

# ḤISBĀN OSTRACON A1: NEW COLLATION AND NEW READINGS

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## Introduction

A correct understanding of an ancient inscription usually stems from several successive studies made by different epigraphists in order to gradually improve the *editio princeps*. It is all the more striking that in the case of the Ḥisbān ostrakon A1 (see **Figs. 8, 9**), apart from a short study of E. Puech (1985), virtually no detailed epigraphic work on this inscription was published after the initial article of F.M. Cross (1975). As a result, most of the subsequent publications follow the latter without change, which seems to be the sole detailed study based on a direct examination of the original object.

The present article is the result of a new collation of the ostrakon at the ‘Ammān Citadel Museum, which has led the authors to several significant new readings and interpretations of some personal names and commodities mentioned in the text.

## The object

*Excavation number:* H73.1657

*Cross numbers:* IV, A1

*Present location:* Amman Citadel Museum

*Museum registration number:* J.15366

*Date of discovery:* 31 July 1973

*Excavators:* Siegfried H. Horn (director), James A. Sauer (supervisor of Area B)

*Archaeological context:* Area B, Square 1, Locus 143; Iron Age II / Persian (according to the excavator, but see Cross 1973: 1)

*Description:* Pithos with very large inclusions of calcite

## 1. Former studies

In the *editio princeps*, Cross (1975: 2) read and translated the text of the ostrakon as follows:

- 1) [L]MLK. ’KL 20+10+5 (?)
- 2) WŠ’N 8 vacat
- 3) WLNDB’L BN N ’M’L M[
- 4) LZ[ ]M’LT NK’T 2 10+’K[
- 5) L[ ]NK’T 2 ’RH BT 2 W[
- 6) LB’Š [’] KSP 20+20 ’Š NTN L[
- 7) YN 20+2 WŠ’N 10 LBBT [
- 8) YN 8 W’KL 6
- 9) LYTB DŠ’ ’KL 20+4 (?)
- 10)Š’N 9
- 11)’RH BT 3

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

This great epigraphist was followed without modification by Aufrecht (1989: 214-215) and Jackson (1983: 51-52), while Aḥituv (2008: 371-372) only changed a number (reading 50 instead 40 at line 6).

Apparently on the basis on photographs, Puech (1985: 13-14, 16 fig. V) proposed his own reading:

- 1) [L]MLK. ’KL 20+8[
- 2) WŠ’N 9

- 3) WLNDB'L BN N 'M'L.K[SP
- 4) LZ'B BN(?)'LT.NK'T W/ZRH B[T
- 5) LY'[\Š.]NK'T W/ZRH BT 2 W[
- 6) LB'Š' [.]KSP 20+20 WŠ NTN L[
- 7) YN 20+2 [+2/3] WŠ'N 10 W/LBBT [
- 8) YN 8 W'KL 6
- 9) LYT B DŠ' 'KL 20+4
- 10) WYN 9 -(?)
- 11) W/ZRH BT 3

Puech's reading differs on several points from the *editio princeps*. The most important modifications are the following:

Correcting some readings: in lines 4, 5 and 11, the presence of the word "cow" is implicitly dismissed because Puech reads W/ZRH instead of 'RH; likewise, at the end of line 7, the word "wheat germ" (LBBT) becomes uncertain, because the first letter can also be read W. Moreover, in line 10, Puech reads WYN ("and wine") and not Š'N ("small cattle"). Furthermore, in line 6, the spelling of the relative pronoun is 'Š according to Cross, but Š according to Puech.

Filling some gaps: at the beginning of lines 4 and 5, Puech reads two personal names (Z'B and Y'[\Š.] respectively) and in line 4 he proposes that the following word is BN ("son of").

However, because the focus of his article was on palaeography, the French scholar did not try to give a new interpretation of the text; he eliminated some words without providing any explanation for his own readings. Cross was not convinced by the latter's propositions and, in a new synthesis on the Ḥisbān Ostraca (2003: 71-79), he reproduced his own former reading without change.

## 2. New collation

Thanks to the courtesy of the Department of Antiquities of Jordan and the Director of the Amman Citadel Museum, we had the opportunity to examine the original ostrakon afresh, to make drawings and take new photographs. This study led us to some significant improvements in the reading as well as to the re-interpretation of several words of this text.

### 2.1 Reading and Translation

- 1) [L]MLK. 'KL 20+8[
- 2) WŠ'N 9
- 3) WLNDB'L BN NQM'L K[SP

- 4) LZ'-[B]N 'LTMK BT 10+2 'K[L
- 5) LY'[\ ]KP'T.WRHBT 2 W[
- 6) LB 'Š[']KSP 20+20 WŠ NTN-[
- 7) YN 20+2 WŠ'N 10 WBBT[
- 8) YN 8 W'KL 6
- 9) LYT B DŠ' 'KL 20+4
- 10) WYN 9-
- 11) WRHBT 3

- 1) To MLK, grain: 28
- 2) and small cattle: 9
- 3) and to NDB'L son of NQM'L sil[ver
- 4) To Z'-[so]n of 'LTMK, bath: 12, gr[ain
- 5) To Y'[\ ] and jars: 2 and [
- 6) To B'Š['], silver: 40 and what he gave [
- 7) wine: 22 and small cattle: 10 and merchandise [
- 8) wine: 8 and grain: 6
- 9) To YTB hay, grain: 24
- 10) and wine: 9-
- 11) and jars: 3

### 2.2. Epigraphic and Philological Notes

Our comments will mostly concern new readings and new interpretations, line by line.

Line 1: [L]MLK. 'KL 20+8[  
MLK

Cross is probably right in considering as virtually certain the reconstruction [L]MLK, because there is only space for one letter and because the text uses the form : preposition L + personal name + commodity + quantity several times.

We nonetheless prefer a cautious approach, i.e. not to conclude immediately that MLK is a title here, designating the king of the land. Indeed, MLK could also be a simple personal name, as is attested in Biblical Hebrew (e.g. 1 Chr 8:35, 9:41; see HALOT, 592), perhaps on a Palaeo-Hebrew bulla (WSS 400), in Phoenician (Benz 1972: 138, 344-345), in Palmyrenian (Stark 1971: 95), as well as in Safaitic, Lihyanite and Thammudic (Harding 1971: 564-565).

'KL

This word probably means "grain" (cf. Hab 3:17: "and the fields yield no grain", as pointed out by Ahituv 2008: 353), though "flour" and "bread" are also possible senses. In addition to the Ugaritic occurrences and to the instance on

a cuneiform tablet from Ta'anakh that Cross has pointed out (2003: 72-73), one can mention at least two examples nearer to the Ammonite realm, since 'KL appears:

In Aramaic on an economic clay tablet approximately dated to the middle of the seventh century BC. (Lemaire 2001: 33-41: "nourriture, grain");

In Edomite on an ostrakon from Ḥorvat 'Uza dated to the end of the 7th century or to the beginning of the 6th century BC. (Beit-Arieh and Cresson 1985: 96-97; Beit-Arieh 2007: 134; Aḥituv 2008: 351-353).

Line 2: WŠ'N 9

The reading as well as the interpretation are clear.

Line 3: WLND B'L BN NQM'L K[SP NDB'L

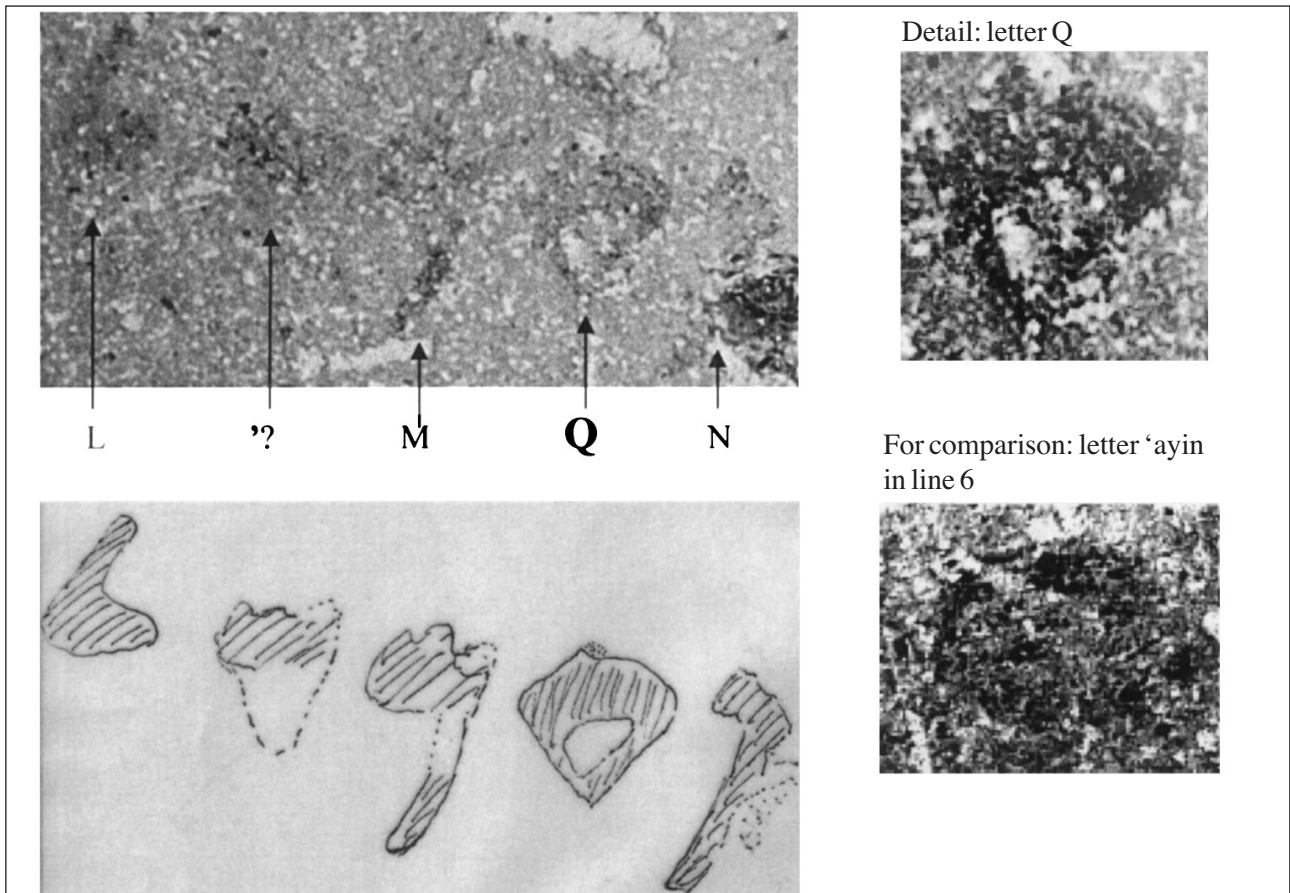
Before the second L in the line, there is a large white spot that clearly stems from the production process of the vessel and therefore pre-

dates the writing. Again, the shape of the letter remains unclear, but the reading fits the traces of ink and provides a name common in the Ammonite onomasticon.

**NQM'L**

After the two N in the middle of the line, the letter that both Cross and Puech have read ' is undoubtedly a Q (**Fig. 1**). It is formed by two vertical and symmetrical curved strokes, giving an ellipsoidal shape to the letter, and is clearly different to the occurrence of ' in line 6.

As a result, we here encounter the personal name NQM'L, which also appears for the first time in the Ammonite corpus. It is attested in Phoenician (Benz 1972: 363) and possibly in Palaeo-Hebrew on an inscription on a jar handle from Tall an-Naṣbah, which can be read either NQM'[L] or NQMY[HW] (Dobbs-Allsopp *et al.* 2005: 387). Names of the form NQM+DN are known in Amorite (Huffmon 1965: 241-243) and Ugaritic (Gröndhal 1967: 168). NQM appears probably as hypocoristicon in Palaeo-



1. The sequence NQM'L in the second half of line 3.

Hebrew on a jar handle from Jerusalem (Dobbs-Allsopp *et al.* 2005: 218-219), while in Sabaeen (Ryckmans 1934-35: 144) and in Safaitic (Harding 1971: 598) it is rather interpreted as *Nāqim* “avenger” (cf. also NQMT in Safaitic; Ryckmans 1934-35: 144). Other names derived from the same root are NQWM and NQMW that appear on the Aramaic ostraca of Idumea (Lemaire 2002: 166, 274). The root NQM (“to avenge”) is possibly attested in the Ammonite onomasticon as component of YQM[']L on the El-Mazar Ostrakon VII (line 9), but this PN can also be analyzed in a different way (from the root QWM: see Aufrecht 1989: 342).

### K[SP]

At the end of the line, it seems to us that the head of the last letter, which is compact and enlarges on the left, pertains to a K (as proposed by Puech) rather than to an M (as proposed by Cross). Puech’s restitution of K[SP] stems from the occurrences of this word at lines 1 and 6, and seems reasonable. KSP is widely attested in West Semitic inscriptions (Hoftijzer / Jongeling 1995: 524-526).

Line 4: LZ’-[B]N ’LTMK BT 10+2 ’K[L

This line is more difficult to read because the ink has faded.

### LZ’-[B]N

The second letter can be read W or Z; after the initial L which is probably a preposition, it is difficult to take the W for the beginning of a word, so the reading Z has to be preferred. After Z, Puech reads a ’ that was merely conjectured by Cross, and then two successive B. The direct examination of the shard shows that the surface is abraded by scratches and that the ink has faded. There are traces of ink from three letters: the first ones are *compatible* with the presence of ’. As for the two following letters, no reading stemming from the traces can be proposed. It is likely that L was followed by a personal name Z’-, for instance Z’B as Puech implicitly suggests; it is attested in the Bible (Judg 7:25, 8:3). At the end of this area of uncertainty, i.e. immediately before the next legible letter (the ’ of ’LTMK), there is a trace of ink at the bottom of the line (on the left part of a small depression that was created before the writing was applied):

it pertains to the tail of K/M/N/T. Cross takes it for an M and reads the preposition “from”, preceding a toponym ’LT. The latter interpretation is very unlikely, as we will soon see. Although every proposition remains guesswork, we suggest reading a N belonging to [B]N “son of”, which would be expected between two personal names: Z[ ] and ’LTMK, as in line 3. It should however be noted that there are several examples in West Semitic epigraphy where BN is omitted between a name and patronym. Consequently, even if it were lacking here, it would not be problematic.

### ’LTMK

The next legible sign is the head of a ’, followed by a L. From the next letter, there remains mainly the lowest part of a tail, whose orientation indicates a reading K/M/N/T. Moreover, although there is not sufficient space on the left for the presence of a head, there is a trace of ink on the right, which can only pertain to a T. Then there is an M, and the last letter clearly is a K.

With regard to the complete sequence, Cross reads ’LT “Elath” (preceded by M, “from”) and NK’T “gum”; in addition, Puech sees a separator between these two words. These propositions prove to be problematic. From an epigraphic point of view, there are several severe improbabilities for this hypothetical reading: our own examination convinced us that the shape of the letter they read as N more likely points to a M (as was already apparent from the drawing of Puech) and that there is no separator between T and N. As for the sense, other difficulties arise. Cross’ identification of “Elath” with the port and city on the Gulf of ‘Aqaba is questionable (2003: 73); moreover, it would be the sole example of such precision in the text after a personal name. Furthermore, the presence of “gum” would, to say the least, be astonishing in this context.

On the contrary, the epigraphic data lead us to read ’LTMK, which is a personal name attested in Ammonite inscriptions on the Nimrud ostraca (CAI 47, l. 14) and on a seal (CAI 62). The equivalent name TMK’L is well known in Ammonite on seals (CAI 1, 3, 14, 26, 84, 86, 113, 132; WSS 886) and on another Ḥisbān Ostraca (A4, see *infra*); its hypocoristic TMK’ appears on two seals (CAI 85 and WSS 981). Both TMK’L and TMK’ are attested in Phoeni-

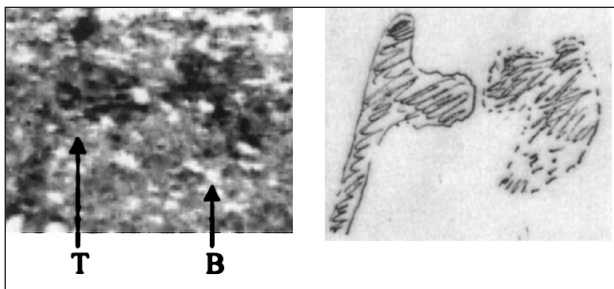
cian (Benz 1972: 429), while the former appears on an Aramaic seal (WSS 853).

**BT 10+2**

After 'LTMK, both Cross and Puech read 'T (end of the word NK'T). But this reading was influenced by the presence of the same word (NK'T) in the following line. A close examination of the shard indicates that, from a strict epigraphic point of view, we must correct the reading ' into B (Fig. 2). Note that the head of this B is slightly erased on the left part, exactly like the B in line 3.

After BT, Cross reads 10+2'K[ whereas Puech deciphers W/ZRH B[T. Here again, Puech seems to seek a reading of a sequence of letters that appears in line 5. In addition, he was probably misguided by the presence of an incrustation under the penultimate letter that gives it the appearance of a H on some photos. As a matter of fact, the material traces, indicating numerals, were more correctly read by Cross. Since the ink of the last letter is very faded, its reading remains uncertain; it could be a K as suggested by Cross, which reasonably leads to the reconstruction 'K[L.

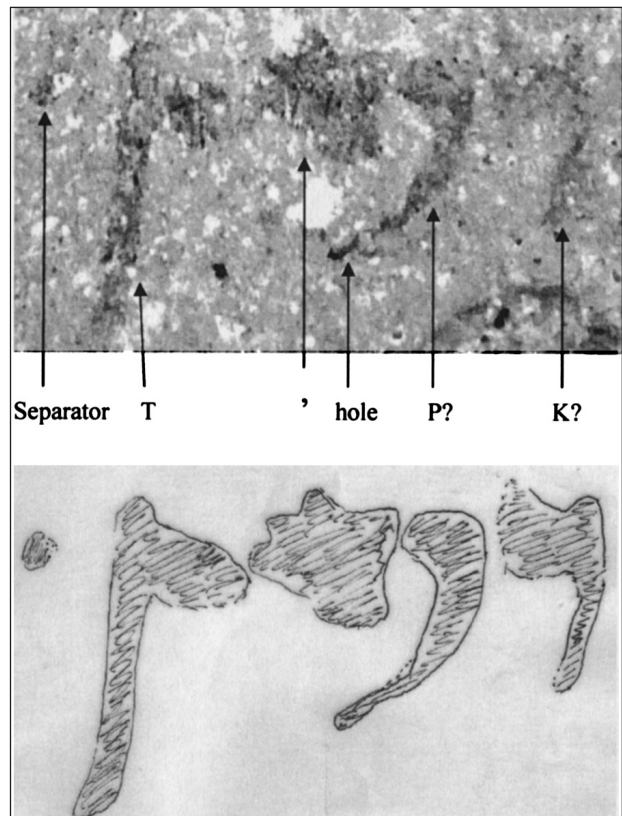
BT designates a measure of capacity (bath) well known in the Bible (e.g. 1 Kgs 7:26) as well as in Epigraphic Palaeo-Hebrew, on jars (Ahituv 2008: 240-242) and on ostraca from Arad (e.g. Ahituv 2008: 92-94). These ostraca use the abbreviation b\ followed by a numeral. Here, two bath-measures are reported in the account. Biblical data, as well as archeological data, seem to indicate that the Israelite pre-exilic bath measured about 24 liters (Powell 1992: 902; Dobbs-Allsopp *et al.* 2005: 343). However, there is no reason to assume that the same range was used in Ammon; in Ekron, one bath-measure contained 32 liters (Ahituv 2008: 241, 345).



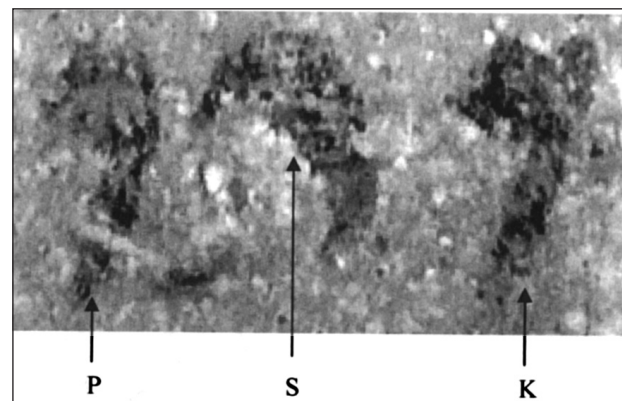
2. The sequence BT 10 + 2 in line 4.

Line 5: LY'' [ ]KP'T.WRHBT 2 W[ LY' [ ]KP'T

In the first half of the line, the ink is faded and there are several holes in the surface of the sherd. Before the gap, Puech is correct in reading two more letters than Cross: Y'. After the gap, both scholars read NK'T. Our own examination leads us to the conclusion that the first letter cannot be an N as the head is too wide (Fig. 3), but could be a K (compare the K in line 6; Fig. 4). Likewise, the second letter is undoubtedly not a K (compare, again, the K in line 6; Fig. 4); its head clearly does fit this reading.



3. The sequence KP'T in line 5.



4. The sequence KSP in line 6.

On the other hand, it could be a P (compare the P in line 6; **Fig. 4**), although it remains uncertain. Note that what seems to be the end of a very long and curved tail for this letter is in reality a hole at the surface of the shard (**Fig. 5**).

As a result, we read KP'T. However, owing to the gap before these letters, the complete sequence of letters remain unknown, so it is difficult to decide if KP'T is a substantive or, if part of it, belongs to a former word or name.

At least, two conclusions can be drawn:

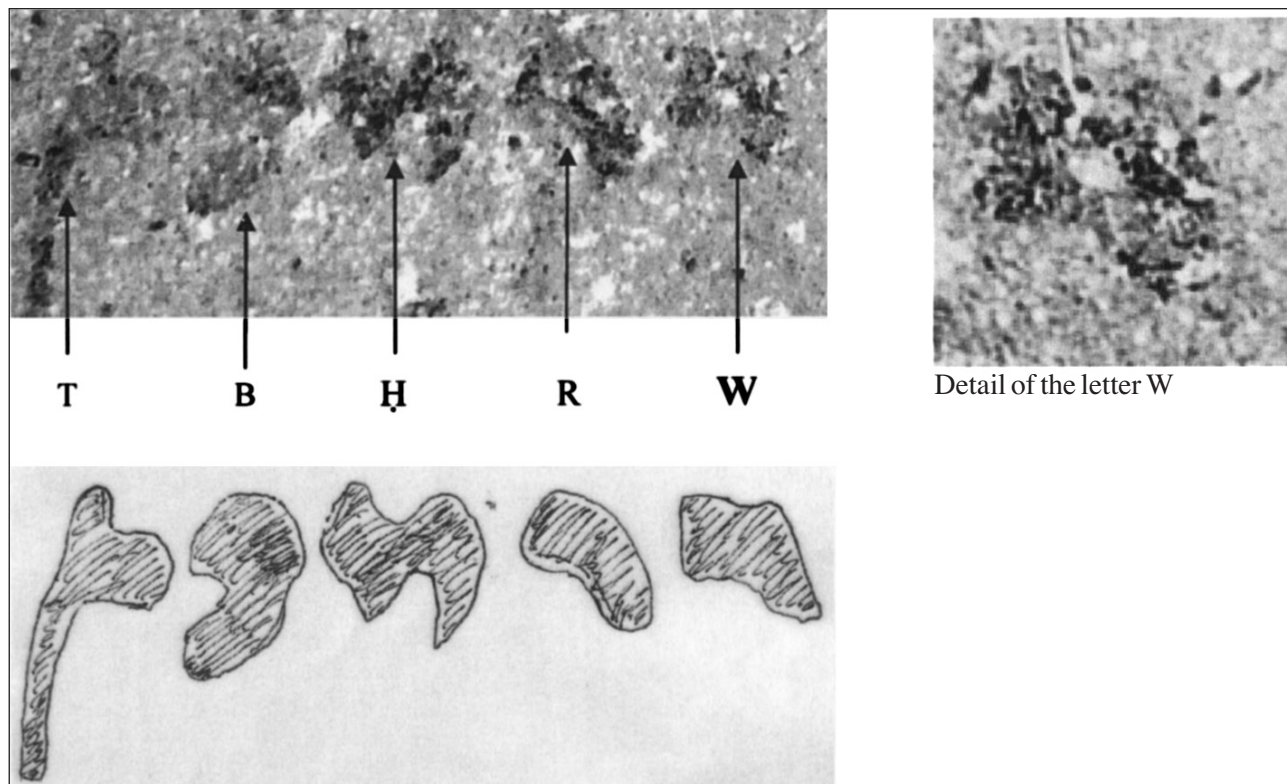
- First, one can reasonably assume that the initial L is followed by a personal name Y'[ ]]. Examples of such anthroponyms are Y'S (WSS 442, 512, 513, 799), Y'WŠ, Y'ZN, Y'ḤŠ and Y'R (Dobbs-Allsopp *et al.* 2005: 599-600).
- Second, there is a separator after T (not noticed by Cross or Puech), and the next word (designating goods of some sort, see *infra*) is introduced by the conjunction W: it implies that the last word before the separator ([ ]KP'T ?) designates a commodity.

**RḤBT**

Cross reads 2'RḤ BT 2, whereas Puech pro-

poses W/ZRḤ B[T. In fact, reading 2' proves to be simply impossible; there is only one sign before R. In addition to the epigraphic problem, Cross' interpretation was highly conjectural: a "two year old cow" would be a very unusual designation for a commodity in an economic ostrakon. Moreover, our own examination allows us to come to a decision with regard to the letter: it is clearly a W, not a ' (**Fig. 5**).

As a result, we read the word RḤBT after the conjunction W. In the Bible, it appears as a toponym (Gen 10:11; see also Gen 26:22). This is a personal name in Safaitic (Ryckmans 1934-35: 123) and Sabaean (Harding 1971: 272), more precisely a feminine one that Sholan (1999: 143) proposes to vocalise *Ra'bat* or *Ru'abat*, which can be linked to *Ru-uh-bat-um* in Amorite (Gelb 1980: 342). RḤB is a personal name in Lihyanite, Safaitic, Minoan and Sabaean (Harding 1971: 272). Nevertheless, since all the anthroponyms of the text are preceded by the preposition L, which is lacking here, and since RḤBT is followed by a numeral, one should rather assume that it designates a commodity. In Ugaritic RḤBT means "amphora, jar"; this word notably appears in the syntagm RḤBT YN (Del Olmo



5. The sequence WRḤBT in line 5.

Lete / Sanmartin 2003: 737). Del Olmo Lete / Sanmartin relate it with Akkadian *r̄tbu* (cf. *CAD*, vol. 14, 321).

Line 6: LB'Š['] ]KSP 20+20 WŠNTN-[LB'Š [']

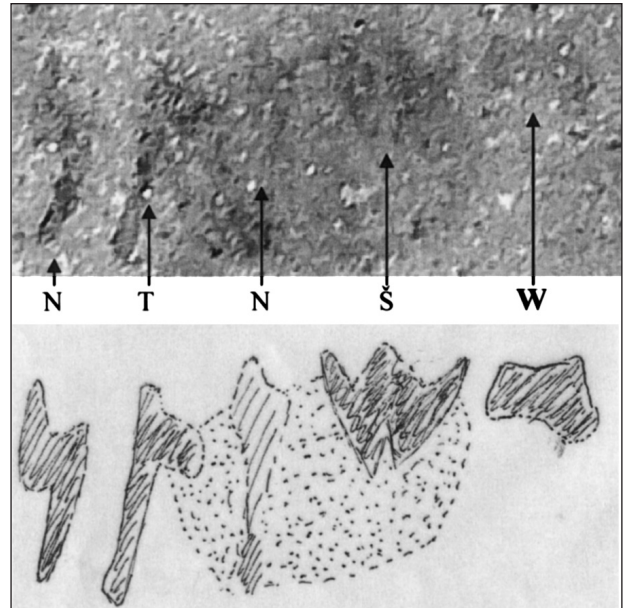
Before K, there is a large fissure on the shard, probably caused after the process of writing. We recognize a trace of ink forming part of the tail of the final ' before the damaged area. The name B'Š' is well known and was perhaps the name of an Ammonite king, but this is debated (see Cross 2003: 74 n. 26).

**WŠ NTN**

Preceding Š, Cross reads a ' , but Puech a W. It follows from close examination that the latter reading is correct. This epigraphic question has an important grammatical consequence: the sole attestation of the Ammonite relative pronoun is in the form Š and not 'Š (Fig. 6). In this respect, two important studies on dialectology (Garr 1985: 85 and Yun 2005: 751) must be updated.

Line 7: YN 20+2 WŠ'N 10 WBBT [BBT

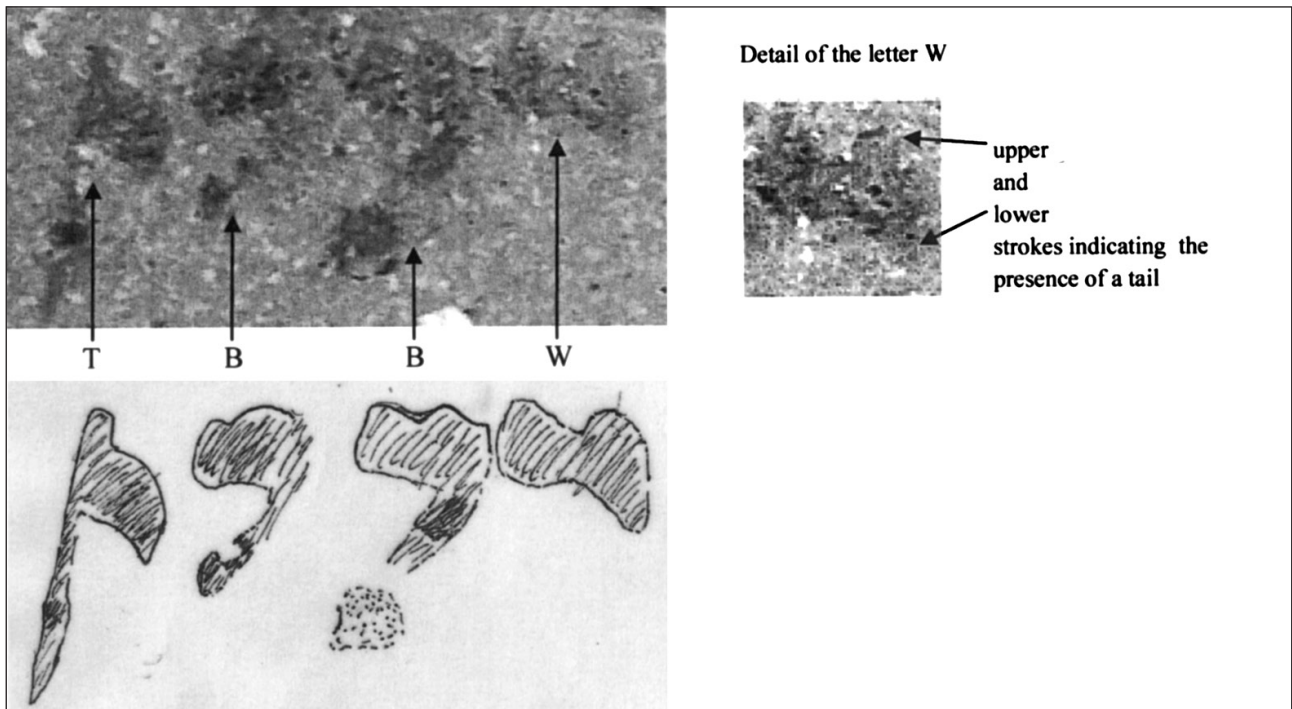
Ahead of the two successive B, Cross reads an L and interprets LBBT as "wheat germ"



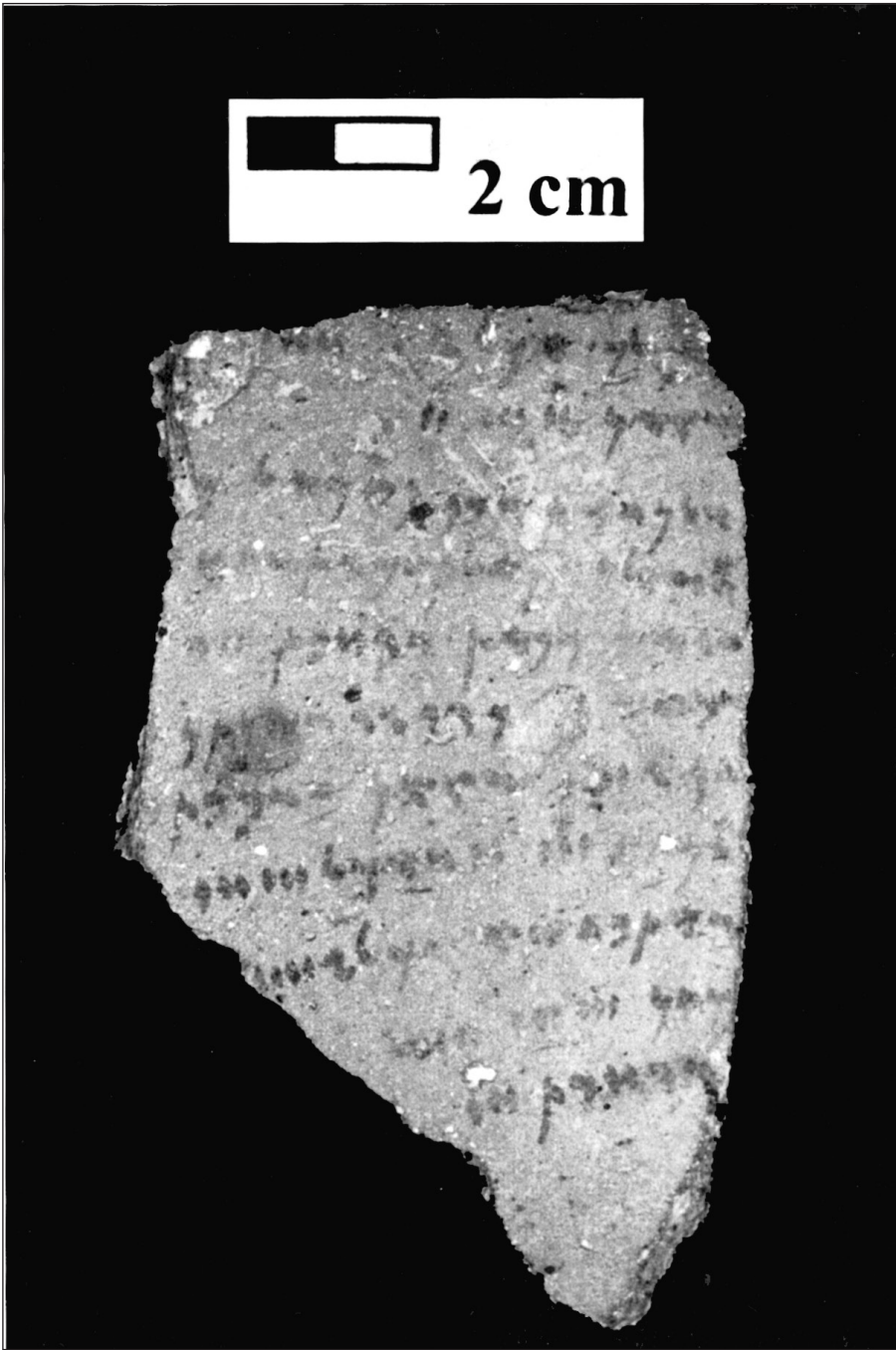
6. The sequence WŠNTN in line 6.

(2003: 72). Puech hesitates between L and W. In fact, the reading W is absolutely certain, as a good photograph as well as direct examination of the sherd clearly shows that the letter has no upper stance above its main part, and on the right there is a small tail, so that the shape points to a W (Fig. 7).

Consequently, Cross' interpretation must be rejected and after the conjunction W, we need



7. The sequence WBBT in line 7.

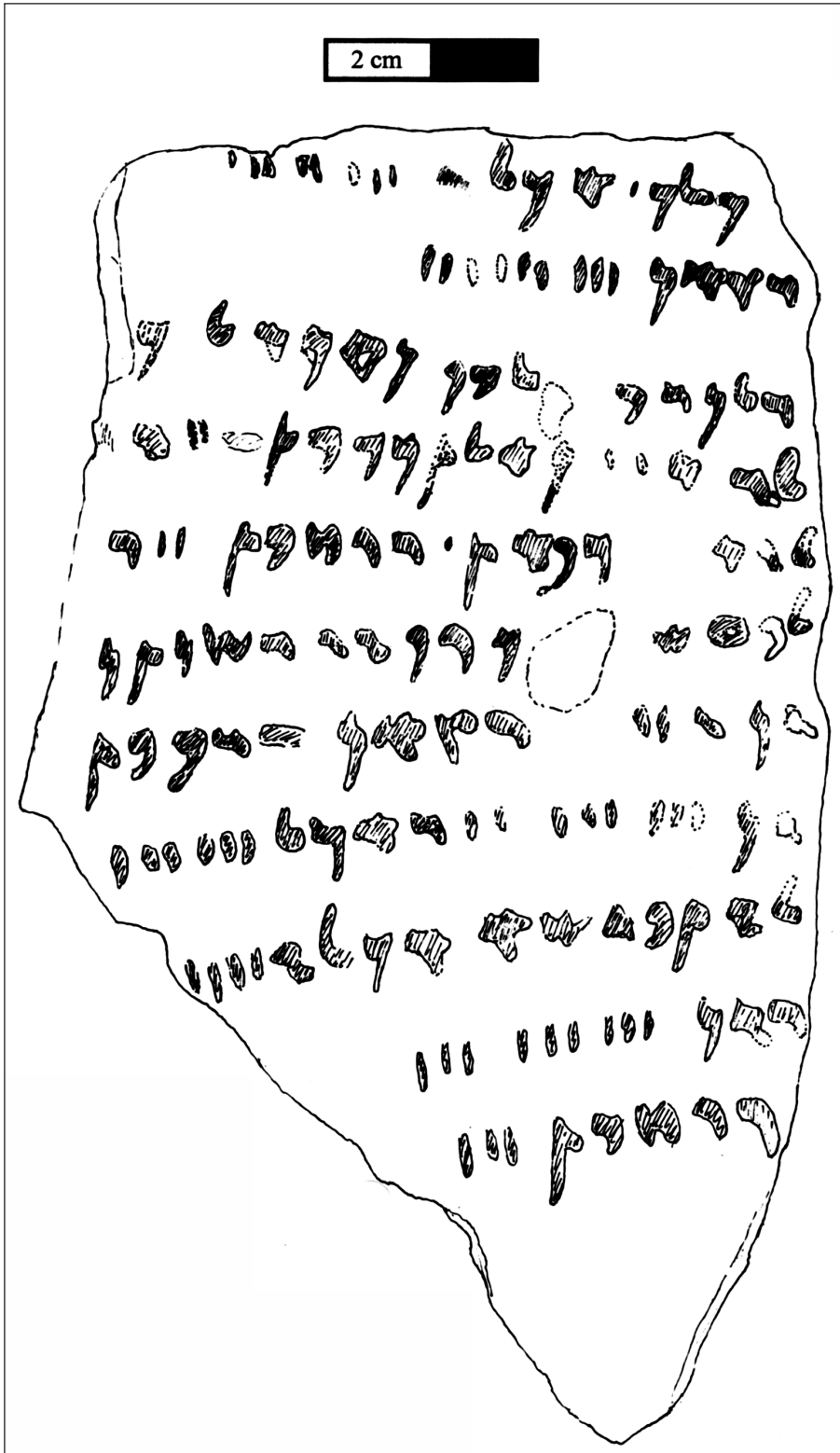


8. The ostracon A1.

to explain the reading BBT. Admittedly, it is attested as a personal name in Sabaean (Harding 1971: 91; Sholan 1999: 106) and Palmyrenian (Stark 1971: 8, 74), and was perhaps a hypocoristic for the feminine name 'LBBT (Sholan 1999: 95, 106). However, since the preposition L is absent before it, BBT more likely designates merchandise. At the present state of knowledge, it seems virtually impossible to find such a substantive in the West Semitic languages. However, in Akkadian, *babtu* designates a commodity

(“Handelsgut”, *AHW*, vol. 1, 95), perhaps more precisely “an amount of staples, finished goods or merchandise outstanding (i.e., not at hand at the time of accounting but whose delivery or payment is expected with certainty in the near future” (*CAD*, vol. 2, 10-13). For example, *CAD* translates: 5 MA.NA *kaspum* 148 ŠE.GUR *našpakum* 40 ŠE.GUR *ba-ab-tum nikkassī šu ša maḥar Šamaš ipušu* as follows: “Five minas of silver, 148 gur of barley in storage (and) forty gur of barley deliveries outstanding, (are) the





9. Drawing of ostracon A1

possessions for which he accounted to Šamaš” (CAD, vol. 2, 13).

Thus, it seems reasonable to understand BBT as a designation for a particular commodity, which perfectly fits our economic text, perhaps

with a nuance near to the Akkadian semantics.

Line 8: YN 8 W'KL 6

Although the ink has faded at the beginning of the line, the reading and the interpretation are

virtually certain.

**Line 9: LYTB DŠ' 'KL 20+4**

In this line we agree with Cross' and Puech's readings (which are the same).

**YTB**

This is a personal name in Safaitic and Thamudic (Harding 1971: 657).

**DŠ'**

Cross recognizes the word meaning "grass" and interprets it as "hay". This is possible, albeit slightly surprising; note also that there is no number after this word, so that no indication of quantity is provided for this merchandise. It is hard to suggest a better interpretation. The only other solution would be taking DŠ' for a personal name. In this case, there wouldn't be the usual link BN between the name YTB and its patronym but, as has already been noted, it sometimes occurs in West Semitic epigraphy. However, it seems difficult to find any attestation of DŠ' in West Semitic onomasticon. Taking into consideration the development T>Š (Lipiński 1997: 118-122; for Ammonite see Garr 1985: 29), we could perhaps link DŠ' with the Minoan personal name DT' (Harding 1971: 234). This is obviously hypothetical, and we mention it only in order to explore the possibilities.

**Line 10: WYN 9-**

The sole problem concerns the numeral: after 9, there are traces of ink which are difficult to read.

**Line 11: WRḤBT 3**

Here we encounter exactly the same situation as in line 5.

**2.3. Conclusion**

This new examination of the inscription has led us to propose several significant changes to former readings. The main results are the following:

- Four words were, in our opinion, mistakenly read in this text: there seem to be no references to the commodities "two year old cow", "gum" and "wheat germ", nor to the toponym 'LT.

- On the contrary, we discovered here the presence of:

- two personal names: NQM'L (for the first time in Ammonite) and 'LTMK;
- a measure of capacity (BT), already known in pre-exilic inscriptions from Judah, in biblical texts and in Ekron, but not in Ammon;
- two designations for commodities: RḤBT ("jars") and BBT, that were previously merely known in Akkadian.

Moreover, we are in a position to confirm Puech's reading of the Ammonite relative pronoun in the form Š; it has been mistakenly read 'Š by many, and this inaccuracy has in turn impacted on quite a few grammatical treatises.

**3. Remarks on the Ḥisbān Ostrakon A4**

Rollston has recently proposed a few improvements to Cross' reading of ostrakon A4. Cross' reading (2003: 85-86) is:

- 1) [ ]
- 2) SKT PD[N'
- 3) TMK 'L[
- 4) BNY GBL'
- 5) [ ]

Instead of TMK'L in line 3, Rollston (2008: 88) reads GMR'L. He argues that T and K of line 3 (according to Cross) have a different morphology and stance than T and K in line 2, and proposes parallels with G and R (respectively) in line 3.

We doubt Rollston's proposition. Firstly, he does not compare the letter he reads as G in line 3 with the G of line 4. There is a striking difference in morphology between them: the orientation of the strokes is clearly different as well as their angle. Therefore, it seems problematic to read G at the beginning of line 3. On the contrary, by comparing the first letter of line 3 with the T of line 2, it appears that the orientation of the strokes and their angles are approximately the same. Indeed, the main difference is the thickness of the letters of the letters of line 2 in comparison to the letters of line 3. Nevertheless, there are inscriptions where the thickness varies from line to line. This is not a result of ink fading, but of the manner of writing. In this respect, a striking example is provided by the (incised) "barley ostrakon" from Samaria (C 1011, cf.

Aḥituv 2008: 310-311). Compare the letters of line 1 with those of lines 2 and 3. Consequently, this difference is not an obstacle to reading T in line 2, as Cross proposed.

Similarly, apart from the thickness, there is no conclusive difference between the third letter of line 3 and the K of line 2. As a result, we consider Cross' reading adequate. Incidentally, the personal name TMK' L that is also attested on ostrakon A1 appears here for a second time.

### Acknowledgements

Our research has been made possible by the generosity of Dr Fawwaz al-Khaysheh, Director General of the Department of Antiquities of Jordan, himself an epigrapher. We are also deeply indebted to Dr Aida Naghawi, Director of the 'Amman Citadel Museum, as well to the many helping hands who provided us with the epigraphic material at the museum. Last but not least, we wish to express our special thanks to Dr Rafe Harahsha and Mrs Catrenea Hamarneh who organized our research in a most competent and efficient way. We also wish to express our gratitude to Prof. André Lemaire (Université de Paris Sorbonne) for pointing us in the direction of some of these new readings in personal communications.

### Abbreviations

- AHw *Akkadisches Handwörterbuch* [von Soden 1965]  
 CAD *Chicago Assyrian Dictionary* [Oppenheim (ed.) 1956-]  
 CAI *Corpus of Ammonite Inscriptions* [Aufrecht 1989]  
 HALOT *The Hebrew and Aramaic Lexicon of the Old Testament* [Koehler/Baumgartner 1994]  
 WSS *Corpus of West Semitic Stamp Seals* [Avigad/Sass 1997]

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