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Evidence of an Edomite Hebrew Scribal Cooperation from Tel Malḥata: One Ostracon–Two Scripts–Three Scribes?

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Among the epigraphic finds that Itzhaq Beit-Arieh published from Tel Malḥata, Inscription No. 4, the focus of this paper, is unique among the Iron Age ostraca, as it is written in both the Edomite and Hebrew languages. The context of the inscription is clear: a registration of amounts of one or more unknown commodities, with certain amounts described as 'diminished.' This paper offers a reassessment of Beit-Arie's interpretation of the inscription, suggesting that it testifies to interaction and cooperation among several scribes adhering to different scribal dialects. It further discusses the broader implications of the inscription for the research of early Edomite writing.

Keywords: Iron Age, Edomite, Hebrew, scribal dialect, epigraphy, Northwest Semitic alphabet, ostraca, numerical systems

Introduction

The Edomite scribal dialect of Iron Age II has been defined as an offspring of the Hebrew branch of the Northwest Semitic alphabet, with some characteristic Aramaic traits (Naveh 1987:110; Beit-Arieh 1995; Vanderhooft 1995; Herr 2014; Rollston 2014:204, n. 5).[2] The limited corpus of Edomite inscriptions, mostly on ostraca, has considerably grown through a number of excavation reports published in recent decades, for the most part by the late Itzhaq Beit-Arieh. He conducted excavations at sites in the northeastern Negev, where he identified levels of Edomite occupation, such as at Ḥorbat 'Uza and Ḥorbat Radum, Tel Malḥata, Tel Masos, Tel 'Aro'er and Tel 'Ira (Beit-Arieh 1995; 2007; Naveh apud Thareani 2011:22f7; Beit-Arieh 2015).

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[2] We should not speak of an "Edomite script", as the specifics that serve to differentiate between the various branches of the Northwest Semitic alphabet do not define separate scripts. Hebrew, Phoenician and Aramaic are branches of the Northwest Semitic alphabet script, and their respective offshoots, such as Ammonite, Moabite, Edomite and Neo-Philistine, are scribal dialects (see below).

Among the twenty epigraphic finds that Beit-Arieh published from Tel Malḥata (Beit-Arieh 2015), 14 were ostraca. Significantly, seven of these can safely be assigned to the Edomite variant of the alphabet; five incised inscriptions are in Hebrew, and six of the ostraca may be either; one later ostracon is Aramaic. Another ostracon, Inscription No. 4, is the focus of this paper. This ostracon bears a unique inscription on its convex exterior side, composed of script in both the Edomite and Hebrew languages, which appear in separate lines. Some misgivings in regard to Beit-Arieh's reconstruction of the inscription and alternative readings of specific words are included below. Beit-Arieh's interpretation of this inscription, the meaning of the exceptional presence of both Edomite and Hebrew in one inscription, and its broader implications for research into early Edomite writing, are revaluated in this paper.

TEL MALḤATA INSCRIPTION NO. 4

Inscription No. 4 was described by Beit-Arieh as 'unusual,' as one of the lines of the exterior inscription "appears to have been inserted into the inscription at a later time as a palimpsest" (Beit-Arieh 2015:492). The ostracon, a fragment of 6.4 × 6.0 cm, is written on both sides. The convex exterior has six or seven lines, while the concave interior comprises remains of four or five lines; here the ink traces are mostly very faint, and only a few letters toward its left edge appear more clearly (Beit-Arieh 2015:492–494).

For the following discussion, the black and white photographs and facsimiles in Beit-Arieh's (2015:493) publication should be consulted. The facsimiles in Beit-Arieh's section titled "Epigraphic finds from the Iron Age" (Beit-Arieh 2015:487–504) are of uneven quality. The facsimiles for Inscription No. 4 are technically very well executed (due to an attempt to illustrate the well-preserved state of the ink) and appear very precise.[3] I would deviate in some details only, which may however be quite meaningful, and prepared my own attempt, based on the published photographs (Fig. 1).

The first line on the ostracon exterior, which may be considered the *recto* of the inscription, is broken, and it is quite possible that more lines originally preceded it (therefore I use the designation Line x+1). On the right edge, too, the marginal letters in several lines are broken and hence, the text is incomplete. The next two lines (Lines x+2, x+3) are of a consistent and homogenous appearance with Line x+1, all demonstrating a good state of preservation of the ink.

Of a similar, but not identical appearance, are the last preserved lines, designated Lines x+6 and x+7. The ductus in these two lines is similar to that of the first three lines, but smaller. Line x+7 is broken and only a few faint traces of it are visible.

[3] From information provided in n. 1 in Beit-Arieh (2015:487), and a comparison with other publications, I deduce that the facsimiles for Inscription 4 were produced by the artist Joseph Kapelyan. I attempted to contact him on this facsimile, but was unsuccessful.

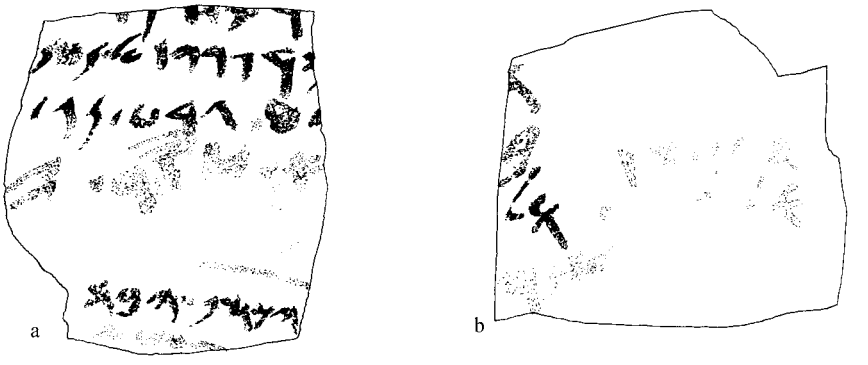

Fig. 1. Tel Malḥata Inscription No. 4: (a) *recto* and (b) *verso* (drawing: Stefan Jakob Wimmer).

Most interesting is the middle section of the *recto* side, between Lines x+3 and x+6. Line x+4 follows directly below Line x+3, and at one point the letters even seem to overlap. The letters of Line x+4 are larger and much fainter than those of the preceding lines. Below Line x+4, there is an uninscribed space of roughly the same height as that of Line x+4. It does not seem to be the case that this area was originally inscribed and all letters have completely faded, even though the ink in other parts of the inscription has faded to different degrees, especially on the *verso* side. It could, of course, be possible that parts of a line existed to the right of this uninscribed area, beyond the broken edge of the sherd, and that this short line did not extend further to the left. In any case, the uninscribed space should not be ignored, and it is designated Line x+5.

A horizontal line is seen above the right part of Line x+6; it originally extended beyond the right edge of the sherd. Judging from the thickness of the line and its same degree of faintness of the ink as that of Line x+4, it belongs to the same section of the inscription as Line x+4. Below I consider whether this fragmentary line could be part of Line x+5, occurring further to the right.

To sum up, the *recto* of this ostracon is clearly composed of three distinct sections: (A) Lines x+1–3; (B) Lines x+4, 5 (including the horizontal line); (C) Lines x+6, 7.

It is possible that additional lines may well have followed above and below the existing inscription, and it is clearly incomplete on its right side. This is not necessarily the case for the left edge, where the last letter of Line x+2 may abut the edge, but it is not truncated. Also, the last letter of Line x+4 is written close to the edge, but does not touch it, and the final letters of all other lines are at some distance from the edge. No ink traces are visible along the same edge on the *verso* side, which forms the upper part of this inscription oriented at a 90° angle to the inscription on the *recto* side; this part of the sherd may not have been originally inscribed, or the ink here may have completely faded.

Section A

For sections A and C, Beit-Arieh soundly established that the script, or rather the scribal dialect (see n. 1), should be classified as Edomite. Unfortunately, the meaning of these lines remains difficult to assess, despite the mainly good preservation of the ink, and even though most of the letters can be read without difficulty. For Lines x+1–3, Beit-Arieh (2015:492) did not suggest a translation, except for two words in Line x+2: "cut down (or: kill) a person," for *gd' np[š]*. He suggested a reconstruction of the word *np[š]* based on the occurrence of this term on three other ostraca from Tel Malḥata (Inscription Nos. 3, 5, 7), postulating that from the letter *š* "only the diagonal line to the right has survived" (Beit-Arieh 2005:492). However, this suggestion must be rejected, as the ink is well-preserved in these lines, and it is inconceivable that only one stroke of the letter *š* would be so clearly preserved while the rest faded without any trace.

This small stroke, slightly inclined to the right and much lower than any of the other vertical letters, can hardly be considered a top-less *w*, as this form of the letter has not been attested in Edomite. The numeral *1* could be an option (see below). My preference is to consider a slightly elongated word divider. Such a word divider is written before the letters *np*, and there may be a faded one in the space preceding *gd'* (not reproduced by Beit-Arieh). There are also word dividers in Line x+4 (see below), and there may be one in Line x+6 (not reproduced by Beit-Arieh), but, strangely, Line x+2 seems to have only one word divider (misunderstood by Beit-Arieh as part of the letter *l*) in the long line x+2. The word divider at the end of Line x+3 concludes Section A, which may perhaps be the reason why it is slightly more pronounced than the other word dividers.

In Line x+6, the letter *p* has a typically curved tail, which is not as distinct at the sign read as *p*. In fact, the latter resembles the *g* in the same line and thus, *ng* here could be read instead of *np*. Neither *ng* nor *np* are meaningful West Semitic words, and may represent some unknown abbreviation. The preceding word, read *gd'* by Beit-Arieh, may rather be read *gr'*, 'diminish' in biblical Hebrew and Aramaic.

A reconstruction of Line x+1, where only the lower parts of five(?) letters are preserved, is as follows:

[...]r 'ḥn[4]

This may perhaps be the plural of *'ḥ*, 'brother'.

In Line x+2, the sequence is:

[...]kr grh 1 'l . nḥn

[4] An anonymous reviewer raised doubts concerning the reading of the second fragmented sign as' (*alef*), as its vertical shaft would lean to the right, whereas in Line x+6 it has the usual inclination to the left. My suggestion is that the pointed triangle toward the lower left is the lower V-shaped part of *alef*, not its vertical line. From the 'vertical' (or rather oblique) line, only a small part protruding to the left would remain, and it would be inclined to the left, as it should. Unlike in Line x+6, it must be admitted, this oblique line would not continue further to the lower right.

Beit-Arieh (2015:492) read the letter *w* after *grh*, but this would have to be a top-less shape unknown in Edomite (see above). Instead, the numeral *1* is a likely possibility here. Here the mark is much larger than the small stroke identified as a word divider in Line x+3, and it is also inclined as are most of the letters. The next-to-last mark in this line was reconstructed as a number by Beit-Arieh. He saw only two vertical lines and assumed that this "represents a number, although the combination with the letters is meaningless" (Beit-Arieh 2015:492). In the author's view, the lines, which are a little blurred, form the letter *ḥ*, possibly a variant of the personal pronoun in the first person plural (Hoftijzer and Jongeling 1995: 81). The word *grh*, the weight and value unit gerah, is plausibly followed by a numeral and perhaps the conjunction *'l*, "above" (in the sense of 'in addition [to some amount]'). Yet, the letter *g* here is written with a straight orientation, or one that only slightly slants to the right. In contrast, the letter *g* is clearly slanting in the combination *gr'* in Line x+3, as expected, as is the case with *ng* (*np*?). The straight orientation of the *g* may indicate that it is the letter *p*, forming the word *prh* for 'cow'. This possibility is unlikely, however, as the feminine ending for this word should be *t* (*prt*), and the curved tail typical of p (e.g., Line x+6) is absent. The reconstruction of Line x+3 as a whole is as follows:
[...l(?)]ṭ . gr' . ng/p(?)

Section B

Unlike in the lines of Section A, the letters in Line x+4 are easily read and are indisputable:
[...]'. ḥsr . 8

The term *ḥsr* is briefly discussed by Beit-Arieh (2015:493). His observation that "In the Bible, this word means to lessen, become diminished (1 Kings 17:15),"[5] is reminiscent of the meaning of the word *gr'* in Line x+3; it may not be a coincidence that the two words are positioned precisely one below the other. It is clearly also possible that this word means that a certain amount, namely *8*, was missing or that its arrival was still pending.

The numeral *8* concludes what is preserved of Line x+4, and this may in fact be the end of the line. The two parallel lines forming the number are oblique, oriented in the same angle as are the preceding letters. The pronounced ticks at the right end of both lines are very typical of the hieratic numeral *8* (Wimmer 2008:212). If this was not the case, one might consider that the two parallel lines represented the numeral *20* in the Aramaic/Phoenician tradition (Wimmer 2008:195f); Beit-Arieh (2015:492) apparently had this in mind when he translated the line as "lacking 20(?)", even though he called it "a hieratic number" (Beit-Arieh 2015:493).

[5] The correct biblical passage is in fact 1 Kings 17:16.

Excursus: Hieratic and Phoenician/Aramaic Numerals

In the various branches of the Northwest Semitic alphabet, two distinct systems for the notation of numerals were in use. In the Hebrew Kingdoms of Judah and Israel, Egyptian numerals in the hieratic script ductus were in use (Wimmer 2008). This tradition may have survived from the Ramesside governance of the Late Bronze Age, when the administrative use of hieratic is well-attested (especially in southern Canaan; Wimmer 2008:275, and see discussion therein; see also Wimmer et al., forthcoming). However, during the Iron Age, the practice is well-attested only between the eighth and the early sixth centuries, when its development was closely linked to that of contemporary Egyptian cursive scripts, including the adoption of early Demotic influences (Wimmer 2008:276ff).

In the formal hieroglyphic ductus, the numerals 1 to 9 consist of a juxtaposition of individual strokes. In hieratic, which is a cursive ductus of hieroglyphs for everyday writing in ink, the combinations of strokes for numerals 5–9 developed into distinctive symbols of their own. Depicting the decades, hundreds and thousands consisted, in essence, of a basic symbol,[6] which was modified to express the multiples.

In addition to the numerals, some symbols for measures were also adopted from hieratic, and apparently readily adapted and supplemented for local measures. The resulting, very specific tradition of hieratic in the Hebrew alphabet was termed 'Palestinian Hieratic' or 'Hebrew Hieratic' (Wimmer 2008:273).[7]

The Phoenicians did not adopt Egyptian numerals despite their own close contacts with Egypt. Instead, they developed a new system with vertical strokes for the single units and horizontal strokes for the decades. As a rule, the single units were arranged in groups of three each, and the decades in pairs in which the marks were written one above the other. The sign group 2 × 10 for 20; eventually developed into a Z-like ligature. Higher numbers were expressed by multiplication. This numerical system was different from the Egyptian not only graphically, but in essence. No special symbols for measures were developed by the Phoenicians, and instead abbreviations were used (e.g., the initials *k* and *s* for *kor* and *se'a*).

The Phoenician numerals were adopted by the Arameans, with Aramaic inscriptions comprising the lion's share of the surviving written attestations of this system; we therefore, speak of the Phoenician/Aramaic system (Wimmer 2008:195f). It is first attested in the eighth century, and continued to be widely used together with the Aramean language in the Persian and Hellenistic periods. The Palestinian hieratic tradition, in contrast, became extinct with the decline of the Hebrew language and is not attested after 586 BCE.

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[6] Strictly speaking, there are two basic symbols for the decades (one for 10, 20, 30 and 70, and another for 60, 80 and 90; special shapes were used for 40 and 50).

[7] I am currently working on an update with new evidence and revisited discussions, to be published in English in 2023. This paper is one of the by-products of resumed work on the topic.

Section C

Line x+6 seems to have been correctly read by Beit-Arieh, except for a faded word divider between the two reconstructed words, which he did not recognize:
[...] h-ksp . hb'
"[…] the silver, have it brought!" (Beit-Arieh 2015:493, and see discussion therein).
Line x+7 is too fragmentary and faded to permit a sound reading.

Discussion: Edomite–Hebrew–Edomite

While the full content of the ostracon still escapes us,[8] the context appears to be the registration of amounts of one or more unknown commodities, with certain amounts described as 'diminished,' i.e., missing or still outstanding. The meaning of the word 'silver' in Line x+6 may either relate to the metal, or indicate the value of some goods. The measure *gerah* in Line x+2 could refer to silver as well.

What makes this ostracon so peculiar is not only the presence of three sections of distinct characteristics of the script and ink, as described above, but especially the observation that part of it is written in the Edomite variant of the Northwest Semitic alphabet (Sections A and B), while another part is written in Hebrew (Section B), as was already observed by Beit-Arieh (2015). However, all three sections appear to be consistent with each other, so that Beit-Arieh's assessment that Line x+4 "appears to have been inserted into the inscription at a later time as a palimpsest" misses the point. This reconstruction is also unlikely for another reason. It is implausible that the uninscribed space in the centre of the ostracon would have been left intentionally empty by one scribe, or that writing there would have been wiped out without any trace, when at a later time, another scribe would reuse the sherd for writing an isolated note in Hebrew.

A different interpretation is proposed here, which incorporates the insights from a reassessment of the text presented above. This inscription can be interpreted as evidence of an interaction and cooperation among several scribes adhering to different scribal dialects.[9] An Edomite scribe commenced the text, mentioning an indication of a small value (*grh* 1), and that something (*ng* or *np*) was diminished or missing (*gr'*). Then his colleague, writing in Hebrew, added that another amount of '8' was diminished or missing, using the Hebrew word *ḥsr*. Perhaps this second scribe intentionally took care to place the latter word exactly under the Edomite scribe's *gr'*, the two words having the same meaning. It is possible that this second scribe added more information in Line x+5, which was part of the original

[8] I present my attempts here in the hope that others may be more lucky, or rather more skilful and knowledgeable, to improve and accomplish more.

[9] While the term dialect, of course, usually refers to language, not script, I suggest the phrase 'scribal dialect(s)'. The scribal traditions under consideration here seem to function in a manner that is parallel to dialects in spoken language.

ostracon now lost to us. This scribe concluded his paragraph with a horizontal line (but see further discussion of this issue below).

After this, an Edomite scribe, again, added more lines at the bottom of the inscription. As it seems, this addition includes the request to submit assets or commodities, measured in silver, which were still missing. Judging from the smaller dimensions of the letters in this part of the inscription and the tighter spacing between the letters and the lines, it would appear that this was not the same scribe who wrote Section A. However, as far as can be determined, the shapes of the letters (see *h* and *'*) are identical in both sections of the inscription and therefore, it is not impossible that the same scribe was responsible for both parts of the inscription.[10]

The presence of both Hebrew and Edomite scribes at Tel Malḥata is attested by separate inscriptions in each of the scribal dialects. Inscription No. 4 further attests to their direct interaction in producing one inscription. It is thus unique among Iron Age ostraca to the best of the author's knowledge.

The inscription on the other side of the ostracon, the *verso*, was classified by Beit-Arieh (2015:494) as "probably in Hebrew script," and as far as can be judged given the poor state of preservation of the ink on this side of the ostracon, the shape and size of the letters resemble those of the letters in Section B on the *recto* side. It is, however, impossible to say definitively whether the *verso* was inscribed by the same scribe responsible for Section B of the *recto*, nor can we establish whether the texts on both sides were in any way related or composed at the same time. The fact that the ostracon was turned by 90° between writing the two inscriptions is in itself noteworthy and unusual, as ostraca inscribed on both sides are typically turned either horizontally or vertically. The inscription on the *verso* side is so heavily faded unfortunately that no meaningful sequence of letters can be detected. A very faint vertical stroke in the second preserved line (Line x+2) could be the numeral *1*, but might as well be part of a letter. The letter *w* near the end of Line x+3 could be graphically interpreted as the hieratic numeral *20* (Wimmer 2008:219), but the mark does not occur at the end of a line, where numerals are typically expected, and is followed by the letter *l*.

What Numbers Can(not) Tell

The presence of the hieratic numeral *8* in Line x+4 is in accordance with the line being composed in Hebrew, given what is known about the exclusive use of hieratic numerals in the Hebrew branch of the Northwest Semitic alphabet. The use of hieratic numerals in the middle part of the inscription suggests an alternative possibility for reconstructing the horizontal line at the bottom of Section B. The hieratic numeral *100* (and multiples

[10] An anonymous reviewer raised the possibility that one and the same scribe could have alternated between the two alphabets (Edomite and Hebrew; 'code switching'). However, since the appearance of the letters in the separate occurrences of the two scripts, including their dimensions, differ markedly, it seems to me improbable that both were produced by the same hand.

thereof) begins with a small tick or vertical segment on the right side of the number, and then extends into a characteristically very long, horizontal or slanting line. In Egyptian, this line is often slanting downward, but on the ostraca from Qadesh Barneʿa (O. Qudeirat 1–5), the line is horizontal or even slanting slightly upward (Wimmer 2008:228–236). It is, thus, a possibility that the truncated horizontal line at the bottom of Section B of the present inscription is the left part of the numeral *100*, or a multiplication thereof, most of which was written in a presumably missing right part of Line x+5.

If the hieratic numeral *20* is identified in Line x+3 of the *verso* (but the letter *w* is to be preferred!), this would also be in accordance, as the *verso* is also inscribed in Hebrew. The numeral *1*, possibly in Line x+2 of the *verso*, is a plain vertical stroke.

In the Edomite sections of Inscription No. 4 only one numeral may be identified, namely *1*, following the word *grh* in Line x+2. Also, the facsimile in Beit-Arieh (2015:493) shows a truncated curved line at the beginning of Line x+7. Graphically, this could be the horizontal line for the numeral *10* in the Phoenician/Aramaic tradition (Wimmer 2008:196). Unfortunately, the ink traces are so faint here that this option cannot be further evaluated.

In Edomite inscriptions, we still have no secure evidence for the system of writing numerals,[11] while the presence of single digits, such as *1*, are not diagnostic as to whether they followed the hieratic or the Phoenician/Aramaic tradition. A fragmentary ostracon from the Edomite capital Buseirah (Puech 1977:19f), found in 1974, may contain the numerals *1* and *2*, as well as the Hebrew hieratic special sign for the measure homer (Wimmer 2008:254f; read *seah* by Puech 1977). However, the ink here is faded and blurred, and further study is needed to reconstruct the inscription with greater precision and evaluate its possible ramifications for the use of numerals and special signs in Edomite inscriptions.[12]

For Moabite, we now have impressive evidence for the use of hieratic numerals from altar inscriptions uncovered at Khirbat ʿAtaruz, Jordan (Bean et al. 2018; Wimmer 2018). This is in accordance with the Moabite alphabet variant being a scribal dialect rooted in the Hebrew branch of the Northwest Semitic alphabet. Accordingly, Phoenician/Aramaic numerals are used in Ammonite ostraca from Tell Ḥisban (Wimmer 2008:62), consistent with the Ammonite alphabet being a scribal dialect of Aramaic.

Finally, there is some evidence that hieratic numerals were also used in the Neo-Philistine alphabet, based on the observation that the latter alphabet employed some special characters from the Hebrew hieratic tradition (Wimmer 2018:714–717). This would be in accordance with Neo-Philistine originating as a scribal dialect of the Hebrew alphabet branch. In principle, it could also be possible that the Philistines, like the Hebrews, adopted hieratic writing practice directly from the Ramesside administration of the region. If this suggestion is correct, it follows that the Philistines later substituted hieratic numerals with those of the Phoenician(/Aramaic) system, as an outcome of their close-knit interactions

[11] The numerals *2* and *3* may be identified in Tel Malḥata Inscription Nos. 5 and 7 (see Wimmer, in prep.).

[12] An attempt will be presented in Wimmer, in prep. (see n. 4).

Table 1. The Branches and Scribal Dialects of the Northwest Semitic Alphabet Script and Their Numerical Systems

	Branches of Northwest Semitic Alphabet		
	Hebrew	Aramaic	Phoenician
Scribal Dialect	Moabite	Ammonite	
	Edomite	Edomite influence	
	Neo-Philistine		Neo-Philistine influence
Numeral System	Hieratic	Phoenician/Aramaic	

with the Phoenician cities in the eighth and seventh centuries BCE. The Philistines may have continued the use of non-numerical special signs adopted from the hieratic tradition, as the Phoenicians lacked such symbols.

Given that Edomite has Hebrew roots, but was also strongly influenced by Aramaic (Table 1), the Edomite scribal dialect may have employed either of these systems of numerical notation. It is to be hoped that someday new finds will tell.

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