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# Egyptian Hieratic Writing in the Levant in the 1<sup>st</sup> Millennium B.C.

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The use of Egyptian Hieratic signs in Iron Age Levantine inscriptions was discussed eighty years ago for the first time, and has by now been firmly recognised and unanimously accepted. The facts which this paper is based upon, are thus not new, except for some freshly published evidence. Yet, this marginal and rather late offspring of Egyptian epigraphy has never really been the subject of Egyptological debate. Understandably so, as it is considered a matter of Semitic, more precisely: Northwest Semitic epigraphy, and supposed to be dealt with by Semitists. The latter are, also understandably, not normally comfortably acquainted with the complex field of Hieratic palaeography. Scholars of Semitic epigraphy have amply been referring to the phenomenon, as it appears more than occasionally in the inscriptions they deal with.<sup>1</sup> But a profound study of the subject has until now not been tackled. The author is set about undertaking such a comprehensive investigation. Since it is in its initiatory stages, this presentation is more on what is intended to be done rather on what has already been done. Eventual conclusions are still to be considered preliminary.

## The setting

The land of Canaan in the Middle and Late Bronze Age, corresponding to the Middle and New Kingdoms roughly until the decline of the 19<sup>th</sup> dynasty, was increasingly in the sphere of pharaonic interest and was for a considerable time factually a province of the Egyptian Empire.<sup>2</sup> It is not surprising therefore that the known corpus of inscriptions, altogether very little

compared to what was written and what is preserved at the same time in Egypt, is predominantly written in Egyptian scripts, Hieroglyphic and Hieratic.<sup>3</sup> Besides, cuneiform was also in use, especially in the northern regions, where Mesopotamian influence is strongly felt. Very little text finds attest other scripts, such as Aegean and Hittite. There was, however, also an Egyptian inspired yet indigenous writing system, the Canaanite alphabet, or, as it is conventionally termed, Proto-Canaanite, known to Egyptologists mostly for its Proto-Sinaitic offspring and since recently also from the Wadi el-Hol desert road between Luxor and Farshut.<sup>4</sup>

The last two centuries of the 2<sup>nd</sup> Millennium, the first phase of the Iron Age, bring about an abrupt decline of Egyptian administration in the Levant and the genesis of a variety of new ethnic-cultural, and very gradually also political, structures. By the 9<sup>th</sup> century - we are now in Iron Age II - the Proto-Canaanite script has developed into distinct branches of what we call the Northwest Semitic alphabet: mainly Phoenician, Hebrew and Aramaic.<sup>5</sup> These alphabets look all quite similar to the non-specialist, but they can be distinguished in certain details. Even more difficult is it to tell apart specific Ammonite, Moabite and Edomite scribal characteristics in Transjordan. The Philistines, inhabiting only the southern coastal areas of what would later be called Palestine, constitute a special case, as their language and scripture are yet hard to grasp and require much more further research.<sup>6</sup>

When we chose to include the epigraphic evidence of the Hebrew kingdoms, Judah in the south and Israel in the north, under the heading ‘Palestinian’ script, we revert to a more general, and purely geographically motivated term, with no ethnic, and let alone political, implications or intentions whatsoever.

## The evidence

In the early 20<sup>th</sup> century, excavations of Samaria, at Sabastiye, northwest of modern Nablus, brought to light an archive of roughly a hundred ostraca, written in the ancient Hebrew script.<sup>7</sup> Samaria was in the 9<sup>th</sup> and 8<sup>th</sup> century the capital of the northern Israelite Kingdom. Most of the texts start with a dating formula, ‘In the year so-and-so’. The year number was in some cases expressed in words, e.g. ‘In the tenth year’, but in other cases a combination of two non-alphabetic characters held the position of the numeral. Egyptologists will without difficulty recognize them as the Hieratic numerals for ‘10’ and ‘5’ = ‘15’. The excavator of Samaria – it was the famous Egyptologists George Reisner, who, like several of his colleagues, starting with Flinders Petrie, was involved in Palestinian archaeology as well – translated the signs correctly as ‘15’, and didn’t even bother to explain that reading or to address the Hieratic nature of the signs in his publication.<sup>8</sup> The German Old Testament scholar Martin Noth was the first, in 1927, to confirm their Hieratic reading, and he concluded, ‘Es ist sehr bedeutsam, daß da, wo wir zum ersten Male Zahlzeichen in Israel antreffen, es ägyptische Zeichen sind, die gebraucht werden.’<sup>9</sup> Yet, the ‘Hieratic theory’ was not accepted by all and was repeatedly debated, until in the 1960s more ostraca with other, clearly Hieratic numbers and also some additional signs, were discovered, in Arad in the Negev, and at other sites. Since then the Hieratic nature of these signs has no longer been in doubt, the evidence is by now overwhelming and ample.

A chart from one of the most important studies on Hebrew ostraca, by the French Semitist André Lemaire from 1977, collects a considerable variety of Hieratic numerals, from ‘1’ to ‘50’ and ‘300’, plus additional signs.<sup>10</sup> That inventory increased enormously through a spectacular discovery that was made in 1979 at Tell Qudeirat or Qadesh Barnea, an Iron Age Judaeen fortress, near the modern Egyptian-Israeli border.<sup>11</sup> A small amount of ostraca was found in one of the rooms of the fortress, which may be identified as exercises for Israelite scribes who were trained in Hieratic numbers. The largest of these ostraca, about the size of a modern A4 sheet of paper (30 x 22 cm), repeats in 6 columns the numerals, in single units, tens, hundreds, and thousands. For ‘10,000’, the highest number, the scribe wrote a Hieratic ‘10’ plus the Hebrew word for ‘thousands’ in letters (‘10 *šlp̄m*’). Additional signs include a special symbol for the Hebrew weight unit ‘sheqel’, the shape of which has until now not been convincingly explained<sup>12</sup>, and a column of additional special signs, which are only partly understood; some of these may be Hieratic. The Qadesh Barnea ostraca were published by the above mentioned André Lemaire, together with Pascal Vernus, the only Egyptologist who has until now dealt with the phenomenon of ‘Palestinian Hieratic’, as I would like to call it.<sup>13</sup>

Non numerical signs are also found on the ostraca from Arad, from the early 6<sup>th</sup> century.<sup>14</sup> There appears to be the grain sign on O. Arad 25 and 34, either as an indicator for grain in general or perhaps a kind of grain (barley?), or – more probable – a measure of capacity like *ḥqʕt* or the quadruple *ḥqʕt*.<sup>15</sup> *ḥqʕt* seems to be implied also by the dot that appears many times on Hebrew ostraca, in contexts that fit to accounts or receipts of commodities. In the publications it is taken for granted that the number when following the dot is to be multiplied by the factor 10, according to the account in Gardiner’s *Egyptian Grammar*.<sup>16</sup> It

is of course possible that this applies for these texts, but it is by no means proven. Also the *h3r*-measure may figure in O. Arad 34<sup>17</sup>, and, in the view of the speaker, also the *hq3t*-fractions  $\frac{1}{2}$  and  $\frac{1}{4}$ .<sup>18</sup> A strange way of expressing fractions seems to be attested on a newly published ostrakon, perhaps also in association with the same *hq3t*-fractions.<sup>19</sup> I would preliminarily suggest to read them as  $\frac{1}{8}$  and  $\frac{2}{8}$ , but the matter certainly needs to be more thoroughly studied.

Numerals, fractions, and abbreviations or special signs for commodities and measures are attested in ancient Hebrew inscriptions from at least the 9th century down to the fall of Jerusalem in 586 BC. After the Babylonian Exile, from the Persian and then Hellenistic Periods on, the Hebrew language and script became substituted by Aramaean, except for rare cases like historicizing coin legends.<sup>20</sup> Hieratic signs are then no longer included.

But we have until now spoken only about the Hebrew branch of the Northwest Semitic alphabet. Did the Phoenicians and Aramaeans not use Hieratic numerals? How did they write numbers? – It seems indeed to be the case that the Hieratic tradition was confined to the Hebrew Kingdoms of ancient Palestine. Aramaeans and Phoenicians alike were using numerals that appear identical to the Egyptian signs from ‘1’ to ‘3’, as they consist of the respective amounts of single, vertical strokes, except that they are sometimes markedly inclined.<sup>21</sup> It becomes clear from the numerals ‘4’ and onward, however, that they are not inspired by Egyptian tradition, because they are characteristically written in separate groups of three each. Thus, ‘7’ for example, is written as two groups of 3 plus 1 stroke, ‘8’ as two groups of 3 plus 2 strokes. It is obvious that this is not Hieratic, and also in Hieroglyphs, where the numbers up to ‘9’ are written as single strokes, they are not usually grouped in such a way.



In his *Corpus of Ammonite Inscriptions* from 1989, Walter E. Aufrecht has presented the numeric signs that appear on a few ostraca from Hisban, east of the Dead Sea, as ‘Hieratic’; but as can be seen from the photos and facsimiles, these numbers follow the Aramaean, not the Egyptian tradition.<sup>22</sup>

The units of tens in Aramaean and Phoenician alike, are represented by short, horizontal strokes, which later become curved and ligatured, as Aramaic develops into a variety of different branches. This is obviously the case in an ostrakon from Tell Qasile, at the outskirts of modern Tel Aviv, where the letter *š*, certainly an abbreviation for ‘sheqel’, is followed by three horizontal strokes, which can only be read as ‘30’.<sup>23</sup> This ostrakon might therefore be classified as Phoenician, not Hebrew. Since Tell Qasile displays remains of the Philistine culture, and bearing in mind how little we know about the Philistine script, an option remains that this is a Philistine ostrakon, if the Philistines, like all other non-Hebrew peoples, preferred the non-Egyptian way of writing numerals. An ambiguous case is the incised line of a large, complete storage jar, from a private collection, where the words ‘(Belonging) to the king: prime (quality) oil’ are followed by two horizontal strokes, which can either be Hieratic ‘8’, or Phoenician/Aramaic ‘20’.<sup>24</sup> If the jar is indeed ‘Judean’, as its publication asserts, the former is certainly correct. The peculiar technique of ‘hammering’ the incision into the already fired jar, is indeed familiar with Judaeans inscriptions.

Besides inscriptions on vessels and the widespread use of ostraca,<sup>25</sup> papyrus must have been the most common writing material in ancient Palestine as well. Due to the climatic conditions, however, almost no papyrus documents from the Iron Age are preserved. Only one tiny strip of papyrus, perhaps from Jordan, has not long ago been presented.<sup>26</sup> Another rather miserable fragment, from the Dead Sea area, does contain Hieratic numerals.<sup>27</sup> Nevertheless, we

know that the use of papyrus, at least in the official administration, was widespread, because large amounts of bullae are being found.<sup>28</sup> These document sealings from clay, usually stamped with a personal seal of a scribe or official, are all that remains from the royal archives of Jerusalem and other places.

Many of these bullae have been published only recently, and one group of them, the so called fiscal bullae, contain also Hieratic numerals.<sup>29</sup> They start with a regnal year, which – like on the Samaria ostraca – is either written in words, or, much more often due to the limited space, as a number. And here an interesting phenomenon can be observed: Sometimes the single units appear as simple strokes even for higher numbers than ‘3’. E.g., the year ‘26’ is written with the Hieratic sign for ‘20’ plus six strokes.<sup>30</sup> A look at other bullae helps to explain this anomaly: One bulla is dated to a ‘20th year’, and 2 single strokes have clearly been added later, above the line.<sup>31</sup> Obviously the seal for this bulla was used for several consecutive years. Instead of producing a new seal each year, the scribe engraved an additional ‘1’ on his seal in the year 21, and yet another ‘1’ in the year 22. Where there was enough space, the additional single unit strokes could more elegantly be added in line. One bulla clearly shows how the year ‘10’ was gradually updated by first one stroke, then a second, a third, and squeezed into the little space left at the end of the line finally by a fourth stroke.<sup>32</sup> The seal was thus conveniently used from year ‘10’ till year ‘14’. A badly preserved bulla was published as another imprint of the very same seal.<sup>33</sup> Yet a close look reveals that the year date here is different. The sign for ‘10’ is here followed by the number ‘8’. After year ‘14’ the scribe was forced to produce new seals, because there was no more space to add more strokes, and what is preserved is the impression of the seal for year ‘18’; the scribe here reverted to the proper way of writing the number and confined this seal for only one year’s use.

Finally, another bulla from a ‘10<sup>th</sup> (year)’ omitted the self evident word for ‘year’ and therefore had enough space to spell the ordinal number as a word.<sup>34</sup> The formula, starting with the letter *b* for the preposition ‘in’, is preceded by a tall, cross like sign. Although it is similar in shape to the Hebrew letter *t*, this reading makes no sense here. Never is the dating formula preceded by any letter or word. A close look at the sign reveals that its upper tip is a bit inclined to the left, calling to mind the image of Egyptian plant signs, like  or perhaps . Even though the sign is not drawn precisely the way an Egyptian scribe would have written the year-plant, the assumption that a Hebrew scribe tried his best, and bearing in mind the almost microscopic dimension – the whole seal is not larger than a thumbnail and the letters are 2-3 millimetres tall – I think the suggestion is acceptable that he wanted to introduce the Hebrew date with the Egyptian sign for ‘year’, the way Egyptian date formulae start. He would have done so in order to demonstrate his own high education, and certainly also as a reverence to ‘Mother Egypt’, where education and scribal practise in particular originate.

## Conclusion

Seal impressions on bullae, and also preserved seals themselves, testify amply to Egyptian orientation and inspiration. Winged beetles lifting up the sun disc, uraei, winged suns, ankh signs and many other symbols are omnipresent in the iconography of the Iron Age Levant.<sup>35</sup> In the Hebrew kingdoms in particular, the adoption of Hieratic numerals and other signs, is strong evidence for their close cultural bonds to the big neighbour in the West. In recent years a tendency has been felt in several analyses on interrelations in the Ancient Near East, to challenge this picture as drawn by previous researchers, and to minimize the extent of direct Egyptian impact during the Iron Age.<sup>36</sup> On that background it has been maintained

that the Hieratic scribal traditions should be explained as remnants of a lasting impact of the Late Bronze Age/New Kingdom Egyptian administration of the region.<sup>37</sup> While I would not exclude the possibility that the gap of several centuries of complete lack of evidence for Egyptian writing in Palestine could indeed be bridged somehow, my impression is – at this stage – that we might do better to think in both tracks. An unbroken survival of the Late Bronze Age heritage may be one component in explaining the phenomenon of ‘Palestinian Hieratic’; but strong contemporary affinities towards Egypt remain a very probable factor as well.<sup>38</sup> Only through a thorough and comprehensive palaeographic examination of the sign shapes, in comparison with the Hieratic of the New Kingdom on one hand, with Late and Abnormal Hieratic, and also with Demotic, on the other, can a sound basis be established for clearer and safer results. Therefore I trust that the study of this peripheral subject shall be meaningful not only for Ancient Near Eastern and perhaps Biblical studies, but also for Egyptology and will eventually contribute to a difficult and much neglected sector of Hieratic palaeography.

## Endnotes

- 1- Cf. the standard works. A. Lemaire, *Inscriptions hébraïques I: Les ostraca* (Paris, 1977), 277-281; G.I. Davies, *Ancient Hebrew Inscriptions* (Cambridge, 1991), xix-xxii; J. Renz, W. Röellig, *Handbuch der althebräischen Epigraphik* (Darmstadt, 1995/2003), I: 292-295, II:148-51, with more literature.
- 2- Cf. i.e. W. Helck, *Die Beziehungen Ägyptens zu Vorderasien* (Wiesbaden, 1971); D.B. Redford, *Egypt, Canaan and Israel in Ancient Times* (New Jersey, 1992); M. Görg, *Die Beziehungen zwischen dem Alten Israel und Ägypten von den Anfängen bis zum Exil* (Darmstadt, 1997); M.G. Hasel, *Dominance & Resistance: Egyptian Military Activity in the Southern Levant 1300-1185 BC* (Leiden, 1998). C. Higginbotham, *Egyptianization and Elite Emulation in Ramesside Palestine* (Leiden, 2000).
- 3- For a general overview cf. A. Millard. ‘The Knowledge of Writing in Late Bronze Age Palestine’, K. van Lerberghe, and G. Voet, and (eds) *Languages and Cultures in Contact: At the Crossroads of Civilizations in the Syro-Mesopotamian Realm. OLA 96*, (Leuven, 1999). For a complete list of the known Hieratic inscriptions cf. A. M. Maeir, M. Martin, and S. Wimmer, *An Incised Hieratic Inscription from Tell es-Safi*, in press.
- 4- Cf. B. Sass, *The Genesis of the Alphabet and its Development in the Second Millennium B.C.*, *ÄAT 13* (Wiesbaden, 1988), For Proto-Canaanite and Proto-Sinaitic, cf. S. Wimmer-Dewikat, ‘The Alphabet from Wadi el-Hôl - A First Try,’ *GM 180* (2001), 107-112.
- 5- Cf. the standard work. J. Naveh, *Early History of the Alphabet. An Introduction to West Semitic Epigraphy and Palaeography* (Jerusalem/Leiden, 1982).
- 6- cf. J. Naveh, ‘Writing and Scripts in Seventh-Century B.C. E. Philistia,’ *IEJ 35* (1985), 8-21.
- 7- G.A. Reisner et al., *Harvard Excavations at Samaria*, (Cambridge, 1924), I: 227-243.
- 8- Reisner, *Harvard Excavations at Samaria*, 227-243
- 9- M. Noth, ‘Das Krongut der israelitischen Könige und seine Verwaltung,’ *Zeitschrift des Deutschen Palästina-Vereins 50* (1927), 243.
- 10- Lemaire, *Ostraca*, 281.
- 11- R. Cohen, ‘Excavations at Kadesh-barnea 1976-1978,’ *Biblical Archeologist 44* (1981), 93-107; Cohen., *Kadesh-barnea: A Fortress from the Time of the Judaean Kingdom* (Jerusalem, 1983). The territory and all the excavated material have meanwhile been returned to Egypt.
- 12- The symbol looks like the hieroglyph  $\text{D}$  (V. 6). For a discussion cf. R. Kletter, *Economic Keystones. The Weight System of the Kingdom of Judah* (Sheffield, 1998), 67-119. Metrologically the sheqel-weight system is indeed closely linked to the Egyptian *dbn* and *qdt* measures.
- 13- A. Lemaire, P. Vernus, ‘Les ostraca paléo-hébreux de Qadesh-Barnéa’, *Or 49* (1980), 341-345; A. Lemaire, P. Vernus, ‘L’ostracon paléo-hébreu no. 6 de Tell Qudeirat (Qadesh-Barnéa)’, in M. Görg (ed.), *Fontes atque Pontes* (Fs Brunner), *ÄAT 5* (Wiesbaden, 1983), 302-326.
- 14- Y. Aharoni, *Arad Inscriptions* (Jerusalem, 1981), 138-139.
- 15- For O. Arad 25 cf. *Arad Inscriptions*, 50-51. S. Yeivin, ‘An ostracon from Tel Arad exhibiting a combination of two scripts,’ *JEA 55* (1969), 98-102. the grain signs appears in ll: 1 and 2.

- For O. Arad 34 cf. Aharoni, *Arad Inscriptions*, 62-64; S. Yeivin, 'A Hieratic Ostrakon from Tel Arad,' *IEJ* 16 (1966): 153-159; grain signs appear (in my own readings) in col. I:2, 4, 8, col. II: 2, 3, 6, 8, 9.
- 16- E.g. Renz and Röllig, *Handbuch* II/1 51.  
A. Gardiner, *Egyptian Grammar*<sup>3</sup> (Oxford, 1957), 198 (§ 266).
- 17- col. I, 3, 7, col. II, 1, 7 (own readings).
- 18- ½: col. I, 8, col. II, 2, 8; ¼: col. II, 2.
- 19- M. Heide, 'Wheat and Wine: A New Ostrakon from the Shlomo Moussaieff Collection', *Biblische Notizen* 114/115 (2002) 40-45. ll: 3 and 4.
- 20- cf. Naveh, *Alphabet*, 112-124.
- 21- Appearance and development of the Phoenician and Aramaic numerals are conveniently presented in G. Ifrah, *The Universal History of Numbers, I: The World's First Number-Systems* (London, 2000), 443-451.
- 22- W.E. Aufrecht, *Corpus of Ammonite Inscriptions* (Lewiston, 1989), 355.
- 23- R. Hestrin et al., *Inscriptions Revealed*<sup>2</sup>, (Jerusalem, 1973), no. 42.
- 24- R. Deutsch, M. Heltzer, *Windows to the Past*, (Tel Aviv-Jaffa, 1997), 66.
- 25- Hebrew ostraca are, like their classic counterparts, always, as a rule, potsherds, never stone flakes.
- 26- P. Bordreuil, D. Pardee, 'Le papyrus du marzeah,' *Semitica* 38 (1990): 50-68.
- 27- Renz and Röllig, *Handbuch*, I, 285-287.
- 28- The main corpora are: N. Avigad, B. Sass, *Corpus of West Semitic Stamp Seals* (Jerusalem, 1997); R. Deutsch, *Messages from the Past. Hebrew Bullae from the Time of Isaiah Through the Destruction of the First Temple* (Tel Aviv, 1999) Deutsch, *Biblical Period Hebrew Bullae* (Tel Aviv, 2003).
- 29- Deutsch, *Messages*, 166-173.
- 30- Deutsch, *Messages*, no. 101.
- 31- Deutsch, *Messages*, no. 98
- 32- Deutsch, *Messages*, no. 97a.
- 33- Deutsch, *Messages*, no. 97b.
- 34- Deutsch, *Messages*, no. 100.
- 35- Cf. e.g. *Messages*, 197, and for a comprehensive discussion O. Keel, C. Uehlinger, *Göttinnen, Götter und Gottessymbole*, (Freiburg, 1992).
- 36- E.g. P.S. Ash, David, *Solomon and Egypt: A Reassessment*, (Sheffield, 1999); B.U. Schipper, 'Israel und Ägypten in der Königszeit,' *OBO* 170 (Freiburg, 1999); N. Sacher Fox, *In the service of the King Officialdom in Ancient Israel and Judah* (Cincinnati, 2000).
- 37- Sacher Fox, *in the service of the king*, 266-268; O. Goldwasser, 'An Egyptian Scribe from Lachish and the Hieratic Tradition of the Hebrew Kingdoms,' *Tel Aviv* 18, (1991), 251-252.
- 38- For discussions on relevant evidence cf. e.g. Görg, *Beziehungen*; Görg, *Aegyptiaca-Biblica, ÄAT* 11 (Wiesbaden, 1991).