AMMONITE OSTRACA FROM HESHBON

HESHBON OSTRACA IV-VIII

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The excavations at Heshbon in the summer of 1973 produced additional ostraca,¹ one of exceptional interest in an Ammonite cursive script (Ostracon IV), the others of relatively little value, a jar label in semi-formal Ammonite characters (Ostracon V), a sherd bearing a single crude 'alep (VI), and two ostraca on which the faint traces of ink are wholly illegible (VII, VIII).

1. Heshbon Ostracon IV (Fig. 1 and Pl. 1)

Ostracon IV, Registry No. 1657, was found July 31, 1973, in Area B, Square 1, Locus 143, a context described by the excavator as Iron II/Persian. The upper-left side of the sherd is missing and with it the ends of the first seven lines of script, certainly, and perhaps the first eight. The right margin is intact except for a small chip at the very beginning of line 1, where at most a single letter is missing. Both the top and bottom seem to be the original line of breakage save for minor chips. The piece of pottery is a body sherd taken from a large, fairly rough storage jar. Its surface

¹ Ostraca found in earlier seasons (from the pre-Islamic period) at Heshbon include Ostracon I (309) and II (803), both written in the standard Aramaic cursive of the Persian chancellery dating to the end of the sixth century. One notes that the changeover from the national script to the standard Aramaic cursive takes place about the same time—the late sixth century—in Ammon and in Israel. The two ostraca above were published by the writer in AUSS, 7 (1969): 223-229; and in AUSS, 11 (1973): 126-131.

Abbreviations used in this article, but not listed on the back cover, are the following:

is not always smooth and frequently contains large calcium grits. The scribe’s pen strokes in consequence are broad and sometimes distorted by unevenness or blurred by the spread of the ink. Nevertheless, given sufficient effort, most of the letters in the eleven lines of the inscription can be made out.

The text of the ostracon reads as follows:

1. [l]mlk. kl 20+10+5 (?) [ ]
2. ws’n 8 (vacat) [ ]
3. wîndb’l bn n’m’l m[ ]
4. lzk [ ] ml’t nk’t 10+2 ‘k [ l ]
5. [ ] nk’t 2 ’rh bt 2 w[ ]
6. lb’s[ ’ ] ksp 20+20 ’s ntn l[ ]
7. yn 20+2 ws’n 10 lb bt [ ]
8. yn 8 w’kl 6
9. lytb d’s ’kl 20+4 (?)
10. s’n 9
11. ’rh bt 3

1. To the king: 35 (jars) of grain [ ]
2. and 8 small cattle. [ ]
3. and to Nadab’el son of Na’am’el from [ ]
4. To Z[ ] from Elath: 12 (measures) of gum; g[rain ]
5. To [ ] 2 (measures) of gum; a two-year old cow and [ ]
6. To Ba’ash[a] 40 (pieces) of silver which he gave to [ ]
7. 22 (bottles) of wine; and 10 small cattle; fine flour [ ]
8. 8 (bottles) of wine; and six (jars) of grain.
9. To Yatib hay; 24 (jars) of grain;
10. 9 small cattle;
11. a three-year-old cow.

Line 1. The reconstruction [l]mlk is virtually certain. There is room for one letter only at the beginning of the line. A personal name with l (as elsewhere in the inscription), e.g. [ll]mlk, cannot be fitted into the space.
We have translated 'kl "grain." Often 'ōkel refers to a cereal in the Bible, and at Ugarit, as D. R. Hillers has shown, 'akl evidently means "grain" or even "flour." Thus it is used in CTA (KRT), 14.18, 172 where the parallel term is ħtt "wheat." More important for our context is the reference in an economic text: 'arb'm dd'akl,

"forty jars of grain." To these references may be added probably the Canaanite cuneiform tablet from Taanach: "Kòkaba' (meted out) to Pu'm, 8 kprt (vessels) of sifted grain ('akl dk')." Akkadian akalu and aklu have developed similar specialized meanings: "bread" and "barley" (or barley products). Canaanite lahmu, "food" follows a similar pattern of semantic development, coming to mean in Hebrew "bread."

The number at the end of line 1 is quite uncertain after the sign for "twenty." The upper-left corner is badly chipped.

Line 2. The vacant space at the end of this line suggests that the list of stores assigned to the crown ends here.

Line 3. The name Nadab'el is a popular one in Ammon. Vattioni lists three occurrences on Ammonite seals. Nachman Avigad has published a fourth. Na'am'el appears elsewhere on a Punic seal, and the element n'm is extremely common in Canaanite onomastics, including Ugaritic, Phoenician, and Hebrew.

We have read the final letter as m before the break. Presumably the home town of Nadab'el followed (as is the case in line 4: m'lt, "from Elath"), and then the commodity and amount. It is interesting that the most common name alone in the text is specified further by both patronymic and place of origin.

Line 4. The initial zayin of the personal name expected is all that can be read. Following it is a large blemish which may or may not have contained a letter. After the blemish, traces of ink are discernible but indecipherable.

3 Gordon, 1126.3, 4 (PRU, II, 126.3, 4).
4 The reading follows Hillers (see note 2) for the most part, and goes against the writer's earlier proposals, "The Canaanite Cuneiform Tablet from Taanach," BASOR, No. 190 (April, 1968): 41-46. Incidentally, the forms kprt and Akk. karpatu "earthenware vessel" (esp. of standard measure) are probably cognates.
5 F. Vattioni, "I sigilli ebraici," Biblica, 50 (1969): 357-388: Nos. 29,1; 159,2; 201,1. The seal listed as 159 was attributed to Hebron by Reifenberg, but to judge from its script is Ammonite in origin.
7 Vattioni, Biblica, 50 (1969), No. 95, 1.
The appearance of the term nk’t in lines 4 and 5 apparently guarantees the reading. The initial letter in each instance could be nūn or mēm. I was first tempted to read mr’t “fatlings” in line 5; however, the second letter is certainly kap in line 4, and most easily is read kap in line 5. We have translated “gum.” In Hebrew the term is nk’t, vocalized n’kōt. It appears as an item of merchandise along with balsam and ladanum brought by camel caravan from Gilead;8 in its only other occurrence in the Bible it is in a list of gifts to be brought from Palestine to Egypt: balm, honey, gum, ladanum, pistachio nuts and almonds.9 The term may be cognate with Akkadian nukātu (nukkātu) and with Arabic nuka‘āt, a byform of nuka‘āt and naka‘āt, gum of tragacanth, an aromatic resin from the shrub Astragalus gummifer and Astragalus tragacantha, used in food and medicine.

The writing ‘lt for Elath, the port on the Gulf of Aqabah, is that expected. The name probably derives from the goddess’ name, [Bēt] ᾭlat; the alternate etymology suggested, from ‘yli(t), “terebinth,” whether derived from *iśāt or *aylāt (>*’ēlatu) would have been written ‘lt in the Ammonite of this period.

The word following the number begins with ‘alep. The following traces fit best with kap: ‘k[l(?)], “grain.”

Line 5. We can assume that after the initial l came a personal name. The traces of ink have virtually disappeared. The second letter of the name, the third after lamed, is best preserved; the traces appear to fit ‘alep. Sin may follow giving l[y]’s “to Yāḏōs.”10

At the end of line 5 we find the sequence ‘rḥ bt 2, and in line 11 ‘rḥ bt 3. We take ‘rḥ as identical with Ugaritic ‘arḥ (plural ‘arḥt) “young cow,” Akk. arhu “cow,” Arab. ‘arhu “young bull,” ‘arḥat “heifer.” The following bt 2 in line 5, bt 3 in line 11, are abbreviated forms of bat šēnātayim and bat šālōš šānōt11 respectively.

8 Gn 37:25.
9 Gn 43:11.
10 On this name and others from the same root, see F. M. Cross, “An Aramaic Inscription from Daskyleion,” BASOR, No. 184 (Dec., 1966): 8, n. 17.
11 Cf. the Ammonite bšnt rḥqt “in years far off” in the Tell Sirān Bronze
tively, “two years old” and “three years old.” One may compare the biblical expressions \( bt \, \text{šnūh} \) and \( bn \, \text{šntw} \) “one year old” used of sacrificial animals, Ugaritic ‘\( \text{glm} \, dt \, \text{šnt} \), “calves a year old”\(^{12} \)
and also ‘\( \text{glt} \, \text{mššt} \), “a three-year-old cow”\(^{18} \) and \( pr \, \text{mšš} \), a three-year-old bull.”\(^{14} \) It appears that in antiquity cows aged two or three years were considered ideal for slaughter.\(^{15} \)

Line 6. The name \( \text{Ba’āsū } \), in addition to its appearance as a royal name in Israel, was the name of an Ammonite king of the ninth century B.C. who fought at Qarqar:\(^{16} \)

The phrase \( 's \, \text{ntn} \, l- \) is useful in drawing Canaanite isoglosses. The relative \( 's \) (\( <s\a \)) stands with Phoenician and North Israelite versus Hebrew and Moabite \( 'ašer \). \( \text{Ntn} \), however, sides with Moabite,\(^{17} \) North Israelite, and Hebrew \( \text{ntn} \) versus the new formation \( \text{ytn} \) in Phoenician and North Canaanite.

Line 7. The spelling \( \text{yn} \) here and in line 8 indicates the contraction of the diphthong \( ay > e \) as in Ugaritic, Phoenician, and North Israelite. The writing \( \text{bn} \, \text{‘mn} \) in the Tell Sirān Bronze may confirm: \( \text{banē} \, \text{‘ammān}.\(^{18} \)

The word \( \text{lbēbōt} \) obviously is related to biblical \( \text{lēbībōt} \), usually translated “cakes” or “pancakes.” In Arabic \( \text{libābat} \) means “fine flour,” and the derivation of the meaning is clear: “inner part,” hence “choice part.” Similarly in Syriac starch is called \( \text{lebbā’} \, \text{de-ḥēṭṭātā} \), “the heart of wheat.” Hebrew \( \text{lēbībōt} \), “cakes” then discussed by the writer in his paper “Notes on the Ammonite Inscription from Tell Sirān,” \( \text{BASOR}, \) No. 212 (Dec., 1973): 12-15.

\(^{12} \text{CTA}, \) 22.2.13 (Gordon, 124); 4.6.43 (Gordon, 51).

\(^{13} \text{Gn} \, 15:9. \)

\(^{14} \text{I} \, \text{Sa} \, 1:24 \) (according to 4QSama and the Old Greek).

\(^{15} \)In an Akkadian text cited in The Assyrian Dictionary, I, A, Part II (Chicago, 1968), p. 263, a buyer is prepared to pay silver for “cows either three-year-old or two-year-old ones” (\( \text{AB,H.L.A} \, [\text{arḥātim}] \, \text{šumma} \, \text{MU} \, 3 \, \text{šumma} \, \text{šaddidātim}).\)

\(^{16} \)D. D. Luckenbill, Ancient Records of Assyria and Babylonia, I (Chicago, 1926): 611. The name is written \( \text{ba’-sa} \) as expected.

\(^{17} \text{Cf. the Moabite name} \, \text{kmšntn} \, \text{on a seal published by Avigad, “Ammonite and Moabite Seals”} \) (see n. 6 above), p. 290.

\(^{18} \)It is possible also to read the old plural oblique \( \text{banī} \) (‘Ammān). Note also the writing \( \text{ywmt} \) “days.”
are named from their content (not their shape!), the special flour from which they are made. In the present context clearly “fine flour” is a more suitable translation than “cakes” or “loaves.”

Line 9. The name ytb may be a hypocoristicon of such Canaanite names as ‘strty[t]b or ytb’l hitherto explained as errors or by-forms of ytn. In Thamudic there is a name ytb, probably a G or causative imperfect of wtb: Yatib.19

The word dése’, “grass,” “hay” may be followed by a number; if so, it can be only one or two strokes. There is too little room even for the symbol “10.” It may be that the rough amount of hay supplied was known, or was not worth measuring out precisely, and hence no number was recorded.

The list is most easily interpreted as the record kept by a royal steward of the assignment or distribution from the royal stores of foodstuffs, beef and mutton, grain and wine, as well as money and spicery, to the personal household of the king, to courtiers, and to others to whom the crown was under obligation. Since the king is first named, and food, grain, and mutton, in sizable amounts is then listed, we must assume that the king is a recipient. The king does not pay taxes in kind. The other persons named, therefore, are also recipients of the designated items rather than the names of men credited with taxes in kind sent to the royal stores.

This text so understood is paralleled by many economic texts listing the distribution of food stuffs and various other commodities under the formula l + PN. A number of such texts are known from Ugarit.20 One may compare also the Ta’anach Tablet

19 Cf. G. Ryckmans, Les noms propres sud-sémitiques, 1 (Louvain, 1934): 213, who suggests the root tbb perhaps found in Safaitic tbn as well. The root wtb, “to rest,” “sojourn” seems preferable. The root tbb means basically “to do harm” or “to suffer harm or loss.” To be sure tābb cited by Ryckmans can mean “strong”; it also means “feeble” or “weak,” the familiar phenomenon of didd (contrary/similar). Arabic twb is not a candidate, being a late Aramaic loanword, cognate with twb > swb in Canaanite.

20 PRU 2: 88-101 (Gordon, 1088-1101, of which 1098 may be an inventory of royal stores); PRU 5: 12-13; Ugaritica V, 99-100. The closest parallels are PRU 2: 89, 90. A. F. Rainey has collected and discussed some of these and
described above, and more remotely the Tell Qasileh ostraca: *zhb. 'pr. lbyt hrn $ 10+10+10,* "Gold of Ophir, presented (*ex vot*o) to the Temple of Hôrôn."21 In the El Kôm Ostraca, Qôsyada the moneylender notes loans *to* a person by *l + PN,* money received in repayment *from mn + PN.*22

If we follow the theory of Aharoni and Rainey, the Samaria ostraca also note distribution of goods from the royal storehouse to officers of the king.23 However, the Samaria Ostraca present very special problems. I am inclined to regard them as tax receipts. They come from the royal storehouse in the citadel of Samaria and appear now to date in the reign of Jeroboam II in the years 774 to 778.24 The ostraca contain two groups of men, other texts attempting to demonstrate that *l + PN* can be used of "recipients," as well as of "owners." I have no doubt he is correct. Indeed *l-* can mean "belonging to," "product of," "distributed to," "credited to," "lent to," "presented" or "given to" in extant epigraphic material. However, I cannot follow Rainey in his interpretation (shared with Aharoni) of the Samaria Ostraca. Cf. A. F. Rainey, "Administration in Ugarit and the Samaria Ostraca," *IEJ,* 12 (1962): 62f.; "The Samaria Ostraca in the Light of Fresh Evidence," *PEQ,* 99 (1967): 32-41; "A Hebrew 'Receipt' from Arad," *BASOR,* No. 202 (April, 1971): 23-29.


22 The ostraca, including a bilingual in Greek and Edomite are to be published by L. T. Geraty in the near future.


24 This seems certain now, thanks to Aharoni's definitive solution of the Samaria numerals: "The Use of Hieratic Numerals in Hebrew Ostraca and the Shekel Weights," *BASOR,* No. 184 (Dec., 1966): 13-19, confirmed by Ivan Kaufman, "New Evidence for Hieratic Numerals on Hebrew Weights," *BASOR,* No. 188 (Dec., 1967): 39-41. It is difficult to separate the two groups, 9th- and 10th-year ostraca on the one side, 15th-year ostraca on the other. The script is remarkably homogeneous. Yet it is strange that there is not clear overlap of names. However, if we were inclined to attribute the two groups to two different kings, we should have to reduce the 9th- and 10th-year group to the last years of Menahem (738, 737), rather than raise their dates to a time before Jeroboam II. The script is very far developed even for the reign of Jeroboam. Cf. my remarks, *BASOR,* No. 165 (Febr., 1962): 34-42, where I followed Yadin's suggested interpretation of the numerals. The raising of the date of the Samaria Ostraca suggests that the Murabba'ât Papyrus be raised to ca. 700 (my former date was 700-650 B.C.), and associated with the Assyrian crisis in Hezekiah's reign.
“l-men” (whose name is preceded by the preposition l) and “non-l-men.” The “l-men” repeat, indeed eight of the dozen “l-men” appear in the ostraca more than once. Gaddiyaw turns up eight times, ’Aša‘ eight times. Moreover, the “l-men” are associated frequently with more than one place or clan. The name ’Aša‘ on ostraca with commodities coming from ’Abi‘ezer, Šemīda‘ and Ḥeleq. Indeed the place names specify the origin of oil or wine and may precede or follow the “l-man”; on the contrary, a place name may identify a “non-l-man” (always following when given). The “non-l-men” generally are specified more carefully, often with patronymic, gentilic, or town of origin. They never repeat except with the same “l-man,” the same district and/or town. In Ostraca 1 and 2 several “non-l-men” are listed with the numerals 1 or 2 (jars) following their name. When one (rarely two) jars only are in a shipment, one “non-l-man” is named or none is named.

From these data we can make several inferences: (1) “l-men” are not tax officials unless one assumes administrative chaos with overlapping districts; (2) “non-l-men” are small men, attached, unlike the “l-men,” to one place or estate and to one “l-man,” and hence are tenants, sharecroppers, or the like, who actually bring commodities to the royal storehouse; (3) the small quantity in the shipments suggests that we have to do not with royal estates or with the total produce of an estate, royal or private.

If these inferences are sound, I believe we must opt for the explanation that most of the ostraca are tax receipts. This fits with the small amount in shipments. If the documents were inventories of produce of royal estates, the number would be far larger; if the documents recorded rations given to a courtier or noble from the storehouse we should expect higher numbers and more than one (or two) commodities listed. Here we may compare our Heshbon Ostracon. It does not seem likely either that the Samaria ostraca record the produce of lands given by royal grant to favored officials. Such produce would go directly to the owner
without going through the royal storehouses, and the produce
would be far greater in quantity.

However, if we explain the ostraca as tax receipts, their form
and content can be comprehended. The shipments come from the
estates of landed (military) nobility\(^{25}\) which are widely dis-
tributed, and are not hereditary lands since one man owns estates
in as many as three clans. The "non-\(l\)-men" are tenants, clients,
etc., attached to an individual estate, who bring the appropriate
tax in kind to the royal storehouse to be credited to the account of
their lords, the "\(l\)-men." Hence the transaction is properly recorded
with an official date of receipt. The district (clan, village, or
estate) is listed precisely or imprecisely since the district in
question identifies the quality of the product, especially in the
case of aged wine. The listing of the "non-\(l\)-man" more precisely
identified usually than the better-known "\(l\)-men," gives proof that
he delivered the wine or oil. We assume that copies of the tax
docket were returned to the estate owner as proof of delivery and
payment of tax. The omission of the name of a "non-\(l\)-man" on
receipts of a single jar or two is understandable, too, since the
receipt is proof enough of his full delivery in such a case.\(^{26}\)

The script of the Heshbon List is of great interest providing
an additional cursive exemplar to our small corpus of Ammonite
scripts. The earliest Ammonite document, the 'Ammān Citadel
Inscription, is inscribed in an Aramaic script of ca 850 B.C.\(^{27}\)

\(^{25}\) That is, gibborē hayil. The breakdown of the egalitarian land system of
Israel came with the rise of a royal officialdom including commercial and
military officers attached to the crown, who were rewarded with grants of
land, fiefs. Cf. Y. Yadin, "Recipients or Owners, A Note on the Samaria
Ostraca," *IEJ*, 9 (1959): 184-187; and especially "Ancient Judaean Weights and

\(^{26}\) On the use of *lmlk* on wine jars and *l + PN* on wine jars, see my remarks
Neither are proper parallels to the usage of the Heshbon list.


\(^{28}\) H. J. Franken, "Texts from the Persian Period from Tell Deir 'Allā," *VT*,

Aramaic and slowly began its own peculiar development. The date of the Deir 'Allā script is in dispute. Joseph Naveh, before the appearance of the new Ammonite texts, dated it on the basis of the related Aramaic sequence of scripts to the mid-eighth century B.C. or earlier. Among others, the late Paul Lapp protested that the stratigraphy of Tell Deir 'Allā did not permit so early a date, and noted that the floors of the building whose walls bore the inscriptions did contain Persian pottery. The discovery of the Tell Sirān Bronze made clear once and for all that Ammonite scribes did develop a national script style and happily provided a precise date with which to pin down its typological sequence date: ca. 600 B.C. or slightly later, in the reign of 'Ammīnādāb III, the great-great-grandson of that 'Ammīnādāb who was a contemporary of Assurbanipal. A monumental inscription on stone taken from the ruins of the 'Ammān Theater comes from about the same date or slightly later. Only two lines are preserved:

\[
\begin{align*}
[b]'l. 'bn  h \[n] \\
[bn] 'm[n] \\
[ba]'l. I shall build[ \\
the people of Ammon[ \\
\end{align*}
\]

The Ba’l of the first line may well be a divine epithet or the name of the Ammonite king, preserved in corrupt form in Jer 40:14: b’lys mlk bny ‘mn. The second line contains the spelling of bn

17 (1967): 480f.


31 I followed Naveh (IEJ, 17 [1967]: 256-258) in this dating at the time he wrote, with the following caveat: “One should note, however, that the text shares certain idiosyncrasies with the later Ammonite and Moabite scripts on seals. It is not impossible, therefore, that it is diverging from the standard Aramaic cursive, and hence may preserve archaic forms beyond their time” (BASOR, No. 193 [Feb., 1969]: 14, n. 2).


34 The samek may be a ditography of the following mēm in a MS of roughly the second century B.C. when samek and mēm were frequently confused.
Thus on palaeographic and internal grounds the inscription would date to ca. 580 B.C. These new palaeographical data, plus the evidence of the Heshbon List, require the lowering of the date of the Deir 'Allā Inscriptions to the early seventh century B.C. The dating to the early or middle eighth century rather identifies the time when the Ammonite national script style broke free from the main line of evolution of the standard Aramaic cursive and lapidary styles—in the early eighth century. Among the chief traits of the Ammonite script is its preservation of archaic forms: bêt, dalet, rēš, and 'ayin continue closed at the top, dalet and rēš into the sixth century; other archaic features include the complex zayin and yōd (into the sixth century), long-tailed mēm with zigzag top, and the two-barred het. At the same time certain letters evolve in unique ways; most striking is the hē of the Tell Sirān Inscription.

Additional control of Ammonite writing styles is found in the corpus of Ammonite seals which now can be isolated. The task has been well begun by N. Avigad in his paper “Ammonite and Moabite Seals.” Five seals can be narrowly dated: The two seals of “servants of 'Amminadab” are dated by the king’s reign to the mid-seventh century B.C., two seals found in the tomb of

In the ‘Ammân Citadel Inscription, the sequence in line 6

\[ \text{h. tšt'. bbn'. 'lm vacat[} \\

must be read in light of this orthography in the Tell Sirān Text:

“you are feared among the gods.”

Evidently the building of the wall on which the inscriptions were penned (or painted) was built in the seventh century at the beginning of new occupation and continued in use into the Persian period.

See above, n. 6.

'Adônînûr ‘Amminadab’s official (‘abd), one of šûb’êl, and one of menahêm ben yenaheêm, and finally the seal of byd’il ‘bd pd’l, long overlooked, dating to ca. 700. These formal scripts of the seventh century are marked by great conservatism, extremely vertical stances, of which the pe is particularly remarkable, and certain innovations which are surprising: a square-shaped ‘ayin, long-legged daleth in vertical stance, the head of mem with its zigzags in the form of a “w.” Highly archaic are the forms of aleph (unchanged from the early eighth-century Aramaic forms), yod, bêt, two-bar het (becoming a single bar in some sixth-century seal scripts), and angular lamed.

Pressures of the cursive on the formal and semi-formal (Tell Sirân Bronze) styles introduce several changes toward 500 B.C.: bêt opens at the top, and sometimes ‘ayin; het may be reduced as noted above; yod is elongated; samek exhibits a “z”-form head, qoph opens at the top. Several of these changes are found too in the Aramaic cursive and argillary scripts. It must be emphasized, however, that the opening of bêt and ‘ayin, daleth and resh, and the simplification to the one-bar het had taken place in Aramaic cursive scripts already by the end of the eighth century B.C., long before the Ammonite changes. In the Nimrud Ostracon, for example, of the late eighth century B.C. these changes are fully developed, and in the Assur Ostracon of ca. 660-650 B.C. there is no remnant of the archaic forms. Indeed Ammonite differs radically from the Aramaic in that daleth and resh are not open normally in the latest Ammonite cursive, and archaic forms of

1-3; for the ‘dnÎl seal, see A. Reifenberg, Ancient Hebrew Seals (London, 1950), p. 42, No. 35.


39 GIS, 2: 76. See the writer’s forthcoming study on the seal and its date. The king in question is mPuCu-AN/Pēdô’ēl/, who paid tribute to Sennacherib in 701 B.C. The Statue Inscription of yrh’zzr is too crude and difficult to be of great help to the palaeographer; cf. B. D. Barnett, “Four Sculptures from Amman,” ADAJ, 1 (1951): 34-36; Pl. XIII.

closed ‘ayin persist to the end. At the same time it may be that some of the Ammonite changes took place under secondary Aramaic influence. No doubt Aramaic was known and its script read in Ammon in these centuries.

At present our latest texts in Ammonite script date clearly from the mid-sixth century B.C. From the very end of the sixth century come the Heshbon Ostraca I and II, both written in Aramaic script. So far as the evidence goes it fits with other data suggesting the general replacement of the old national scripts, Edomite, Ammonite, and Hebrew, by the Aramaic script universally used in the Persian chancelleries. To be sure in narrow circles in Judaea and Samaria the old national script survived, becoming what we have labeled Palaeo-Hebrew; and similar survivals elsewhere, of which we as yet have no examples, may have existed.

Some brief comments can be made on the script of the Heshbon Ostracon IV in the context of the evolution of the Ammonite character.

‘Aleph in the Deir ‘Allā and Tell Sīrān scripts, as in the seventh-century seal scripts, retains its traditional eighth-century form showing little or no change. In the Heshbon ‘aleph, the mode of penning has changed: the right two bars are made in a check or “v” motion; the left bar is made independently. The form is reminiscent of the “star” ‘aleph of the argillary Aramaic script and the seventh-century forms in the Assur Ostracon and the Saqqarah Papyrus, but is not identical. Certainly it is typologically the most advanced of the ‘alephs in Ammonite.

Bēt in the Heshbon List is open at the top. In this it shows the developed tendency also at work in the more formal script of the Tell Sīrān Bronze. The cursive of Deir ‘Allā preserves the

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Fig. 2. Ammonite alphabets.

Line 1. The cursive script of the Deir 'Allā inscriptions from the early seventh century B.C.
Line 2. Heshbon Ostracon IV. Dating to the end of the seventh or to the beginning of the sixth century B.C. (In cursive script).
Line 3. The Tell Sīrān bronze inscription from the beginning of the sixth century B.C. (Engraved in a semifinal hand).

older, closed form.

Daleth and resh in the Heshbon List reveal little or no tendency toward opening at the top. In the Tell Sīrān Inscription, one daleth is slightly open but it is clear that the standard form is closed. These letters stand in strongest opposition to the Aramaic type sequence and leave no doubt of the independence of the Ammonite alphabet over considerable periods of time. In the formal script and in the Deir 'Allā cursive the daleth tends to be greatly elongated.

The letter hē does not appear, unfortunately, in the Heshbon List. The Deir 'Allā form superficially resembles the simplified cursive hē of Aramaic, but two-bar forms and the extraordinary divided-rectangle of the head of the Tell Sīrān hē underline its peculiarity.
The *waw* of our Heshbon Ostracon follows precisely in the tradition of the Deir ‘Allā *waw*, which parallels the Aramaic *waw*. The Tell Sirān *waw* echoes a lapidary tradition found elsewhere in the archaizing lapidary scripts from Nerab (early seventh century B.C.). The form is not known in the main sequences of Aramaic formal and cursive scripts.

Both in the Deir ‘Allā text and in the Tell Sirān text, *ḥet* preserves the older two-bar form of the early Aramaic scripts. The Heshbon List again displays the most developed letter form, with one bar. At the same time its ancestor is the type of *ḥet* developed in the Ammonite tradition of Deir ‘Allā, as opposed to the main Aramaic stream.

A formal *yōd* persists throughout the main line of Ammonite scripts. Simplification under Aramaic influence may be seen in the seal of *byḥy bn ynhm.* The Tell Sirān *yōd* shows a tendency to narrow and elongate.

The tradition of *kap* made with a triangular bar on the top left continues from Deir ‘Allā through the Heshbon List. The older, lapidary *kap* appears in seventh century seal scripts. In Aramaic the form occurs sporadically in eighth and seventh century scripts, but never so stylized as in the Tell Sirān script.

*Mēm* in the Deir ‘Allā texts preserves the long lines and shallow, zigzag head of eighth-century Aramaic *mēm*. Throughout the Ammonite scripts we find no evidence of the Aramaic *mēm* developed in the seventh century with a vertical cross-bar cutting the head.

The letter *samek* is problematical in the Ammonite script. It appears to share a “z”-headed form with the argillary Aramaic scripts of the seventh century, and appears sporadically in lapidary texts, including Nerab. Unhappily, however, the Tell Sirān *samek* is in dispute and the Heshbon *samek* is badly preserved.

‘*Ayin* in the Ammonite cursive is round, in the Ammonite lapidary is square. The two occurrences in the Heshbon List are

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closed or virtually closed. Some (but not all) of the 'ayins of the Tell Sirān script are left open.

Pē is rounded at its top in Ammonite and tends more to the vertical than in the kindred Aramaic scripts of the seventh-sixth century.

Qōp retains more or less its archaic form in Ammonite, opening at the top but not developing the horizontal “s” top of the Aramaic cursive and argillary scripts of the seventh century B.C.

Sin shows little development from ninth-eighth century forms.

Taw in the Deir ‘Allā texts and in the Tell Sirān script derives directly from the elongated taw of ninth-eighth century Aramaic. In the Heshbon list the cross-bar has moved off to the right, a tendency already developed in seventh-century Aramaic.

The script of the Heshbon list shows itself more advanced than the Tell Sirān script in the case of 'alep, het, kap, samek and taw. Despite its highly cursive style as opposed to the semi-formal style of the Tell Sirān inscription, its forms of ‘ayin and yēd are less developed. In view of the great distance between the cursive of Deir ‘Allā and the cursive of Heshbon, it is difficult to date the Heshbon List earlier than the end of the seventh century B.C., two scribal generations after the Deir ‘Allā inscriptions. In view of internal historical data, the Tell Sirān Bronze cannot be lowered much below 600 B.C., in no case later than 580 B.C. These data suggest that the Heshbon list is roughly contemporary with the Tell Sirān Bronze, from the late seventh or early sixth century.

The language of the Heshbon Ostracon IV adds to the evidence that Ammonite was a South Canaanite dialect closely related to Phoenician, the Hebrew of Northern Israel, and in some features with Hebrew and Moabite.

Such a conclusion was already adumbrated by the evidence of Ammonite seals, and their use of characteristic Canaanite elements: bn, bt, n'r, and 'mt. The names on seals and in the texts, including royal names, were generally well-known Canaanite or
Amorite patterns. The article *h* which appears on the seals is used regularly also in the Tell Sirān Inscription.

From Tell Sirān comes additional evidence, masculine plurals in -m (versus Moabite), and the plurals *yuwa* and *šnt* with Phoenician and dialectal Hebrew, probably Israelite.

From Heshbon come a number of words with characteristic Canaanite phonemes: s'n (Aram. 'n') and d's' (Aram. d't'h). Even more striking is the relative in 'š elsewhere found only in Phoenician, but closely related to Northern Israelite ša-, Mishnaic še-, contrasting with Hebrew and Moabite 'ašer and older Canaanite zū (Ugaritic *dū*). The verb ntn, on the other hand, stands with Hebrew and Moabite (and presumably Proto-Semitic) against Phoenician and North Canaanite ytn. The survival of 'arhu “young cow” in Ammonite is remarkable, occurring elsewhere in Northwest Semitic, I believe, only in Ugaritic.

For all of its banal content, the Heshbon List proves an important addition to our knowledge of the Ammonite script and language.

2. *Heshbon Ostracon V* (Fig. 3 and Pl. I)

Ostracon V, Registry No. 1656, was found July 31, 1973, in Area B, Square 2, a context described by the excavator as Iron II/Persian. The right side of the sherd is missing certainly, and it may be that the inscription was incised (after firing) on an intact jar as a label of ownership.

The inscription can be reconstructed as follows:

\[ [lt]tn'l. \]

An alternate reading, of course, would be mtn'l. Ntn'l is a popular biblical name, and ntyhw appears both in the Bible and on

*To be sure, a number of names remain unexplained, including dblbs (sic!).*
Hebrew seals. The Phoenician equivalent ytn’l is well known, as well as Phoenician mtn’l, mtn’lm, etc.

The letters of the graffito are skillfully made. They display the graceful, elongated forms of eighth-seventh century Ammonite. Taw is distinctive in that the cross-bar is tending to move to the right. A vertical stroke on the left of the name, evidently a word divider, suggests that a patronymic followed, now broken off. The graffito is probably to be assigned a seventh-century B.C. date.

3. *Heshbon Ostracon VI* (Pl. I)

Ostracon VI, Registry No. 1676, was found in Area C, Square 2. The archaeological context is predominantly Iron II/Persian with a few possible Iron I sherds present. The sherd preserves only a crude ‘alep.

4. *Heshbon Ostracon VII* (Pl. II)

Ostracon VII, Registry No. 1659, was found in Area B, Square 2, Locus 72, a context described as Iron II/Persian. While it shows
unmistakable evidence of several lines of script, it is wholly illegible. It may be that at some future date new techniques will be developed to reveal script from faint traces, and this ostracon’s secrets unlocked.

5. *Heshbon Ostracon VIII* (Pl. II)

Ostracon VIII, Registry No. 1658, was found in Area B, Square 2, in an Iron II/Persian context. Of the original script only traces remain, which are too indistinct to allow identifying any characters.