A New Hebrew Ostracon from Lachish

Daniel Vainstub, Hoo-Goo Kang, Barak Sober, Iris Arad, and Yosef Garfinkel

Abstract

In an archaeological excavation conducted in 2016 on the northern slope of Tel Lachish, the triangular lower-right corner of a Hebrew ostracon was found. It was assigned to Level II, which was destroyed by the Babylonians in 586 BCE. Despite the very faded condition of the inscription, the following phrase can be cautiously reconstructed for its bottom line: "On the 1[6?] (day of the month) Shapan [son (of)]." This phrase probably summarizes or closes an administrative document.

Keywords: Iron Age; hieratic; epigraphy

1. Introduction

This paper discusses a triangular ostracon recovered from the northern slope of Tel Lachish from a context assigned to Level II (Figs. 1–3). It is most probably the surviving lower-right corner of a larger piece, the original dimensions of which are indeterminate. The triangle's lower side is 62 mm long, and its right side is 58 mm long. It bore a severely faded inscription in black ink. In this paper, we present the results of a reflectance imaging spectroscopy inspection (RIS; also known as hyperspectral imaging) and cautiously offer a partial decipherment of the inscription.

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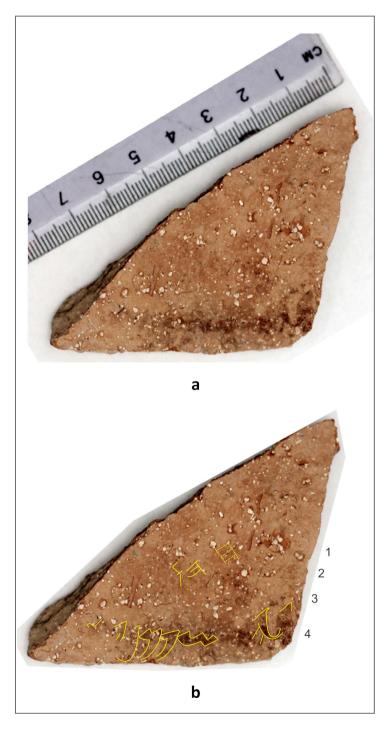


Fig. 1. A color photograph of the ostracon (a) with the remains of writing marked (b). The image was produced by a Cannon EOS 450D camera using a Tamron lens. Since the camera was converted to infrared, a color correction filter was used to produce a color image.

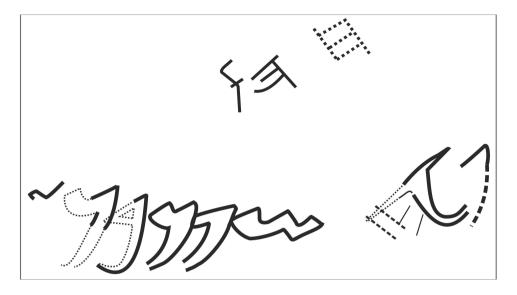


Fig. 2. Line drawing of the writing.

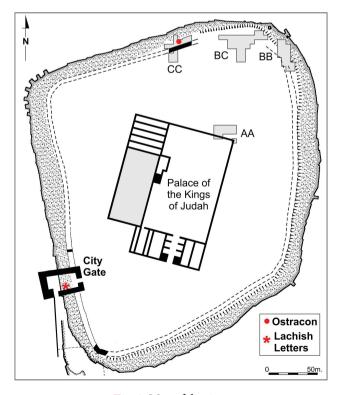


Fig. 3. Map of the site.

2. Background

The ostracon (Basket B736, Locus C283) was found during the 2016 excavation season of the Fourth Expedition to Tel Lachish, conducted on behalf of the Institute of Archaeology of the Hebrew University of Jerusalem and the Southern Adventist University and directed by Profs. Y. Garfinkel, M. G. Hasel and M. G. Klingbeil (License no. G-39/2016; Garfinkel et al. 2019; 2021). It was uncovered in Area CC on the Tel's northern slope (Fig. 3). Locus C283, in which the ostracon was discovered, is a thick glacis layer of chalk, rubble, and earth sandwiched between a stone glacis above (C282) and a fill below (C281). It covered the excavated area between the top of the inner face of W200 (Level V) in the north and the outer face of the city wall of Levels IV–III in the south. It is likely that Glacis C283 and stone Glacis C282 were parts of a single system designed to prevent the slope's erosion. The pottery found in Locus C283 dates from Iron Age IIA, IIB, and IIC. Stratigraphically speaking, and although outside the city wall, it can be securely attributed to Level II, which was destroyed by the Babylonians in 586 BCE. The ostracon was collected with other pottery sherds from Locus C283 on June 30, 2016, and was noticed after pottery washing.

3. The Hyperspectral Scanning

The ostracon was scanned using a Nireos Hera hyperspectral camera described by Miseo and Bradley (2022: 48). This hyperspectral camera covers a range of electromagnetic radiation wavelengths of 400–1,000 nm (i.e., in the visible light and near-infrared regions). A hyperspectral image produced by this device is a data cube comprising 120 spectral bands (grayscale images) representing the reflected light at specific wavelength ranges, resulting in 5.04 nm intervals between consecutive bands.

Since the ostracon is small and fragile and the writing is almost invisible, particular care was taken with the photography settings. The ostracon was placed inside a lightbox on a black background. The lightbox was illuminated with two 100W 12V halogen lightbulbs with reflectors, four 50W 12V halogen lightbulbs, and one 250W 220V halogen floodlight. These bulbs were placed inside the lightbox and directed at the box's roof to illuminate the object with reflected, evenly diffused light. This setting also helped avoid the effects of direct heat generated by the incandescent lightbulbs. All light sources were connected to direct current (DC) power sources to prevent unwelcomed effects due to current alternation.

Hyperspectral scanning was followed by post-processing. First, the data cube was inspected to extract an image with a clear distinction between the writing

and the background. This image was used to generate the mask image needed to calculate the potential contrast (PC) (Faigenbaum et al. 2012; Shaus et al. 2017) of all the bands in the image cube. The band with the highest PC was selected as the "best" image for further processing. Post-processing the best image included histogram stretching, followed by local adjustments of contrast, *gamma*, and lighting in selected areas around the characters to enhance the text's readability (Figs. 4, 5).

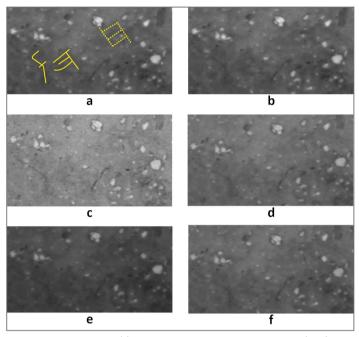


Fig. 4. Lines 1-2 (a) and selected hyperspectral scans (b-f).

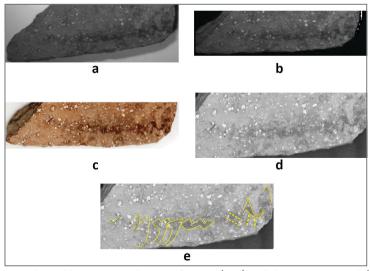


Fig. 5. Selected hyperspectral scans of Line 4 (a–d) and the writing traced (e).

4. The Inscription

1.	[]ਜ[]	[]h[]
2.	[י]הֹוֹ [בן]	[ya]hu [son (of)]
3.	[]	[]
4.	Γ	+[?6] שפֿן בֿון	±10	On	the 1[6?] (day of the month) Špn son (of) []

The surviving upper two rows of the ostracon comprise the pale and abraded remains of writing in black ink (Figs. 1, 2, 4). In Line 1, the faded remains of a het can be cautiously discerned. In Line 2, the letters he and vav can be discerned with a reasonable degree of certainty, possibly pointing to the typical Judahite theophoric suffix יה. Line 3 is empty and apparently was never written. Line 4 features letters that are about 30% larger than those of Line 2. Coupled with the empty Line 3, it is likely that the ostracon's bottom line was written by another person, constituting a phrase that summarizes or closes the document.

In Line 4 (Figs. 1, 5), only the *shin* is complete, clearly featuring all four strokes. The remaining letters are partial but adequately preserved to discern the contours of their strokes: Some featured partially preserved stroke contours, while in others the strokes' outlines were preserved. This line opens with the hieratic numeral 10 preceded by the apex of the head of a *bet* with the beginning of its descending stroke; this is consistent with the beginning of a date formula. The remains of the two heads of letters after \S{pn} are consistent with the heads of the letters bn, "son."

5. Paleography

Because the letters are severely faded, it is impossible to scrutinize how all the letter strokes were executed. Nevertheless, two indicative characters and the general stance of the letters are consistent with the Hebrew script used in Judah in the last generations of the First Temple period. The indicative characters are as follows:

1) The letter *he*, the lower transversal stroke of which rises gradually to the left towards the central horizontal stroke. This pattern emerged at the end of the 8th century BCE and increased in frequency thereafter (Vainstub 2000: 294; see Renz 1995a: 123–125, types u, dd, jj, oo). Letters similar to our *he* can be found in the inscription אליהו engraved on a 7th-century BCE jar from Jerusalem (Prignaud 1978: 137–139) and in Arad Ostraca 4 and 7 from the Elyashib Archive, dated to 586 BCE. The *he* associated with most Lachish Letters is different, featuring three straight transversal strokes. Still, a few Lachish ostraca, such as 18 and 21, bear *hes* of the same type as ours.

2) The hieratic numeral 10 is notable for its pronounced oblique stroke sharply curving to the right. It is very similar to exemplars found at Qadesh Barnea, dated to the second half of the 7th century BCE, and the Lachish Ostraca from Level II, dated to 586 BCE (Table 1). However, it is unlike the same cipher in the 8th-century BCE Samaria Ostraca, where this stroke is straight (Wimmer 2008: 216–218). Furthermore, the closest parallel to our cipher 10 is observed on Lachish Ostracon 9; they are so alike that the people who wrote them are likely to have been contemporaries and belonged to the same social and cultural circle.

The cipher following the cipher 10 is too faded to afford a reliable reading. Notwithstanding, among the existing possibilities the most feasible is the cipher 6 (see Wimmer 2008: 208), resulting in the number 16. Another possibility is that three or four short strokes expressing the numerals 3 or 4 were attached to the numeral 10, beginning below the lowest point of the curving stroke.

Table 1. Samples of the Hieratic numeral 10 (after Wimmer 2008: 216).1

Present	Samaria	Qadesh Barnea	Lachish 9
	^ ^ ^ ^		/

6. Discussion and Conclusions

Despite the ostracon's partial preservation, our knowledge of 7th–6th-century BCE Judahite epigraphy enables us to hypothesize about its *sitz im leben*. The ostracon seems to form part of an administrative inscription executed in two stages. First, the main body of the inscription was written. Since only a partial personal name has survived, it is impossible to determine if this part of the inscription was a list of personal names, with or without attached quantities, or another type of document. Lists of personal names for some administrative tasks are common in Judahite sites, including Lachish (e.g., Lachish Ostraca 11, 19, 22, 31, and 33).

¹ See the full comparative table in Wimmer (2008: 216–218). The curving stroke descending to the right is a local Judahite development, which began to develop in the 7th century BCE.

The ostracon's last line was written next, probably by a different person. It is better preserved, allowing us to partially reconstruct a phrase. The sentence probably begins with the preposition b "in, on" and two hieratic numerals, of which only the first can be confidently read. Hebrew epigraphy uses this combination for two purposes (see Dobbs-Allsopp et al. 2005: 669, Entry b; 674, Entry bt2): (1) to express a measure of volume, whereby b is an abbreviation of the unit bat, which is quantified by the number that follows, and (2) to represent the day in a date formula, which is most probable here (see below). The date is sometimes spelled out in letters, for instance, בשנים לחדש, "on the 2nd (day) of the month" (Arad Ostracon 7), and sometimes consists of a bet followed by a numeral. The formula "on"-number-personal name is suitable for declaring the day an official performed a particular task. In this vein, the expression "b"-number communicates the day of the month without mentioning the month because it is obvious. Such an annotation points to a practice of monthly registration, whereby the notes are discarded at the end of the month. Arad Ostracon 1 is enlightening in this regard. It comprises an order sent to Elyashib, the last commander of Arad, requesting that a document's date be recorded: וכתב שם הים, "write the name of the day."

In an administrative system that produces monthly summaries and reports, like the one manifested in the Elyashib Archive at Arad, the name of the month was omitted because it was obvious. Still, the word החדש, "of the month," was normally written after the number (e.g., בשנים לחדש, בשנים לחדש, עד הששה לחדש, בשנים לחדש, If our reading is correct, the writer of our ostracon opted for a shorter formula.

The best parallel for our last line is provided by Arad Ostracon 17, in which the official Naḥūm stated on the reverse side of the ostracon that he had performed what was demanded of him: ביד הכתי ביד הכתי 24th (day) of the month Naḥūm handed over oil to the Kittian." Another good parallel is in Arad Ostracon 32. Like ours, the main body of this ostracon is faded and unreadable, and only the last line has survived. It is not inconceivable that this line was written by a second writer, as we have suggested for our inscription; it is also possible that in both cases the use of different inks was the reason for the inscriptions' differential preservation. The closing sentence in Arad Ostracon 32 is לחדש [הצר] סוסה כן סוסה כן החדש (On the 8th (day) of the month. [Haṣar] Sūsā k (Aharoni 1981: 60; Aḥituv 2008: 138–139).

The only person bearing the name Špn in the Bible is שָׁפְּן בֶּן־מְשֵּלְהוּ בֶּן־מְשֵּלְהוּ constructed in the discovery of the book of the Torah in the Temple of Jerusalem and the subsequent cultic reform in the time of Josiah (2 Kgs 22; 2 Chr 34). His descendants continued to hold high office in the kingdom's

government until its destruction. A bulla of his son גמריהו [ב]ן שפן, who also served as the royal scribe (Jer 36:10-12, 25), was found in the City of David (Shoham 2000: 31). This bulla is the only occurrence of the name in a provenanced epigraphic source predating our ostracon.²

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² Notwithstanding, some authors (Davies 1991: 67; Dobbs-Allsopps et al. 2005: 220) interpret the first letter of the name שני engraved on a vessel found in Jerusalem (Prignaud 1978: 136–137; Renz 1995b: 268) as a *shin* and read the name שני. See also unprovenanced occurrences in Avigad and Sass (1997: Nos. 387, 388, 431, 1046).

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