Facts Matter: Language of the Earliest Alphabetic Inscriptions

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Although D. Petrovich's recent book *The World's Oldest Alphabet: Hebrew as the Language of the Proto-Consonantal Script* advances several claims about the origin of the alphabet and biblical history, its main arguments are linguistic. In particular, Petrovich identifies the language of the early alphabetic inscriptions as Hebrew as part of a larger argument for the historicity of the biblical Exodus tradition. In this review essay, I will summarize and critique Petrovich's linguistic arguments. Along the way, I will consider two important questions in the classification of the Canaanite languages.

Douglas Petrovich's recent book *The World's Oldest Alphabet: Hebrew as the Language of the Proto-Consonantal Script* proposes several sensational claims about both the origin of the alphabet and biblical history. In it, Petrovich argues that the Israelites invented the alphabet and recorded their language in a series of inscriptions from Egypt and the Sinai Peninsula, at places such as Serabit el-Khadem, Wadi el-Ḥôl, Lahun, and Bir en-Naṣb (pp. 11–13). He then systematically analyzes and translates fifteen early alphabetic inscriptions as Hebrew: Sinai 377, Wadi el-Ḥôl 1, Wadi el-Ḥôl 2, the Lahun ostracon, Sinai 376, 345, 346, 349, 351, 353, 357, 360, 361, 375a, and 378. The content and language of these inscriptions, he claims, provide concrete evidence for the biblical description of the Exodus and the Israelite sojourn in Egypt (pp. 195–99). At root, however, Petrovich's historical arguments rely on his claim that the early alphabetic inscriptions record the Hebrew language. In this review, I will show that this claim is fundamentally flawed. I will also consider two important issues in the classification of the Canaanite languages, and point out some general problems with Petrovich's book.

THE MAIN ARGUMENT

The premise of Petrovich's argument is that one must first identify the language of a text before being able to decipher it (p. 191).[1] Accordingly, Petrovich explicitly suggests three pieces of evidence for identifying the language of the early alphabetic inscriptions as Hebrew: 1) The word "Hebrews" (*ʿibr*) appears in the Egyptian inscription Sinai 115 from the Egyptian turquoise mining installation at Serabit el-Khadem; 2) acrophonic Hebrew names can be found for all of the original alphabetic letters; 3) the early alphabetic inscriptions record three personal names that are found exclusively in the Hebrew Bible (p. 191). He also alludes to two additional diagnostic features found in the early alphabetic inscriptions: 4) the

This is a review article of *The World's Oldest Alphabet: Hebrew as the Language of the Proto-Consonantal Script*. By Douglas Petrovich. Jerusalem: Carta, 2017. Pp. 262, illus. $87.40.

1. This is not necessarily the case. As the history of decipherment shows, it is possible to decipher a text in a previously unknown language (as in the case of Old Persian, Akkadian, Elamite, Sumerian, Hittite, Ugaritic, etc.). Seen in this light, Petrovich's insistence that the early alphabetic inscriptions must record a known Semitic language, as opposed to a previously undiscovered one, seems strange. See E. J. W. Barber, *Archaeological Decipherment: A Handbook* (Princeton: Princeton Univ. Press, 1974), 6–12.

Fig. 1. The Eighth Pictograph from Sinai 115. Courtesy of the Egypt Exploration Society

Fig. 2. A Hieroglyphic *p* from Sinai 115. Courtesy of the Egypt Exploration Society

Fig. 3. An RTI Derivative of a Plaster Cast of Sinai 351 with an Alphabetic *b* Indicated. Image by A. M. Wilson-Wright

Fig. 4. A Hieroglyphic *p* from Sinai 516. Courtesy of the Semitic Museum, Harvard University

use of the comparative *min*; and 5) the nouns *təlî* 'quiver' and *ʾêmâ* 'terror' (pp. 43, 113–14). In the current section, I will show that this evidence does not stand up to scrutiny.

I will begin with Petrovich's reading of "Hebrew" (*ʿibr*) in Sinai 115, a reading that runs into epigraphic and linguistic difficulties. Epigraphically, it relies on an unlikely interpretation of the eighth pictograph on Sinai 115. This sign consists of a rough square in outline form (fig. 1), which resembles both a hieroglyphic *p* (fig. 2) and early alphabetic *b* (fig. 3). Similar looking *p*'s appear on contemporary Egyptian inscriptions from the vicinity of Serabit el-Khadem (e.g., Sinai 516; see fig. 4) and, since the remainder of Sinai 115 is written in Egyptian,[2] it seems likely that the eighth pictograph represents a hieroglyphic *p*. Petrovich, however, opts for an alphabetic reading of this sign because the eighth sign differs from more common renderings of the hieroglyphic *p*, which are executed in *bas relief* (fig. 3) (pp. 18–19). Yet the outlined form is a valid variant of the *p* hieroglyph, which occurs in other Egyptian inscriptions, and cannot be dismissed as an anomaly.

Also problematic is Petrovich's reading of a hieroglyphic *r* following pictograph eight (p. 19). It is unclear from the available photographs whether the roughly oval shape following the eighth pictograph is a letter or damage to the surface of the stele, and Petrovich does not acknowledge the second possibility. Given these problems with Petrovich's reading, I would follow T. Schneider in seeing the name *ʿipn*—perhaps the Semitic hypocoristic *ʾabnu* 'stone' (cf. *KTU* 4.33:24; 4.335:25; 4.370:3; 4.423:21; 4.658:13; 4.715:2)—as the final word of l. 1 of Sinai 115.[3]

Even if we accept Petrovich's reading, it is unlikely that *ʿibr* renders the word "Hebrew." Normally, we would expect "Hebrew" to be written with an initial *ʿ* on the basis of other writings of this name and its cognates: Akkadian *ḫabiru*, Egyptian *ʿpr*(*w*), and Biblical Hebrew *ʿibrî*. Petrovich suggests three possible solutions to this problem: 1) As the first recorded instance of the name Hebrew, *ʿibr* was not subject to the later orthographic conventions for rendering Semitic speech in Egyptian script;[4] 2) the articulation of Hebrew *ʿ* was closer to that of Egyptian *ʿ* than Egyptian *ʿ*; and 3) Akkadian *ḫ* and Biblical Hebrew *ʿ* are reflexes of a third consonant, which was preserved in early Hebrew and transcribed *ʿ* in Egyptian.[5] The first solution represents an argument from exceptionalism and cannot be sustained. The other two falter on linguistic evidence. In Middle Kingdom (2055–1650 BCE) transcriptions of Semitic names, Semitic *ʿ* is always rendered by Egyptian *ʿ* and never by *ʿ*, which shows that Semitic *ʿ* was closer to Egyptian *ʿ* than Egyptian *ʿ*.[6] Conversely, Egyptian *ʿ* always

2. Here I leave aside Petrovich's claim (p. 17) that the third pictograph in Sinai 115 comes from the so-called Canaanite syllabary proposed by Brian Colless, "The Canaanite Syllabary," *AN* 35 (1998): 28–46.

3. T. Schneider, "The Problem with Reading the Word 'Hebrew' in Sinai 115: An Egyptologist's Response," http://www.rollstonepigraphy.com/?p=771. It is also possible to read this name as *ʿiprn*, Semitic *ʾibirānu* 'The Bull' (cf. *KTU* 1.113:16; 4.68:64; 4.99:12; 4.103:37; 4.105:1; 4.126:24; 4.610:44; 4.752:7).

4. P. 24: "The use of *ʿibr* on Sinai 115 may have been the initial writing of the term in ME, so the later convention may not have been established 300 years earlier, and perhaps Hebded—especially if he had been born and raised in Egypt—wrote the word as he preferred to speak it. One simply cannot demand that the conventions of three centuries later be heaped on the shoulders of the man who may have been the first person in history to record this proper name as a Semite raised in Egypt would write it."

5. Petrovich advances the first two arguments in his book (p. 24) and proposed the third on academia.edu in a response to T. Schneider's critique of his Egyptological arguments. Douglas Petrovich, "The Reading of Sinai 115's Caption: An Open Response to Thomas Schneider," https://www.academia.edu/30408017/_2016_The_Reading_of_Sinai_115s_Caption_An_Open_Response_to_Thomas_Schneider, 2–3.

6. J. E. Hoch, *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period* (Princeton: Princeton Univ. Press, 1994), 492–97; Thomas Schneider, *Ausländer in Ägypten während des Mittleren Reiches und der Hyksoszeit*, vol. 2*: Die ausländische Bevölkerung* (Wiesbaden: Harrassowitz, 2003), 116–74.

corresponds to Hebrew ʿ in Egyptian loanwords into Hebrew.[7] The third solution assumes that Akkadian *ḫabiru* and Hebrew *ʿibrî* are cognates displaying an irregular correspondence between *ḫ* and ʿ, which would warrant the hypothesis of a third consonant lying behind them. But this is not the case. *ḫabiru* is an Akkadian transcription of West Semitic *ʿapiru*. The mismatch between the initial phonemes reflects a larger mismatch between the phonology of Akkadian and the phonology of the West Semitic languages: Due to contact with Sumerian, Akkadian lost almost all of the Proto-Semitic "gutturals," including the voiced pharyngeal fricative ʿ. *ḫ* was the only guttural to survive and so it was used to transcribe all of the other West Semitic gutturals. Furthermore, we would need far more than a single cognate set to establish Akkadian *ḫ* and Biblical Hebrew ʿ as reflexes of a third, hypothetical phoneme since a single cognate set could be the result of chance or borrowing. J. Huehnergard, for example, musters approximately sixty cognate sets to argue for the existence of a Proto-Semitic phoneme *x'* that actualized as *ḫ* in East Semitic and *ḥ* in West Semitic.[8]

Even if we accept Petrovich's reading and translation of Sinai 115, the appearance of the word "Hebrew" in a Middle Kingdom Egyptian inscription from Serabit el-Khadem does not demonstrate that the alphabetic inscriptions from Wadi el-Ḥôl, Lahun, and Bir en-Naṣb, and New Kingdom Serabit el-Khadem were written in the Hebrew language. In fact, it is unclear whether all of the early alphabetic inscriptions even record the same Semitic language, and Petrovich does not offer any evidence to show that they do.[9] At most, Petrovich's reading—bracketing for a moment its epigraphic and linguistic drawbacks—shows that individuals known as Hebrew may have been present at Serabit el-Khadem during the Middle Kingdom and that the Egyptians wrote about them in a single stele.

The appeal to acrophones also proves problematic. In the second appendix to the book, Petrovich discounts ten traditional letter names (*gîmel*, *hê*, *zayin*, *ḥêt*, *ṭêt*, *sāmek*, *ṣādê*, *qôp*, *šîn*, and *tāw*) because they do not occur as common nouns in Biblical Hebrew (pp. 205, 206, 209, 210, 211, 217, 220, 221, 222, 224). As a motivation for this practice, he writes, "If one grants that the original alphabet could have been Hebrew, the question arises as to the original names of each Hebrew letter, given that the alphabet is based on an acrophonic system and that there is a long and well-established tradition of fixed Hebrew words that correspond to each letter of the alphabet" (p. 201).

In other words, Petrovich's proposed acrophones rely on the assumption that the inventors of the alphabet spoke Hebrew, and thus his appeal to letter names turns into a circular argument. At best, this argument could serve as potential confirmation that Petrovich's hypothesis is correct. If he could not find Hebrew acrophones for the letters of the alphabet, it would be unlikely that the inventors of the alphabet spoke Hebrew. But this line of reasoning does not offer particularly strong support for Petrovich's argument since it is possible to come up with alphabetic acrophones from any West Semitic language. In fact, it is probably more difficult to come up with acrophonic letter names from Biblical Hebrew than from other West Semitic

7. Y. Muchiki, *Egyptian Proper Names and Loanwords in North-West Semitic* (Atlanta: SBL Press, 1999), 264; B. J. Noonan, *Non-Semitic Loanwords in the Hebrew Bible: A Lexicon of Language Contac*t (University Park, PA: Eisenbrauns, 2019), 274.

8. J. Huehnergard, "Akkadian *ḫ* and West Semitic *ḥ," *Studia Semitica* 3 (2003): 103–5.

9. Petrovich's argument would be more convincing if he did not date the alphabetic inscriptions from Serabit el-Khadem to the New Kingdom. He could claim that the presence of Hebrews at Serabit el-Khadem coincided with the production of a fairly extensive corpus of early alphabetic inscriptions. According to Petrovich's own analysis, however, the four corpora of early alphabetic inscriptions that he studies are at a significant geographic (Wadi el-Ḥôl, Bir en-Naṣb, Lahun) or temporal (Serabit el-Khadem) remove from Sinai 115.

languages because most of the alphabetic letters depict everyday objects, which often go unmentioned in the texts preserved in the Hebrew Bible.

Petrovich's third argument is based on personal names, but it does not fare much better than his other two claims. Personal names are poor markers of linguistic affiliation because they often stand outside of the prevailing linguistic system. Egyptian names, like Phineas and Passhur, appear in the Hebrew Bible (Exod. 6:25, Jer. 20:1), yet no one would claim that the Bible is written in Egyptian. Or, to cite a more contemporary example, my first name ultimately comes from Norwegian—it is the Bøkmal spelling of Arne, itself from Old Norse Arni 'eagle'—and yet I publish exclusively in American English. Furthermore, two of the personal names that Petrovich flags as being exclusively Hebrew—Moses (< *mśy* 'born of DN')[10] and Asenath (*ns-nt* 'Belonging to Neith')[11]—most likely come from Egyptian and so it would be unsurprising to find them in an Egyptian context such as Bir en-Naṣb or Serabit el-Khadem.

In addition to these formal arguments, Petrovich claims to find a comparative *min*-construction in Wadi el-Ḥôl 1 and the words *təlî* 'quiver' and *ʾêmâ* 'terror' in Sinai 349, and argues that these linguistic features appear in Hebrew alone (pp. 43, 113–14). He translates Wadi el-Ḥôl 1 as follows: "Wine is more abundant than the daylight, than the baker, than a freeman" (*rb {w}yn mn hng mhʾp mḥr*) (p. 39). Later he states that "The structure of this text is so particularly Hebrew that any other language can scarcely be theorized for it. Grammatically, the text is known as a *min*-comparative, which abides by a strict formula: comparative adjective + superior noun + *min* + inferior noun" (p. 44). This construction is not limited to Hebrew, however; it also appears in Biblical Aramaic and Arabic. In Daniel 7:20, for example, Daniel's divine interlocutor describes the new horn on the fourth beast as follows: "its appearance is greater than [that of] its companions" (*wə-ḥezwah rab min-ḥabrātah*). Thus, the comparative *min* is not exclusive to Hebrew and does not indicate that Wadi el-Ḥôl 1, much less all of the early alphabetic inscriptions, were written in Hebrew.

Single lexical items also prove poor indicators of linguistic affiliation because words are usually the first features to be borrowed in situations of language contact. English, for example, contains thousands of French loanwords, some of which entered the lexicon centuries ago, and yet no serious linguist would classify English as a Romance language. Furthermore, the two words that Petrovich highlights as being diagnostically Hebrew—*təlî* 'quiver' and *ʾêmâ* 'terror'—do not appear solely in Hebrew.[12] They also appear in various dialects of Aramaic, which means that they are not diagnostic of Hebrew.[13]

Petrovich's linguistic arguments raise two important methodological questions: 1) Did Hebrew exist as a distinct language prior to the Late Bronze Age? and 2) Can scholars even distinguish between Hebrew and other Canaanite languages in purely consonantal orthography given the available data? The answers to these questions, I believe, are 1) no and 2) it

10. J. Van Seters, "Moses," *Encyclopedia of Religion*, ed. M. Eliade (New York: Macmillan, 1987), 10: 115–16. Muchiki, *Egyptian Proper Names*, 216–17, and K. Kitchen, *On the Reliability of the Old Testament* (Grand Rapids: Eerdmans, 2003), 296–97, argue that Hebrew *mōšê* cannot come from Egyptian *mśy* because Egyptian *ś* is never represented by Hebrew *š* in other loanwords and proper names. But this is simply not true. The correspondence is quite common (compare, for example, Egyptian *ḥśmn* > Hebrew *ḥašmal* 'bronze' and Egyptian *šś* > Hebrew *šēš* 'linen') and reflects the original value of Hebrew *š* as /s/ prior to palatalization.

11. Muchiki, *Egyptian Proper Names*, 208–9.

12. Petrovich (p. 114) admits as much when he states: "Of great philological importance, this nominative (*ʾêmâ*) occurs only in Biblical Hebrew and Aramaic, as there are no known uses of the noun in other cognate languages, such as Phoenician and Ugaritic."

13. J. Hoftijzer and K. Jongeling, with appendices by R. C. Steiner, A. Mosak Moshavi, and B. Porten, *Dictionary of the North-West Semitic Inscriptions* (Leiden: E.J. Brill, 1995), 1216, 1252.

depends. As I argue in a forthcoming article, Proto-Canaanite dates between 1550 and 1360 BCE.[14] If these dates are correct, then Hebrew cannot predate the earliest possible date for Proto-Canaanite at the beginning of the New Kingdom because Hebrew itself is a descendent of Proto-Canaanite. Therefore, it is unlikely that the early alphabetic inscriptions from the Middle Kingdom record Hebrew, and here I would include most, if not all, of the early alphabetic inscriptions from Serabit el-Khadem (*pace* Petrovich).

The answer to the second question depends on the identification of diagnostic features for the different Canaanite languages. But, given the fragmentary attestation of many of the Canaanite languages (such as Edomite, Ammonite, Moabite, and Amarna Canaanite), it seems difficult to find diagnostic features that are positively attested for all languages. One possible feature that springs to mind is the form of the feminine plural before possessive suffixes. In Biblical Hebrew, the feminine plural takes the form *-ôtê-* (< *-ōt-ay-) before possessive suffixes, a combination of the feminine plural morpheme and the masculine plural oblique morpheme *-ay. In the remaining Canaanite languages for which we have evidence (i.e., Phoenician, Moabite), the feminine plural morpheme appears to take the form *-ōt-* before suffixes.[15] Unfortunately, however, the ending *-ōtê-* proves impossible to detect in purely consonantal orthography since both *-ôtê-* and *-ōt-* would be written *t*. The Hebrew form, if it were a diagnostic feature, would only be detectable prior to the contraction of the diphthong, when the *y* was still consonantal and would still have been represented in writing.

To summarize, Petrovich's five pieces of evidence for reading the early alphabetic inscriptions as Hebrew are fundamentally flawed: 1) The word "Hebrew" does not appear in the Egyptian inscription Sinai 115 from Serabit el-Khadem, and even if it did, its presence does not demonstrate that early alphabetic inscriptions from other locations were written in Hebrew. 2) The ability to find Hebrew names for the letters of the alphabet relies on the assumption that the Israelites invented the alphabet. 3) Personal names fail as an indicator of linguistic identity because they often come from other languages. 4) The comparative *min* appears in Biblical Aramaic and Arabic in addition to Hebrew. And 5) The words *təlî* 'quiver' and *ʾêmâ* 'terror' are not unique to Hebrew, but also appear in Aramaic. Furthermore, it is unlikely that Hebrew even existed as a distinct language during the Middle Kingdom, when many of the early alphabetic inscriptions were written. And even if it did, it would be difficult to distinguish between Hebrew and other Canaanite languages written in consonantal orthography, given the available data.

MORE GENERAL PROBLEMS

In addition to these problems with the main argument, *The World's Oldest Alphabet* contains several factual errors, omissions, and misquotations that further weaken Petrovich's claims. In this section, I will discuss the most serious of these issues.

Factual errors severely undermine several of Petrovich's claims. In appendix 1, for example, Petrovich argues that the acrophone for the letter *q* was a "spun fiber," rather than monkey or ape, as typically reconstructed. By way of counterargument, he writes, "Moreover, the burden of proof that falls on anyone following this view is the need to connect it to a legitimate Hebrew vocabulary word for "baboon" or "monkey"; neither word appears in the Hebrew Bible" and "even more inexplicable is why they [i.e., the inventors of the alphabet]

14. A. M. Wilson-Wright, "Linguistic Contact between Hebrew and Ancient Egyptian," in *Oxford Handbook on Ancient Egypt and the Hebrew Bible*, ed. S. T. Hollis (Oxford: Oxford Univ. Press, forthcoming).

15. R. W. Garr, *Dialect Geography of Syria-Palestine, 1000–586 B.C.E.* (Winona Lake: Eisenbrauns, 2004), 97–99.

would choose an object/animal for whom Egypt—the birthplace of the alphabet—was not a native habitat for monkeys or baboons [sic]. Would they have chosen a word-picture not even observable in Egyptian or Levantine culture?" (p. 221). Neither of these statements is true. Not only does Biblical Hebrew possess a word for monkey, *qôp* (1 Kings 10:22; 2 Chron. 9:21), this word closely resembles the name of the letter *q* in the Greek (*qoppa*), Syriac (*qop*), and Mishnaic traditions (*qôp*).[16] And while monkeys were not native to Egypt, they were frequently imported as pets and service animals and served as the inspiration for hieroglyph E33.[17]

Another factual error appears in Petrovich's discussion of the sandhi phenomenon (pp. 33, 43, 98, 114, 123, 150–51, 157, 165). In linguistic terminology, sandhi refers to the coalescence of two adjacent phonemes into a single phoneme, which can sometimes be represented in writing as a single letter.[18] The early alphabetic inscriptions at Serabit el-Khadem contain a few optional sandhi writings, mostly in the recurring formula *mā(ʾ)hab-baʿlat* "beloved of the Lady." In Sinai 374, this formula is written *mʾhb bʿlt*, but in Sinai 345 it is written *mhbʿlt* with a single *b* representing both the final phoneme of *mā(ʾ)hab* and the initial phoneme of *baʿlat*. These readings are consistent with the traditional understanding of sandhi. Yet Petrovich understands sandhi to include consonantal phonemes separated by a vowel and proposes many readings based on this principle.[19]

In his discussion of Sinai 361, for example, he argues that the consonantal sequence *bš* represents the *pōlēl* participle *bōšēš* and in his treatment of Wadi el-Ḥôl 1, he claims that *yn* stands for *yayin* (pp. 43, 165). Such an extended sandhi rule seems unlikely for two reasons. First, it is difficult to account for it as a genuine linguistic phenomenon within Hebrew. We would have to posit a vowel deletion rule of the form $*C_1VC_1 > C_1C_1$ for the sandhi rule to apply and such a sound change is not attested for any variety of Hebrew.[20] Second, the level of ambiguity in the writing system increases exponentially under Petrovich's expanded sandhi rule and offers more leeway for the would-be decipherer. Without the expanded sandhi rule, *bš* could represent at least six different words (any word of the form *b*v*š*, where v = *a*, *i*, *u*, *ā*, *ī*, or *ū*); with it, *bš* could represent at least 42 different vowel combinations (*b*v_1*š* or *b*v_1*š*v_2*š*, where v_1, v_2 = *a*, *i*, *u*, *ā*, *ī*, or *ū*).

In several places, Petrovich fails to engage with earlier scholarship and omits references that would potentially challenge his reconstructions. In appendix 2, for example, Petrovich argues that the alphabet originally had twenty-two letters, matching the number of letters found in the Hebrew Bible and Iron Age Hebrew inscriptions (pp. 226–29). Yet this argument proves untenable in light of scholarship on historical Hebrew grammar. While it is true that the alphabet used to write Hebrew contains only twenty-two letters, the Hebrew language distinguished more than twenty-two phonemes until at least the second century BCE. Transcriptions of proper names into Greek show that the letters *ʿayin* and *ḥêt* each represented two different phonemes. *ʿayin* represented both the voiced pharyngeal fricative

16. G. J. Hamilton, *The Origins of the West Semitic Alphabet in Egyptian Scripts* (Washington, DC: The Catholic Biblical Association of America, 2006), 220.

17. E. Brunner-Traut, "Affe," in *Lexikon der Ägyptologie*: *Band I, Lieferung 1*, ed. W. Helck and E. Otto (Wiesbaden: Harrassowitz, 1972), 85–86.

18. R. C. Steiner, "Phonemic Spelling and *Scriptio Continua* for Sandhi Phenomena and Glottal Stop Deletion: Proto-Sinaitic vs. Hebrew," *JNES* 75 (2016): 317.

19. He also states that sandhi writings are the rule in the early alphabetic inscriptions, rather than the exception, overlooking the contrast between Sinai 374 and Sinai 345.

20. This rule cannot account for the writing of *yayin* as *yn* because word initial consonant clusters are unattested in both Northwest Semitic and Hebrew.

ʿ (transcribed Ø; e.g., *yaʿăqōb* > Ιακωβ 'Jacob') and the voiced velar fricative *ǵ* (transcribed γ; e.g., *ʿazzâ* > Γάζα 'Gaza'), while *ḥêt* represented both the voiceless pharyngeal fricative *ḥ* (transcribed Ø; e.g., *yiṣḥāq* > Ισαακ 'Isaac') and the voiceless velar fricative *ḫ* (transcribed χ; e.g., *rāḥēl* > Ραχηλ 'Rachel').[21]

Moreover, the orthographic distinction between *š* (שׁ) and *ś* (שׂ) in the Masoretic Text reflects the existence of two different phonemes in Biblical Hebrew (e.g., **łayama* > *śām* 'he placed' vs. **sim* > *šēm* 'name'). These extra phonemes create problems for Petrovich's claim that Hebrew speakers invented a twenty-two-letter alphabet. Why would Hebrew speakers fail to invent letters for three of the phonemes found in their language? Or are we to assume that these phonemes emerged after the invention of the alphabet in exactly the same places that cognate evidence says they should? Petrovich does not engage with scholarship on these issues.

Petrovich's discussion of standard Biblical Hebrew also omits several potentially challenging references. Many of the readings that Petrovich proposes deviate from standard Biblical Hebrew usage and he does not engage with standard Hebrew reference grammars and lexica, such as *HALOT* and Gesenius-Kautzsch, to explain why his readings are preferable or even plausible. To cite one example: He translates the consonantal sequence *ʾntzšp* in Sinai 349 as "He sought occasion to cut away to barrenness" (*ʾinnâ tōz šəpî*) on the basis of the Biblical Hebrew words *ʾnh* 'to cause to happen', *tzz* 'to tear away', and *šəpî* 'barren heights' (p. 112). Each of these words poses problems for Petrovich's translation. The root *ʾnh* only means 'to seek an occasion' in the *hithpaʿel* and even then, it never governs a following infinitive as in Petrovich's reconstruction; the root *tzz* is a *hapax legomenon* in the Hebrew Bible and appears in the *hiphʿil* in its single attestation, not the *qal* (Isa. 18:5); [22] and the noun *šəpî* refers to barren places (e.g., hills in the desert) and not barrenness in the abstract.[23]

Omissions plague Petrovich's epigraphic discussion as well. Petrovich does not consistently identify the images that form the basis for his readings and even when he does, he does not always include these images in the book. This makes it difficult for other scholars to check his work. He neither mentions nor utilizes the latest tools available for the study of the early alphabetic inscriptions: the new photographs of Sinai 376 and 377 published by P. Tallet,[24] the plaster casts and squeezes of many of the Sinaitic inscriptions, available at the Harvard Museum of the Ancient Near East (formerly, Semitic Museum) and the Catholic University ICOR Library,[25] and the RTI files of these objects that I produced and made freely available on the internet.[26] These tools are especially important because the political situation in Egypt and the Sinai makes it difficult to personally consult many of the original

21. For a survey of the evidence, see R. C. Steiner, "On the Dating of the Hebrew Sound Changes (*Ḫ > Ḥ and Ġ > ʿ) and Greek Translations (2 Esdras and Judith)," *JBL* 124 (2005): 229–67.

22. Furthermore, infinitives of purpose are usually introduced by the preposition *lə-*. The absence of *lə-* with infinitives of purpose is a recurring issue with Petrovich's reconstructions. See pp. 136, 157, 180.

23. *HALOT*, 70, 1628, 1715.

24. P. Tallet, *La zone minière pharaonique du Sud-Sinaï, I: Catalogue complémentaire des inscriptions du Sinaï* (Paris: IFAO, 2012), 23.

25. Of the fifteen inscriptions Petrovich analyzes, plaster casts or squeezes are available for Sinai 349, 351, 353, 357, 360, and 361.

26. The RTI files can be downloaded from http://www.inscriptifact.com/. For an overview of what RTI is and how it can aid epigraphic analysis, see N. E. Greene and H. D. D. Parker, "Field of View: Northwest Semitic Paleography and Reflectance Transformation Imaging (RTI)," in *Epigraphy, Philology, and the Hebrew Bible: Methodological Perspectives on Philological and Comparative Study of the Hebrew Bible in Honor of Jo Ann Hackett*, ed. J. M. Hutton and A. D. Rubin (Atlanta: SBL Press), 213–23.

Fig. 5. The remains of the fourth column of Sinai 361. Most of the text has been obliterated by gouges in the rock surface. Image by A. M. Wilson-Wright

inscriptions.[27] Instead, Petrovich uses images culled from the works of H. Grimme, R. F. Butin, R. F. S. Starr, G. Gerster, and F. W. Dobbs-Allsopp, to judge from several offhand comments scattered throughout the book (pp. 32, 65, 68, 81, 86, 101, 132, 176–77).[28] While useful, these images do not offer the level of detail found in the new RTI images. Indeed, Petrovich's reliance on older, static images may explain some of the errors in his reconstructions. In the fourth column of Sinai 361, for example, Petrovich (p. 164) construes several pockmarks in the inscriptions' surface as the letters *ʿ*, *l*, and *t* (see fig. 5).

Misquotations of other scholars further mar *The World's Oldest Alphabet*. In his discussion of Sinai 345, for example, Petrovich cites p. 129 of Sir Flinders Petrie's 1906 *Researches in Sinai* as evidence that Sinai 345 was inscribed during the reign of Thutmose III: "The red sandstone of which the sphinx consists was used during the reign of Thutmose III (1506-1452 BC), but not at other times" (p. 81). Yet Petrie's comments actually refer to Sinai 346 and not Sinai 345.[29] In a similar vein, he states that I translate the first word of the left side of Sinai 345 as "inscription" (*han*[v]) followed by a demonstrative pronoun (*ḏ*) (p. 89). A quick consultation of "Interpreting the Sinaitic Inscriptions in Context" shows, however,

27. As Greene and Parker, "Field of View," 210, point out, first-hand examination of the original inscription is important for epigraphic analysis, but when it proves impossible to consult the original inscription, high quality images and particularly RTI files offer a useful substitute.

28. Compare H. Grimme, *Althebräische Inschriften vom Sinai: Alphabet, Textliches, Sprachliches mit Folgerungen* (Hannover: Heinz Lafaire, 1923), pls. 4–5, 15; R. F. Butin, "The Serabît Inscriptions II: The Decipherment and Significance of the Inscriptions," *HTR* 21 (1928): pl. 2a; idem, "The Protosinaitic Inscriptions," *HTR* 25 (1932): pls. 14, 16; R. F. S. Starr and R. F. Butin, *Excavations and Protosinaitic Inscriptions at Serabiṭ el Khadem: Report of the Expedition of 1935* (London: Christophers, 1936), pl. 9; G. Gerster, *Sinai: Land der Offenbarung* (Berlin: Ullstein, 1961), pl. 65; and F. W. Dobbs-Allsopp, "Asia, Ancient Southwest: Scripts, Earliest," in *Encyclopedia of Language and Linguistics*, ed. K. Brown et al., 2nd ed. (Oxford: Elsevier, 2006), 495. It is unclear from Petrovich's comments whether he had access to the original negatives of these photographs or whether he scanned them from books or articles. Scans of printed photographs would preserve less information than the originals because printed images typically have a lower resolution than their source photos.

29. W. M. Flinders Petrie, *Researches in Sinai* (New York: E.P. Dutton and Company, 1906), 131.

that I actually take the first three letters as the demonstrative *hanḏū* followed by the word 'inscription' *waz*(*u*).[30]

CONCLUSION

Petrovich's five pieces of evidence for reading the early alphabet inscriptions as Hebrew do not stand up to scrutiny. 1) The word "Hebrew" does not appear in the Egyptian inscription Sinai 115 from Serabit el-Khadem, and even if it did, its presence does not ensure that the early alphabetic inscriptions from other locations were written in Hebrew. 2) The ability to find Hebrew names for the letters of the alphabet relies on the assumption that the inscriptions are written in Hebrew—a circular argument. 3) The personal names Moses and Asenath that Petrovich identifies in two of the inscriptions come from Egyptian, not Hebrew. 4) The comparative *min* construction is not unique to Hebrew, but also appears in Biblical Aramaic and Arabic; and 5) The words *təlî* 'quiver' and *ʾêmâ* 'terror' appear in various Aramaic dialects, in addition to Hebrew. Furthermore, it is unlikely that Hebrew even existed as a distinct language during the Middle Kingdom, when Petrovich dates many of the early alphabetic inscriptions. And even if it did, it is unclear whether we could distinguish Hebrew from other Canaanite languages of the same time period written in consonantal orthography, given the available data. Beyond these methodological issues, Petrovich's arguments are undermined by factual errors, omissions, and misquotations. In short, *The World's Oldest Alphabet* is fundamentally flawed and should not have been published in its current form.

30. A. Wilson-Wright, "Interpreting the Sinaitic Inscriptions in Context: A New Reading of Sinai 345," *HeBAI* 2 (2013): 144.