of the fourth millennium (ca. 3400) was built with cedar timbers imported from Byblos. And First Dynasty rulers used Byblian timbers in the construction of their tombs.

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 Age.”

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20 “It is possible that the Byblian system arose from an amalgam of a first-hand knowledge of Egyptian (hieratic) writing and the knowledge that syllables could be written in Akkadian cuneiform” (Hoch [n 19]: 119).
22 Ibid., 71.
24 Bard (n 21): 71.
Ages.” 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 Sherābīt el-Khādim. In 1869 E. H. Palmer first discovered an alphabetic inscription, and Flinders Petrie found about ten more in 1905 in the temple area; the rest were discovered on stone slabs near two of the mine-shafts. Also, one inscription was discovered on a sphinx statue, which, as we will see, provided the key to partial decipherment. The Sherābīt el-Khādim texts mostly date from the seventeenth to fifteenth centuries B.C.E.

After the Sherābīt el-Khādim 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 Sherābīt el-Khādim texts. Appropriately, the forms of some of the letters in the early Canaanite texts appear less schematized than the Sinaiic texts, viz. the yod looks more like a human hand, the rosh more like a human head, etc.

Finally, in the late 1990s in northern upper Egypt, in the Wadi el-Hol (see fig. 2), 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.

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26 See Hamilton (n 18): 289 for a summary of the chronology of the texts and also pp. 323–400 for a thorough discussion of each text. He notes that one text from Sherābīt el-Khādim, Sinai 375c, dates later, to the mid-thirteenth century.

27 See Hamilton (n 18) for a thorough discussion of all the texts.
Of course, the question of who was responsible for the alphabetic innovation and what motivated it has engendered significant speculation. And it is 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 complicated 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 PHOENICIANS AS THE LIKELY INNOVATORS OF THE ALPHABET

As is the case with many artifacts, the creators (both of the system and of the individual inscriptions over the centuries) did not leave a detailed explanation. Nor did they 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.28 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’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 read or write inventing a writing system? And if Goldwasser’s intention was that the miners were illiterate with regard to only Egyptian, how did they overcome the inherent abstractness of writing itself? Some might object that sufficiently creative “illiterati” might adopt the principle without the specific details of Egyptian. Perhaps once or twice, but over five hundred years? Such an idea stretches the limits of believability.

If the illiterate workers are still behind the artifacts, then we should cease attempting to read their work as representative of language. They cannot be texts and their forms cannot reflect a writing system; rather, they can only be an incoherent set of scratches that reflects either an attempt at crude art or simple mimicry of what they witnessed produced by scribes. Also, is it plausible that similar looking non-language scratches appeared in multiple places from Egypt to Canaan over a half millennium? It makes no 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.

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30 In his 2010 book (Writing and Literacy [n 4]), Rollston notes that literacy may be defined variously. He argues that the simple ability to write one’s name without the ability to write or read any other text is not a form of literacy at all. Rather, he offers the following description of literacy:

For the southern Levant during antiquity, I would propose as a working description of literacy the possession of substantial facility in a writing system, that is, the ability to write and read, using and understanding a standard script, a standard orthography, a standard numeric system, conventional formatting and terminology, and with minimal errors of composition or comprehension (127).
And so we are back to the basic question: well, then, who? A recent provocative answer is that it was the Hebrews. In his 2016 monograph, Douglas Petrovich provided a new analysis of the early alphabetic texts as the product of Hebrews and representing the direct ancestor of Biblical Hebrew.31 Petrovich’s argument so challenges the consensus with both its specificity and conclusions that it is worth pausing to review his argument.

Petrovich argues that the language of the Proto-consonantal Hebrew (“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.” 32 And third, in three separate texts Petrovich reads three proper names he identifies as biblical persons: Ahisamach (ʾḥysmk; Sinai 375a; see Exod 31:6), Asenath (ʾsnt; Sinai 376; see Gen 41:45), and Moses (mš; Sinai 361; see Exod 2:10).

Both Alan Millard and Rollston have responded online to Petrovich’s claims,33 and Petrovich has countered with his own online comments posted on his academia.edu site. The essence of the argument boils down to three issues, not all of which have been adequately addressed by 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 Ronald

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31 Petrovich (n 8).
32 Ibid., 191.
Leprohon, disagree with many of his readings.\textsuperscript{34} It will be enlightening to consider two texts representative of Petrovich’s argument: the Lahun ostracon (UC 59712) and the Ṣerâbîṭ el-Khâdim 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 while 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.\textsuperscript{35} Perhaps more importantly, Stephen Quirke, the specialist in cursive Egyptian writing at University College London, where the Lahun Ostraco is housed, has communicated to Ron Leprohon that the text is simply hieratic.

As for Sinai 115, Professor Leprohon confirmed that, even if the meaning of the text is obscure, the writing is straightforwardly Egyptian script. Moreover, Petrovich cropped the image in a way that obscures the full picture; Leprohon noted that, “The beginning of the caption of graffito Sinai 115, on the right side, as is clear to see, is broken today, but is easily reconstructed from the similar caption in Sinai 112, followed by a similar scene, albeit without the same caption in Sinai 405.”\textsuperscript{36}

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 referent 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. Is it 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.

\textsuperscript{34} My comments in this section summarize a set of email exchanges between Ron Leprohon and myself and also between Ron Leprohon (on my behalf) and Stephen Quirke that were exchanged between 26 Sept. and 2 Oct. 2017.

\textsuperscript{35} A few Hebrew ostraca from the late seventh–early sixth century B.C.E. (e.g., Arad 25, Kadesh-Barnea 6) include Hieratic symbols used to indicate dry measures or numerals. Such a switch differs from what Petrovich has suggested because the Hieratic symbols in the Arad ostraca are not used to render “Hebrew” words (i.e., the symbols may represent the number “6,” but are not intended to be an alternate spelling for Hebrew šeš ‘six’); rather, they are used as part of a notational system, symbols on the order of the pre-writing recording system in Mesopotamia.

\textsuperscript{36} Email exchange with Leprohon.
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 concerning Petrovich’s analysis, focusing on the grammar of Biblical Hebrew, see the Appendix at the end of this essay.)

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 important. The Egyptologist Alan Gardiner, who first deciphered the initial finds ten 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.”

The most interesting of these concerns a statue of a sphinx (see fig. 3). Critically, there is also a hieroglyphic inscription on this statue which identifies this figure as Hathor, to whom a temple was dedicated at the mines of Şerābīt el-Khādim. Both sides of the statue also contain an alphabetic line, in which the sequence B’LT is clear. The Semites writing these texts appear to equate Hathor with their goddess, Ba’alat. And crucially, Ba’alat is well-known from later Byblian epigraphs as the “the Lady of Byblos” (b’lt gbl), the patron goddess of that city (see, e.g., KAI 4.3–4; 7.3–4,

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In light of this, it is odd that the Byblians have not been suggested more often as the most likely source for the alphabet.\(^{38}\)

The fact that the Byblians had already created a new, much more abstract writing system with the syllabary by the beginning of the second millennium suggests that the Byblian context had the sufficient conditions for writing innovation. And since the alphabet is merely a simplification of the already abstract syllabary, a connection between the two is reasonable.

A similar context of alphabetic innovation occurred not far from Byblos, though towards the end of the second millennium, in Ugarit. The status of Ugarit as center of trade and linguistic complexity (texts in eight different languages have been found at Ugarit!) and yet with its own identity as an independent political entity illustrates the conditions which may have led to writing innovation. And the fact that they did innovate a system that was superficially based on a logo-syllabic system (cuneiform) with no explicit relationship between their new letter forms and existing cuneiform is circumstantial support for a similar Byblian innovation.

These pieces of circumstantial evidence—sufficient conditions for writing innovation, previous experience with writing innovation, and the mention of the goddess of Byblos—make it logical to identify the people and the language behind the early alphabetic writing as Byblian Phoenician. Indeed, why would anyone but Bybian scribes equate Hathor with the Lady of Byblos?

If the Byblians invented both a syllabary and then an alphabet, we have to wonder why few syllabic texts have been found (only fourteen) and why no alphabetic texts have been found in Byblos itself. A similar absence of texts has vexed the study of early monarchical Israel and the reasonable assumption has always been that the texts did not survive the vicissitudes of climate, wars, and other phenomena such as fires. Given the strong Egyptian connections, it is also reasonable that Bybian texts were largely written on papyrus and so suffered the fate of complete decay.\(^{39}\) The evidence may be absent, but identifying the Byblians as

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the innovators certainly addresses Goldwasser’s question: “for what state, what administration, and what audience was this alleged script invented?”

Finally, what were the early alphabetic texts for? They do not appear to be administrative texts of 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. Unlike speech, which plays out over time, writing plays out over space and is arguably “timeless.” Writing endures beyond the moment. 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!) illiterate miners.

CONCLUSION

For at least two generations of scholarship, the early alphabetic texts have been referred to as “proto-Sinaitic” and “proto-Canaanite,” depending on their find spot. Neither term is particularly useful. They provide geographic information, but 1) they reflect the misuse of the word “proto,” which implies that these texts were the ancestors of later “Sinaitic” and “Canaanite,” neither of which exist as a writing system or language; and 2) they make no connection to actual writing systems that plausibly develop out of these early texts, such as Phoenician, Hebrew, Moabite, or Aramaic.

The issue of naming the script (if not language) of these early alphabetic texts is far from trivial. Naming is an incredibly powerful process, since names contribute to categorizing an 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 Eastern history, ancient Israelite history, and even our use of the Bible as historical source (especially in light of Petrovich’s arguments).

If we call the script “proto-Hebrew,” it becomes an anchor to which we tie the reconstruction of the ancient Hebrew language and Israelite history and has implications for how we might view the biblical texts.

40 Goldwasser, “The Invention of the Alphabet” (N 28): 129.
in light of chronological concerns (so Petrovich). Admittedly, even if we call this script “proto-Byblian,” or better, “early alphabetic Byblian” (to distinguish it from the syllabic texts) with circumstantial support but little direct evidence, we again will influence our reconstruction of the second millennium history and perhaps even the reading of the texts. The obviously most neutral designation is “early alphabetic” or “proto-alphabetic.” Since I do think that the Byblian connection is 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 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 establishment of an Israelite monarchy created the necessary and sufficient conditions for specifically Israelite writing. 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.

APPENDIX: A FOCUSED REVIEW OF D. PETROVICH’S USE OF BIBLICAL HEBREW GRAMMAR IN HIS ANALYSIS OF THE EARLY ALPHABETIC TEXTS

In his 2016 volume on the early alphabet epigraphs from Egypt and the Sinai in the second millennium, Douglas Petrovich argues that the language of the “proto-consonantal” script used in a scattering of epigraphs from Wadi el-Ḥôl, Lahun, and Ṣerâbîṯ el-Khâdim is a Hebrew antecedent to the language of the Bible and that this provides linguistic support for the historicity of Moses and his composition of the Pentateuch “by 1406 BC, the year of his death and the beginning of the conquest of Canaan.” Beyond the complex issues presented by the text themselves, Petrovich presents his work as the dawning of a new day in biblical studies, that is, as the springboard for a serious challenge to the “critical-scholarly world [that] has cleverly built an impenetrable force field around the evidence”

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43 Similarly, Rollston, “The Proto-Sinaitic Inscriptions 2.0” (n 33).
44 Petrovich (n 8): 195.
for “the historical credibility of the biblical account of the Israelites in Egypt from Jacob’s day until that of Moses.”

Besides an introduction (Chapter 1) and conclusion (Chapter 2), Petrovich’s book consists of two chapters in which he works through the primary artefacts with “proto-consonantal Hebrew” (PCH) writing. In Chapter 2, he covers the inscriptions he assigns to Egypt’s Middle Kingdom: Sinai 115, 376, 377, Wadi el-Ḥôl 1, 2, and the Lahun “bilingual” ostracon. In Chapter 3, he introduces the context of the Sinaitic epigraphs found at Ṣerābīṭ el-Khâdim and then analyzes Sinai 345a,b, 346a,b, 349, 351, 353, 357, 360, 361, 375a, and 378. After the conclusion, Petrovich includes four appendixes: (1) on the original twenty-two letters of the PCH alphabet, (2) the “additional” five proto-alphabetic letters, (3) a declining and parsing guide for Middle Egyptian and PCH words, and (4) a chronology of relevant ancient Egyptian dynasties.

On paleographic matters, I concur with the arguments made in Rollston and Schneider, as well as Aren Wilson-Wright. Here I will focus on Petrovich’s flawed understanding of Hebrew grammar and the implications for his reconstructions.

PROBLEMS WITH HEBREW GRAMMAR IN PETROVICH’S ANALYSIS

At the core of Petrovich’s argument is not just his identification of the script as “Hebrew” but the words and grammar as Hebrew, more specifically, a Hebrew that is nearly biblical in aspect. For each text, he provides a BH transcription as well as a list of BH words (with biblical references) that he has identified in the text. Some of the claims about Hebrew grammar, however, raise doubts about Petrovich’s knowledge of the language as well as his understanding of the methods of comparative and historical Semitic linguistics. I will illustrate this with two of the more egregious problems.

45 Ibid., 186, 188.
Gemination

My first concern primarily centers on Petrovich’s understanding of gemination, but this will lead us through a few other issues on the way. For instance, Petrovich reads the sequence of Middle Egyptian signs in Sinai 115 as G-B-I-T-U, for which he claims that the B was “doubled,” or “written once, but spoken twice,” with one segment ending the first word and the other segment beginning the second word. Based on this “perfectly legitimate Hebrew grammatical convention,” he interprets the sequence as gb[b]itu “earth-god’s house,” which he equates with BH bêt-ʾēl.47 The phrase thus represents a Hebraized (note the BH word for “house”) Egyptian phrase (note the possessive noun in the first, bound position) in Egyptian writing. There are multiple issues to address here.

First, Petrovich’s explanation for the use of an Akkadian word /bitu/ instead of the expected Hebrew form /bayit/ is worth noting:

If Abraham truly originated from Ur (Gen 11:31), where he would have spoken Akkadian before departing for Canaan, presupposing Ḫebeded’s [the supposed author of Sinai 115] knowledge of Akkadian would be extremely plausible . . . the Hebrews either used bitu for house, following Akkadian rather than Canaanite, or they simple chose Akkadian over Hebrew, since written Hebrew text was unknown to the world up until this point in time . . . [If] the former option is correct, the initial vowel-class could have changed from i to e (bit to bet). The Hebrew Caption thus would be preserving a pre-formative moment in the Hebrew language, before bitu became bet.48

The equation of Canaanite and Hebrew is inaccurate at best (apart from the decidedly un-Hebrew language found in the second millennium el-Amarna texts, “Canaanite” refers to a first millennium dialect group) and spurious at worst, if intended to put the existence of Hebrew in the second millennium on firm linguistic ground by linking it to the el-Amarna artifacts. Moreover, authors and speakers do not “simply choose” to use one language or another at arbitrary points; research into multilingualism and code-switching indicates that there are clear patterns and motivations behind switching. The burden of proof for such a switch in the Sinai epigraphs lies solely on Petrovich, although none was given.

Also, his suggestion that the change of bitu to bet could simply reflect a dropping of the final u and a change of the word-internal vowels

47 Petrovich (n 8): 16, 26–27.
48 Ibid., 27, 29.
betrays an ignorance of both Akkadian phonology (i.e., the rule accounting for the change of *baytu to bitu) and the fact that Hebrew, as a West Semitic language, experienced a different history for the monophthongization of the -ay- in *baytu resulting in bêt.

I strongly doubt that Petrovich’s complex phrase, which is neither Hebrew nor Egyptian, would have made any sense to either Hebrews or Egyptians in the second millennium. In any case, gemination does not work in the way that Petrovich presents it.

Gemination is not a “doubling” or copying of a sound segment, but the prolonged pronunciation of the segment. Admittedly, this is often obscured in typical Semitic transcription conventions, where, for instance, a geminated B is written as two graphemes -bb-; the international phonetic alphabet convention more accurately signals that gemination remain a single grapheme by using the sign :, hence a geminated B is rendered bː.

There are two contexts for gemination in BH. First, the requirements of a word pattern itself may include gemination, such as with the middle root consonant in the Pi’el: דיבר dibːer. Second, the cliticization of the article haC- (with its indeterminate final consonant) or preposition min-result in gemination of the initial consonant of the host noun (presumably both due to anticipatory assimilation of the final consonant of the cliticized particle), e.g., *haC-bayit > habːayit “the house” and *min-bêt > mibːêt “from the house of.”

The point of this for interacting with Petrovich’s claims is that gemination does not create a consonant that “was written once but pronounced twice.” Moreover, the lengthening of a consonantal segment occurs entirely within words, not across word boundaries. Even apart from the assertion that a dagesh forte was used in Sinai 345b—two millennia before the Masoretes developed their notational system!—it is simply ad hoc to argue that the “doubling” convention was used across word boundaries as “a much freer use hundreds of years before the oldest extant manuscripts of the Hebrew Bible are attested.”

If the phenomenon that Petrovich describes was operative in the phonology and represented in the writing system of those who wrote the early alphabet texts, it would be more accurate to identify it as a type of external sandhi, specifically, anticipatory sound assimilation across a word boundary (of course, sandhi could have been operative in the phonology of the language of these early inscriptions without it being represented in the writing system).

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49 Ibid., 157.
50 Ibid., 89.
External sandhi, though, is rare in early West Semitic, and when it does occur, it appears to be related to set phrases, names, or titles. Consider, for example, Byblian Phoenician byhmlk (for *bn yhmlk) “son of Yhmlk” (KAI 6.1, 7.3; also KAI 8), Cypriot Phoenician mlkty “king of Kition” (CIS I,11.2, but otherwise always mlk kty), and epigraphic Hebrew hyyhwh “life of Yhwh” (Lachish 3.9, Arad 21.5, but see Lachish 6.12, 12.3 for hy yhwh). Sandhi across word boundaries does not occur in the Hebrew Bible except in two names, ירבעאל (< *yarûb-bal) in Judg 6:32 (+12x) and מְרִי־בַעַל (mərî bâl) in 1 Chr 9:40.51

Within the Sinai corpus, Wilson-Wright has argued that mhbl’t in Sinai 345 is an example of sandhi and thus parallel to m’hb b’lt ‘beloved of the Lady’ in Sinai 374. Wilson-Wright suggests one additional example, mhbl’t in Sinai 348, which is the same phrase but missing both the b of the sandhi process as well as the ’alep of the root of the first word.52 However, this particular artifact was lost in the early twentieth century and the best line-drawing is based on the squeeze, which casts serious doubt about our ability to use any data from this text.53

Since external sandhi operates on adjacent sound segments (i.e., no other consonant or vowel can intervene), Wilson-Wright also proposes that this indicates that the language of these early texts reflects the loss of short final vowels, at least on bound words. He notes that this parallels the loss of case vowels on bound words in Old Akkadian but differs from Northwest Semitic. In this branch of Semitic, the final ’aleps in Ugaritic and the spelling used in early Byblian epigraphs suggest that short final vowels did not quiesce until the early first millennium. I am not convinced by Wilson-Wright’s argument, especially since his other

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arguments about the language of Sinai 345 draw heavily on parallels to Central Semitic and Northwest Semitic features.

In summary, of the five cases of “gemination” across word boundaries that Petrovich proposes, only three examples actually qualify, though reconfigured as external sandhi: gb bitu in Sinai 115, mʾhb bʾlt in Sinai 345, and šnt tmhn in Sinai 361. The other two, bʾ tzzt = מְאֻהָב בַעֲלָת and bšn nš = בְּשָּׁנָה נְשֹׁה, in Sinai 360 clearly do not qualify, since the consonants Petrovich takes as “doubled” are separated by a vowel that never quiesces in the respective paradigms of ancient Hebrew (2ms perfect verbal affix and feminine nominal affix, respectively).

We could also include in this discussion Petrovich’s approach to the “doubling” involved with II-III or geminate root verbs. Thus, in Sinai 377 he claims that the sequence M-L is the verb מָלַל “he has scraped, inscribed,” for which the second L of the root “would have been written once but spoken twice, as practiced typically for geminate verbs during the Bronze Age.”54 This is not an accurate understanding of gemination or of the morphology of geminate verbs. See also similar explanations for verbs based on the root Z-L in Sinai 346a55 and Sinai 349,56 S-B in Sinai 351,57 Q-M in Sinai 353,58 ʾ-R, G-N, and ʾ-N in Sinai 357,59 B-Š in Sinai 361.60

Moreover, given the un-Semitic structure of the proposed phrase gb bitu in Sinai 115 (with the possessive noun in the first, bound position) as well as the necessary conjecture regarding the loss of short final vowels (which does not occur this early in West Semitic outside of onomastica), I think it highly unlikely that external sandhi was a productive morphophonological function in ancient West Semitic. It was either limited to names and titles, as it is in Amorite evidence,61 or the three possible cases in the Sinai corpus simply represent writing errors.

See also similar explanations Petrovich gives for gemination across a word boundary in Sinai 345a:62 mʾhb ʾlt (= mʾhb bʾlt מְאֻהָב בַעֲלָת [sic]);

54 Petrovich (n 8): 33.
55 Ibid., 92, 98.
56 Ibid., 103.
57 Ibid., 118, 123.
58 Ibid., 129, 137.
59 Ibid., 145, 151.
60 Ibid., 160, 169.
61 See O’Connor, “The Onomastic Evidence” (n 51).
62 Petrovich (n 8): 83, 89.
Sinai 360: \( b\breve{t} zzt \) (= \( b\breve{t} tz\bar{z}t \) וּתּוֹזֶת) and \( b\breve{z}n \) š (= \( b\breve{z}n \) נְשֹׁה); and Sinai 361: \( \breve{s}n\ m\bar{m}n \) (= \( \breve{s}n\ tm\bar{m}n \) נְמֹה).}

**Feminine Noun Morphology**

The second grammar issue of note concerns the affix attached to feminine singular nouns. Petrovich assumes that in second millennium Hebrew such nouns already had the inflectional -\( \breve{\alpha}h \) ending (with \( h \) as a mater lectionis) in the free form. Relatedly, he frequently claims that because matres lectionis were not used until the first millennium, a number of identified nouns could be feminine in the absence of any inflectional ending.\(^{65}\)

Relatedly, note Petrovich’s reading of the sequence \( M-R-\breve{\epsilon}-T-W \) in Sinai 346a as the noun מַרְעִית “pasture” with an attached 3ms possessive pronoun \( \breve{t} \) “his.” What Petrovich seems to miss is that the \( \breve{w}aw \) in the BH form of the attached pronoun does not have a consonantal value; it is, rather, a mater lectionis, a place-holder indicating a vowel (which is specified as an /\( \breve{o}/ \) in the later Masoretic notation with the holêm over the \( \breve{w}aw \)). The problem this raises for Petrovich concerns the history of the writing system, since the use of matres lectionis was not a spelling convention in any NWS language of the second millennium. Even in Ugaritic, towards the end of the second millennium, there is no clear evidence for the use of matres lectionis.\(^{66}\) Though M. Deitrich and O. Loretz,\(^{67}\) followed by J. A. Riley,\(^{68}\) argue that Ugaritic spelling of Akkadian words suggests the use of matres, borrowed words are more often adapted to native spelling conventions than new spelling conventions created to accommodate borrowed words. Thus, the argument for Ugaritic matres remains weak.

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\(^{63}\) Ibid., 155, 157.

\(^{64}\) Ibid., 160, 169.

\(^{65}\) See ibid., 43–44, 123, 136, and many other supposedly feminine nouns whose lack of a feminine ending is not explained.


\(^{68}\) Jason A. Riley, “‘Why, O -\( \gamma \)?: The 1cs Suffix in Ugaritic and Its Bearing on the Case of the Vocative,” UF 44 (2013): 261–284.
While Petrovich is correct that *matres lectionis* were not employed until the first millennium, it is unlikely that he is correct on any other point. The evidence of Ugaritic, Phoenician, Moabite, and even some early Hebrew epigraphs (e.g., לְפָּנֶּנָא in the Samaria Ostraca) unequivocally demonstrate that the feminine singular free form ending was -(a)t in Northwest Semitic through the second millennium and into the early first millennium. Brief research into comparative Semitic research is sufficient to derail his argument.\(^6^9\)

The ambiguity that Petrovich proposes does not work for the vast majority of nouns, which are clearly inflected as masculine or feminine. The masculine noun “calf” would have been written ‘*GL* whereas the feminine “heifer” would have been ‘*GLT*.

Petrovich also treats the glides *yod* and *waw* and the related issue of *he* as a final root letter in a similarly implausible manner. For every sequence that Petrovich identifies as a form of a verb that in BH is a III-*he* root, such as `3-P (supposedly יָהָנָא “to bake”) in Sinai 377 and Wadi el-Ḥôl 1, he explains the absence of the root-final *he* in the alphabetic text as “expected” because writing the *he* was a “later orthographic convention.”\(^7^0\) The historical development of originally III-*yod* verbs, which become III-*he* in BH, is quite complicated and the details of the process are not always clear. While a small number of second millennium (Middle Babylonian) words do not exhibit an etymologically-expected final *yod* or *waw*, the weight of evidence, including attestations in the earliest first millennium Phoenician and Moabite epigraphs, attest the written representation of a final *yod* or *waw*. We cannot, therefore, simply assume that a proposed second millennium form of Hebrew would have the same morphophonology as its first millennium descendant. Petrovich’s treatment of this complicated issue does not reflect any awareness of the methods, data, or conclusions common to historical and comparative Semitics.

See also these examples adduced by Petrovich: *Wadi el-Ḥôl 2*: *Y-G-K*, which is supposedly “your afflicter,” a *Qal* 3ms participle of לְפָּנֶּנָא with 2ms pronoun; *Wadi el-Ḥôl 1*: *N-G* for BH לְפָּנֶּנָא ‘light’, which is a true III-*he* verb in BH, making the absence of the *he* particularly unexpected; *Sinai 349*: `3- for BH לְפָּנֶּנָא, which is a III-*yod* verb and *K-M* for לְפָּנֶּנָא, but this root is a true III-*he* root and the final *he* should not be missing; *Sinai 353*: `3- for BH לְפָּנֶּנָא, which is a III-*yod* verb; *Sinai 357*: `3- for BH לְפָּנֶּנָא, which is related in the biblical text to the root

\(^6^9\) For the interested reader, I suggest starting at page 236 in Lipiński (n 51).

\(^7^0\) Petrovich (n 8): 34.
Reliance on Rare Hebrew Words

A final grammatical observation regarding Petrovich’s analysis concerns his reliance on biblical *hapax legomena* or very rare words, whose meanings even in the biblical text are open to debate. Below I list, with Petrovich’s glosses, words he invokes that occur three times or less in the Hebrew Bible:

- **Lahun**: רֶנ ‘celebration’ (1x, Ps 32:7); **Sinai 345b**: יָדוֹ ‘strength’ (1x, Ps 88:5); **Sinai 346b**: צִּוְנֵה ‘sheep’ (1x, Ps 8:8);

- **Sinai 349**: מַכָּל ‘measure’ (1x, Gen 26:12), חָוֵג ‘to yearn’ (1x, Ps 63:2) and גֹּאֵה ‘quiver’ (1x, Gen 27:3); **Sinai 351**: קָוּב ‘watering trough’ (2x, Gen 24:20; 30:38) and פֹּן ‘swollen’ (1x, Num 5:27); **Sinai 353**: קָפֵים ‘erect’ (1x, Lev 26:13) and בְּלִי ‘to restrain’ (1x, Ps 32:9); **Sinai 357**: כְּ ‘multitude’ (1x, Ps 42:5) and דָּרַשׁ ‘to swoop’ (1x, Job 9:26); **Sinai 360**: מַפְתִּח ‘to take courage’ (1x, Isa 46:8); **Sinai 361**: מַכְדֶּשׁ Polel ‘to delay’ (2x, Exod 32:1; Judg 5:28) and גָּפָה ‘confusion’ (1x, Deut 28:28; Zech 12:4); **Sinai 376**: מָלַל ‘to engrave’ (3x, 1 Kgs 6:29, 32, 35); **Sinai 377**: מָלַל ‘to inscribe, scrape’ (1x, Prov 6:13).

Petrovich has also assigned a number of words lexical meanings derived from contextual use in the biblical text rather than a denotative gloss based on any clear lexicological principles. Consider the examples below:

- **Sinai 346a**: בֵּל in BH as ‘to despise’ occurs in the Hip’il, not the Qal (nor the Pu’al, as proposed for **Sinai 349**) and בֵּל does not mean ‘an apostate’ by itself (in Prov 14:14 it occurs within the phrase בֵּל לֵב); **Sinai 349**: יָדוֹ in the Qal is not causative in BH; **Sinai 351**: כְּ is never used with a temporal entity as the subject, i.e. “a year turns/changes” in BH; **Sinai 353**: קָפֵים denotes being grouped in five parts or by fifties and only connotes ‘organize for war’ in the context of Exod 13:18; Josh 1:14; 4:12; Judg 7:11 and then only as a Qal passive participle; **Sinai 357**: מָלַל does not occur in the Pu’al (nor the Pi’el); **Sinai 361**: מַכְדֶּשׁ does not occur in the Pi’el in BH and מַפְתִּח does not mean ‘bound servitude’ in Isa 3:7; **Sinai 376**: מָלַל only occurs in the Qal in BH, not the Pu’al (nor Pi’el);
Wadi el-Ḥôl 2: the suggested form for הָעַע ‘crooked one’ fits no paradigm and נָעָה for causative ‘to afflict’ does not occur in the Qal in BH, but only Pi’el or Hip’il.

Final Comment on History and Religion

In summary, Petrovich does not make a compelling case for many of his readings. His morphological analyses wreak havoc on the historical reconstruction of West Semitic grammar. A final example of this comes in his conclusion, where he links the use of the word B’LT and the image of Hathor in the Sinai alphabetic epigraphs with the Golden Calf episode in Exodus 32. Petrovich’s argument is not always clear but I think can be accurately summarized as follows:

- The Israelite’s use of a calf did not “come out of a hat”;
- The Hebrew word for calf, עֵגֶל (note that in Exod 32:4 the word is bound, עֵגֶל מַסֵּכָה), is masculine but the feminine form, for heifer, would have been written the same way in the “pure consonantalism” of the PCH inscriptions;
- Since the Pentateuch had to have been written no later than 1406 B.C.E. if Moses is viewed as a historical person “and the biblical chronology is taken as literal and accurate,” the form in Exod 32:4 might have originally been feminine, given that the mater lectionis marking unbound feminine nouns “would not have been added until at least ca. 850 B.C.”
- This means that the later Hebrew scribes would have been forced to guess whether the word handed down in the Mosaic consonantal Pentateuch was masculine or feminine; they chose masculine, but the original intention could have been that the statue was in the form of a heifer;
- “Therefore, the probability is great that the golden heifer fashioned by Aaron at Mount Sinai in 1446 BC was an image of none other than Hathor, the goddess whom the Israelites who participated in mining expeditions of Şerābīt had been worshipping routinely.”

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71 Ibid., 199–200.
72 Ibid., 199.
73 Ibid., 200.
74 Ibid., 200.
I’ll be brief in refuting this argument.

• First, a feminine noun in the mid-second millennium would have had the final -t morpheme (it is only in the first millennium that any Northwest Semitic language witnessed the loss of -t and subsequent replacement by -a, later marked by the mater lectionis -ḥ).

• Second, the phrase in Exod 32:4, 8 is עֵגֶל מַסֵּכָה, in which עֵגֶל is bound; if it were feminine in this biblical phrase, as a bound form it would never have lost the final -t in Hebrew, regardless of the era.

• Third, the עֵגֶל is unambiguously masculine in Exod 32:24, where a masculine demonstrative follows: וַיֵּצֵא הָעֵגֶל הַזֶּֽה.

CONCLUDING THOUGHTS

The rhetorical style of Petrovich’s book troubles me and with my concluding thoughts I will explain why. First, he takes a hostile stance towards contemporary scholars when their conclusions do not match his or serve his goals. For example, in his preface Petrovich asserts that monographs of Benjamin Sass and Gordon Hamilton are said to have “glaring weaknesses” because they refrain from offering translations of the early alphabetic texts.76 This is an unfair characterization, since Sass’ and Hamilton’s topic was the origins of the alphabet, not the texts themselves. His rhetoric with regard to contemporary scholars stands in significant contrast with his fawning references to early twentieth century scholars, such as Hubert Grimme and Alan Gardiner; he identifies the latter as “one of the twentieth century’s greatest linguists of the ancient Egyptian language” and “a world-class Egyptologist.”77 Such descriptive ornamentation, either positive or negative, goes beyond the dispassionate consideration of ideas; whether intentional or not, it serves to discredit some and present others as authorities. Moreover, while we can recognize the scholarly achievement of past generations, there is a clear

75 See Lipiński (n 51): 205, 237.
argument implicit beneath Petrovich's discussion of previous scholarship, namely, that earlier scholarship that was "friendlier" to a traditional chronology of the Bible is better and more believable.

Second, Petrovich attempts to head off any criticism of his provocative work by telling his reader that he has no doubts his work will be prejudicially criticized but that his interdisciplinary training made it incumbent upon him to publish his results.\footnote{Petrovich (n 8): xiii.} (In the introduction \[really a foreword\], Eugene Merrill similarly warns that, while Petrovich's work will likely be objected to "because of his ideological and/or theological predilections," his extensive research, fastidious attention to detail, and his acclaimed expertise in every relevant discipline should comfort the reader.\footnote{Ibid., vi.} Based on his self-described "exacting" research, Petrovich contends that judgments concerning his conclusions should not be "determined hastily"; rather, his arguments should be allowed to age for "three, four, or five decades." Citing Schopenhauer in his preface,\footnote{Ibid., xiii.} he implies an equation of his thesis with "truth," which must endure ridicule before ultimate acceptance. And he claims that his interpretations are free of "personal bias," even though he narrates how his study of the early alphabetic epigraphs rose out of his research into biblical chronology, resulting in his forthcoming volume, \textit{New Evidence of Israelites in Egypt from Joseph to the Exodus}. Identifying two letters as "משׁ" and then equating them with the personal name of the biblical Moses is hardly free of bias.

The inverse relationship between specialization and dilettantism is no stranger to biblical studies. As our various disciplines and sub-disciplines require increasing sophistication in theory and method, it is not easy to acquire adequate training and skills in related areas of inquiry. More than once among a group of peers have I heard a wistful (and naive) lament about how easy scholars had it a century ago, when one could "master the entire field" and work on multiple, nearly unrelated topics. The antidote, of course, is coupling time with intellectual curiosity, leading one into new areas over the course of a career. Tragedies of dilettantism occur when either element is missing and the necessary expertise and maturity of method are absent. Tragically, Douglas Petrovich's monograph on the early alphabetic epigraphs from Egypt and the Sinai epitomizes what may happen without adequate training or the time-tempered maturation of intellect and thesis.

\textit{The World's Oldest Alphabet} is, without a doubt, a creative, detailed, and passionate investigation of the early alphabetic texts from the Sinai
and Egypt. It is a topic that requires one to interact with archaeology, epigraphy, paleography, writing as both a technology and a social convention, the grammars of ancient and biblical Hebrew and Egyptian, not to mention the known details of the history during the second millennium in Egypt and the Levant. Such a task is not for the faint hearted and Petrovich should be applauded for having great courage. With that said, Petrovich’s arguments, conclusions, and general rhetorical stance invite serious challenge and the readers should be aware that this volume must be used very carefully.