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THE COPPER ROUTE AND THE EGYPTIAN CONNECTION IN 3RD MILLENNIUM BC JORDAN SEEN FROM THE CARAVAN CITY OF KHIRBET AL-BATRAWY

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Was the Kings' Highway used as "Copper Route" during the 3rd millennium BC and did this track enhance the connection between Pharaonic Egypt and Jordan? Finds from the 3rd millennium BC city of Khirbet al-Batrawy suggest that the Copper Route was a way of exchanging goods through the overland tracks crossing central Sinai. Moreover, this centre provided evidence for a variety of destinations on long-distance trade routes towards the west (Palestine and Lebanon), the north (Syria), and across the desert and the steppe, also to the east (Mesopotamia) and the south (Arabia).

The exploitation of the Copper Route as overland connection with Egypt during EB III may explain the flourishing of Jordanian urban centres in this period.

Keywords: Khirbet al-Batrawy; Egypt, copper; Faynan; urbanism

0. PREMISE

Recent discoveries by Rome «La Sapienza» University in the "Palace of the Copper Axes"[1] at Khirbet al-Batrawy offered some hints at the trade network within which this Early Bronze II-III Jordanian city was included. One major direction was the "Copper Route" to the Wadi 'Araba south of the Dead Sea, reaching the Gulf of 'Aqaba and the Sinai Peninsula.[2] It allowed a direct connection with Egypt, whose mining activities in the Sinai were flourishing during the second part of the Old Kingdom (IV to VI Dynasties). The "Kings' Highway", thus, not only gave access to the basic resource of copper ores of Wadi Faynan and possibly Timna (and even of Western Sinai), but also represented a way for Egyptian items (and cultural influence) to penetrate into 3rd millennium BC Jordan, bypassing the Palestinian centres on the "Way of Horus". Whether long-distance routes control, exchanges with Egypt, and copper extraction and transformation influenced the formation and growth of the early Jordanian urban system it is difficult to say on the basis of sparse and often occasional materials (even the urban character of such early fortified sites has been often questioned by scholars).[3] Nonetheless, their location in respect of the copper and salt routes (fig. 1) may reflect the determinant role played by caravans travelling back and forth on this main north-south track in their formation and development.

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1 Nigro 2010a; 2013a, 496-501; 2013b, 198-204; 2014.

2 About trade routes between main centres of the Southern Levant and Old Kingdom Egypt, across the Sinai, during Early Bronze II-III see: Oren 1973, 204-205; Beith-Arieh 1974; 1983; 2003, 201-204; Ward 1991.

3 The impact of metal exchange on early Southern Levantine urbanism has been widely debated with different perspectives and interpretations: Ilan - Sebbane 1989, 139; Knapp 1998; Genz 2000, 63; 2003, 72; Segal - Rosen 2005; Barker *et al*. 2007, 232-235. Scholars usually are inclined to extend to a wider panorama finds (or in some cases absence of finds!) made in their own excavation (see e.g., the reduced relevance attributed to metal by Genz in Early Bronze Jordanian urbanization). No copper items were found in Khirbet Yarmouk-Tel Jarmuth EB IIIB Palace B2 (de Miroschedji 2006). Actually, this site was abandoned, and not suddenly destroyed and this may well explain the lack of metal items in such a huge palace. However, this lack does not seem a sufficient prove to minimize metal role in early Southern Levantine urbanization (de Miroschedji 2014, 320), which is altogether illustrated by finds in Tell el-Hesi (Bliss 1894, 39, figs. 69-78), Pella-Tabaqat Fahl (Bourke - Sparks - Mairs 1999, 62-64, fig. 11) and, above all, Khirbet al-Batrawy.

1. KHIRBET AL-BATRAWY: AN EARLY BRONZE II-III CARAVAN CITY

Recent excavations by Rome «La Sapienza» Expedition at Khirbet al-Batrawy in north-central Jordan,[4] an Early Bronze Age city ruling over Upper Wadi az-Zarqa, the easternmost affluent of the Jordan, provided some new data on economic and cultural interaction between Southern Levant and Egypt at the times of the IV to VI Dynasties (i.e. during Levantine Early Bronze III, 2700-2300 BC).[5] The retrieval of Egyptian-style luxury and symbolic items, as well as of Egyptianizing vases (see below § 5.), seems to suggest that a direct connection existed at that time with Pharaonic Egypt. The quest for the modes of such contact and its consequences seems an intriguing one.

The location of Batrawy at a strategic junction of the tracks crossing east-west the desert and the steppe and north-south the Jordanian highlands, made it the dominant site overlooking the relatively large and well irrigated county of Upper Wadi az-Zarqa, and especially the ford through the Zarqa river, located underneath the fortified hill (fig. 2).[6]

Batrawy's vocation as caravan city was clearly epitomized by donkey and onager remains prevailing in the faunal record of this site.[7] The river banks offered good grazing land and beverage for such pack-animals, which at the time were the main mean of transportation on long-distance overland routes. Stone lined kites and precincts in the steppe of Jordan still testify how the region just east of Batrawy was a reproductive basin for onagers and donkeys.[8] It seems, thus, not surprising that finds from the palace highlight commercial interconnections also with far away regions such as Egypt, Syria, Anatolia and Mesopotamia.

For caravans coming from the east, Batrawy was not only the entrance to the Wadi az-Zarqa, but also the main gate to the Jordan Valley (fig. 3):[9] a shortcut from the ford through the river Zarqa leading straight to the Jordan.[10] Otherwise, the bent of the river reached more gently the irrigated lowlands passing through Tell al-Bire,[11] Tell Handaquq South[12] and Tell Umm Hammad.[13] From there, one might descend the eastern side of the Jordan Valley up to Tell el-Hammam, or to cross the Jordan to arrive at Jericho. Conversely, to the north, Tell Abu al-Kharaz, Pella-Tabaqat Fahl, Tell esh-Shuna,[14] and, on the other side of the Jordan, of course, Beth-Shean and Khirbet Kerak, completed the list of the directly connected centres of the Early Bronze II-III Southern Levantine road network (fig. 4).

The main track connecting Batrawy with the south was the "Kings' Highway", running upon the Jordanian highlands as early as the end of the 4th millennium BC onwards. From

4 Nigro 2010b; 2012a; ed. 2008; ed. 2012.
5 Nigro 2009a; 2013a; 2013b.
6 Nigro 2010c, 434; 2012b, 610-611.
7 Alhaique 2008; 2012, 334-345.
8 A later references to this tradition in animal husbandry is provided by the frescoes of Qusayr Hamra. The site was restored by World Monument Fund, the Italian ISCR and the DoA under the direction of Gaetano Palumbo and Giovanna De Palma.
9 Sala 2008a.
10 Nigro 2006, 663-665; 2011, 60.
11 Glueck 1939, 213-214, site 320; Palumbo *et al*. 1996, 385-386, 388, 390-391; Sala 2008a, 369-370.
12 Chesson 1997; 1998.
13 Betts ed. 1992.
14 Baird - Philip 1992; 1994; Philip - Baird 1993.

Batrawy soutwards the EB III fortified sites were Tell el-'Umeiri[15] in the Madaba Plain, El-Lehun[16] on the edge of Wadi Mujib; then the track and possibly descended to the Dead Sea through Wadi Kerak down to Bâb edh-Dhrâ'[17] and Numeira.[18] From there, one may get access to a distinct series of valuable raw materials: above all, Dead Sea salt, sulphur, bitumen,[19] but also Wadi Faynan copper and even reach the Gulf of 'Aqaba (before it the ores of the Timna district), and the shortcut crossing the Sinai towards the Gulf of Suez, with several possible deviations to the mines spread over the Sinai western wadis.[20] It was this highway which represented, for the early Jordanian "cities", the most direct connection with Egypt.

Conversely, towards the north the overland route from Batrawy reached Khirbet ez-Zeraqon, entering in Syria, or reached the eastern steppe with some major fortified towns like Qarassa[21] and Labwe[22] and, further east, Khirbet al-Umbashi.[23]

Towards the east, Batrawy was at the end of the track crossing the desert (fig. 5), along a route touching Al-Qihati[24] towards Jawa, or Qasr Hallabat straight to the east, reaching (after 700 Km, that is a 1 month-long trip with a donkeys/onagers caravan) the Euphrates in central Mesopotamia (in the Falluja district).

Due to its location and connections Batrawy might have served as exchange point on a long-distance interregional trade network.

2. Copper and the city in Southern Levant

It has been suggested that trade routes developed on the ways to metals,[25] and this seem particularly true in the case of Early Bronze Age Southern Levant.

Metal hoarding was a common feature of Southern Levantine societies at least since the Chalcolithic period,[26] when copper objects collection was, however, strictly connected with an economy firmly founded upon massive ideological and religious bases.[27] Also in Early Bronze I, main copper retrievals, like as the Kfar Monash hoard,[28] gathered weapons basically destined to a ritual employ (religious and funerary).[29]

It is, however, with the following urban Bronze Age (EB II-III) that copper items were introduced as "apical tools" dispensed from the ruling institution, and for this reason they

15 Harris *et al*. 2002.
16 Homès-Fredericq 2009, 795-796.
17 Rast - Schaub 1989; 2003.
18 Waheeb - Mahmod - Dweikat 2013; Schaub - Chesson 2007.
19 Connan - van De Velde 2010, 15-16.
20 Recent discoveries on the eastern coast of Egypt (Wadi al-Jarf) have corroborated the scenario showing IV and V Dynasties Pharaohs exploiting routes to the Sinai and to the East (Tallet - Maruard 2012).
21 Braemer - Ibanez - Shaarani 2011.
22 Braemer - al-Maqdissi 2006; 2008, 1823-1830; Braemer - Nicolle - Criaud 2010.
23 Braemer - Échallier - Taraqji éd. 2004.
24 Sala 2008a, 375.
25 Muhly 1991; *contra* Genz 2000 (see note for the Author's comment).
26 Moorey 1988; Golden 2010; Milevsky 2013.
27 Knapp 1988, 149-150; Philip 1988; Kletter 2013, 7-8.
28 Hestrin - Tadmor 1963.
29 As the renown spear head from the temple of Megiddo (Loud 1948, 66, pl. 283:1) suggests: Montanari 2011.

quickly gained an economic pole position in the exchange chain between raw material and finished items. Early urban polities rather quickly became capable to import semi-worked ingots from the copper ores (e.g. from Wadi Faynan)[30] as well as finished tools, and successively start to produce them by themselves. Early cities pursued wealth accumulation to re-invest it in productive improvement, technological innovation and power self-representation fulfilling ideological demand. For such a purpose, metal weapons fully accomplished the fundamental symbolic function of rank stating, and, furthermore, witnessed the ability of their owner in procuring metal and working it.

Early Bronze II-III metal hoards[31] consist, in the majority of cases, of weapons, which though preserving their original symbolic meaning (and economic value) especially in public or socially relevant contexts, also achieved a more immediate utilization in the new activity linked to the urban rise: war. As stated elsewhere,[32] war was an outcome of Levantine Early Bronze Age urban centralization of wealth, and copper turned out a mostly wanted ingredient to produce weapons and to support a newborn military class.

3. The Copper Route as a way of long-distance trade of precious stuffs

With the emergence of copper (weapons), the direct control of trade routes rapidly became a strategic asset for early urban communities, which intended to exercise a form of territorial control.

In the Lower Jordan Valley/Dead Sea earliest "geo-political" system (fig. 4), the cities of Tell es-Sultan/Jericho, Tell el-Hammam, Bâb edh-Dhrâ', Numeira (in EB III), and the outpost of es-Safi, as well as el-Lehun (on top of the highlands of Wadi Mujib), and Arad were all active on the route of copper,[33] which run back and forth into Wadi 'Arabah and on the highlands. Nonetheless, especially for the two latter cities (Arad and Bâb edh-Dhrâ') the Copper Route – in relationship with the nomadic component of the EB II-III society probably protagonist of such trade – is perhaps one of the main reasons for having them being erected in somewhat agriculturally unfavourable environments,[34] the other being salt and the secondary (but very appetitive) stuffs available from the Dead Sea (sulphur, bitumen, alumina, etc.). Traded stuffs from long-distance destinations were a further reason for these cities to exist and thrive by seasonally integrating tribes of nomad merchants into their economic system. The commercial vocation of such centres has been possibly only partially appreciated, due to the fact that a large part of exchanged materials are invisible in the archaeological record because of their perishable nature (textiles, spices, drugs, powders, timber, cosmetics, etc.; see below § 5.).

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30 Levy *et al*. 2002.

31 This phenomenon is illustrated by the case of hoards retrieved in the Early Bronze II site of Pella (Bourke - Sparks - Mairs 1999, 62-64, fig. 11), and the Early Bronze III site of Tell el-Hesi (Bliss 1894, 39, figs. 69-78).

32 Nigro 2009b, 188.

33 Kaufman 2013, 686.

34 Even if it has been argued that the climatic and environmental situation of the 3rd millennium BC was warmer than today, natural resources in the Ghôr necessitated specific adaptive strategies to let a settled community flourish.

4. THE COPPER AXES FROM BATRAWY AND ANCIENT JORDANIAN ROUTES

Among the remarkable finds in the Palace of Batrawy, the four axes retrieved in a *cachette* in Pillared Hall L.1040,[35] a dagger found in the south-corner of the same room,[36] and a fifth axe from nearby Hall L.1110 (fig. 6),[37] may provide fresh evidence concerning the routes of metal trade through the Levant during Early Bronze III.

Compositional analyses on copper used for the six Batrawy weapons point to the possible provenience from two mining compounds along the Wadi 'Arabah (Wadi Faynan and Timna), and from Anatolia (Ergani Maden).[38] However, it is impossible to ascertain that copper was not re-melted, and to demonstrate that metal used in the Batrawy axes, thus, derived from an clearly identifiable mining ore. The almost total absence of arsenic (< 1 %) coincides with the metallurgical profile of Wadi Faynan Early Bronze III mines of Khirbet Hamra Ifdan and Barqa el-Hetiyeh.[39] The absence of cobalt, however, might even suggest a compatibility with Timna copper. A possible Early Bronze Age III exploitation of the Timna mining district – far south in the Wadi 'Arabah – is, however, still deemed hypothetical.[40] The weapons typological criterion might, nonetheless, be useful. Three[41] of the five copper axes from the Palace of Batrawy fit well the typology represented by clay moulds retrieved at Khirbet Hamra Ifdan (elongated body with fan blade and round tang), as another hint at the provenience of the axes. The biggest specimen, conversely, might be related with Anatolia, while the fifth axe is Southern Levantine elongated sub-type.

5. IMPORTED ITEMS FROM PALACE B TRACKED ON THE ANCIENT ROAD NETWORK

What adds further pregnancy to such copper retrievals are associations in their finding spot, i.e. the destruction layer of EB IIIB Palace B (fig. 7), where a vast series of items was found sealed underneath the burnt and collapsed ceilings of the building.[42] Some of these items and material might have reached Batrawy through the same Copper Route (the so-called "Kings' Highway") and connected branches, the track crossing Jordan south-north on the highlands east of the rift valley of the Dead Sea and the Jordan river (fig. 4). Precious and semi-precious stones (carnelian, olivine, calcite, hyaline quartz, smoky quartz, gypsum, translucid limestone, amethyst, pumice, schist, etc.), mineral and curative muds and sands, ointments, spices and drugs, as well as other invisible goods (pulses, seeds, leather, animals, timber, and plants derived products, such as pigments and aromatic or adhesive resins) transited on this route from the Arabian Peninsula, the Gulf of 'Aqaba, the Red Sea and Egypt to Jordan, Palestine and Syria.[43]

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35 KB.10.B.130, KB.10.B.131, KB.10.B.132, KB.10.B.133: Nigro 2010d.

36 KB.10.B.97.

37 KB.11.B.120: Nigro 2012a, 705.

38 Hauptmann 2007, 299.

39 Najjar *et al.* 1990, fig. 1; Adams 2003.

40 Hauptmann 2007, 69, 72, 78-79, 201. Cobalt geochemically correlates with iron, nickel and manganese. At Timna (according to Rothenberg ed. 1990) a high cobalt contents was not found, while the cobalt content in Feinan copper ores is higher than in Timna ores (Segal - Yahalom-Mack 2012, 397).

41 KB.10.B.130, KB.10.B.132, KB.10.B.133.

42 Gallo 2014, 158-160, fig. 14, with bibliography on Palace B destruction.

43 Ben-Tor 1986, 9-10.

5.1. *The four-strings necklace from Hall L.1110*

Along with the copper weapons, a major piece of evidence which first provided numerous hints at the trade network within which the Early Bronze Age city of Batrawy was included, is the four-strings necklace retrieved in Hall L.1110. It has been already illustrated in a previous issue of this journal.[44] It may be useful to recall the different semi-precious gems included into the necklace and imported from abroad:[45] carnelian,[46] olivine, hyaline quartz, and, above all, amethyst (fig. 8), which was extracted in Egypt in Wadi Abu Had (north-eastern desert),[47] or, further south, in Gebel el-Asr (in the western desert) and Wadi el-Hudi, 35 Km south-east of Aswan. Also carnelian and olivine might come from Egypt or from other sources in the Arabia Peninsula, as well as hyaline quartz (commonly named "rock crystal"). Smoky quartz, instead, more probably came from Anatolia. Also sea-shells were included coming from the Red Sea.

5.2. *The pedestal cup or krater*

Along with more than 20 pithoi mainly containing barley of a finely selected quality,[48] numerous vessels belonging to the palace services were retrieved.[49] Some of them can be ascribed or compared to foreign types. The first one is the ceremonial cup or krater on a high grooved foot, characterized by a finely highly obliquely burnished light reddish-brown slip (KB.10.B.1054/11; fig. 9).[50] This vase is inspired by Khirbet Kherak Ware high stands or pedestals, which exhibit similar deep round grooves (imitating those of copper prototypes).[51] Also the flattened rim slightly upraised, with an inner step intended to host a lid, is a feature sometimes occurring on KKW specimens. A very peculiar look is given to the vessel by the oblique fast burnishing of its outer surface, which is quite rare on highly polished vases of the Early Bronze Age II-III Levantine inventory.[52] Also the spherical shape, and especially the two vertical handles applied on the maximum diameter, however, are quite unusual, and convey the vase a goblet-like shape which suggests a ceremonial or ritual function. Furthermore, the couple of handles, which might be connected with the northern Levantine coastal tradition, where this feature is more frequent,[53] suggest that the cup was intended to be raised or brandished when its content was offered and picked up.

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44 Nigro 2012c.

45 Moorey 1999, 93-99.

46 Sowada 2009, 94-95.

47 Bomann - Young 1994.

48 Food accumulation has been long recognized as the main (if not exclusive) function of the Palestinian and Transjordanian Early Bronze Age palatial buildings (lastly, Genz 2010).

49 Nigro 2013a, 499-500, fig 16; Sala 2013, 608, fig. 21.

50 Nigro 2013a, 499-501, fig. 17.

51 Paz 2006, figs. 3.13; 3.27:9.

52 Eisenberg - Greenberg 2006, fig. 8.46:3.

53 Handles were frequently added to jars and more rarely to open shapes. A double handled bowl from Khirbet ez-Zeraqon (Genz 2002, pl. 21:15) has a more markedly open shape, even though represents the closest comparison for this vessel. Similar pedestal shapes are also known in the northern Syrian tradition of the middle Euphrates horizon (Rouault - Masetti Rouault eds. 1993, 299, fig. 218).

5.3. *The bear skin*

The same northern direction (Northern Syria) is suggested by the paw of Syrian brown bear (*Ursus arctos syriacus*), i.e. what is left of a bear skin, possible a mantle, deposited at the basis of the second pillar of Hall L.1040 in Palace B aside the *cachette*, where the four copper axes were found (§ 4.). Even though it cannot be excluded that north-central Jordan was inhabited by this plantigrade during the 3rd millennium BC (especially the mountain region north of Batrawy in the district of Jerash), however the nearest areal of diffusion of such an animal is from Lebanon (Mount Lebanon and Anti-Lebanon) and Syria (Mount Hermon) to the Taurus and Amanus Chains in Southern Anatolia.

The bear skin might also be viewed a symbol of strength and power, with special reference to the military power of a leader, as several archaeological and ethnographic parallels suggest.[54] It was, in any case, imported in Batrawy and deposited at the bottom of the second pillar of Hall L.1040 during the final attack to the city of Batrawy together with other valuable and symbolic items.

5.4. *Red Ochre*

Another imported stuff was red ochre, found in a pithos[55] in the same hall (fig. 10), a pigment which has probably to be connected with élite embellishment and funerary treatment (but also with ceramic production, and the jar was aside a potter's wheel). It was probably imported from hematite-iron ores in south-eastern Anatolia, even if ochre ores were perhaps available also in the mountain of the western Arabian Peninsula.

5.5. *The Red Polished Jugs*

Two red polished jugs (KB.11.B.1128/49; KB.11.B.1128/65) of a fine lustrous red-burnished ware, retrieved in Hall L.1110, were characterized by a peculiar reserved decoration.[56] They belong to a pottery specialized ware of the Early Bronze Age (RAHD), attested to in several sites of central Palestine, and possibly produced in a major centre of the Jordan Valley.[57] They were a couple among several others in the palatial set.[58]

These peculiar jugs were inspired from copper prototypes, as it is shown by their decoration. According to what can be reconstructed by observing the ceramic specimens, the metallic prototypes were built up by joining the neck with two rivets (the couple of knobs usually replicated at the bottom of the neck in several EB jug types), and the upper and lower halves by means of a horizontal midband made by two twisted foils of copper, tied up by vertical clamps (resulting in vertical ridges across the band on the vases girth in the ceramic imitation).

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54 Nigro 2014.

55 KB.10.B.1040/9: Nigro 2013a, 497.

56 This production has been recently identified and described as "Reserved Alternate-Hatching Decoration" (Fiaccavento 2014).

57 Fiaccavento 2014 for a thorough treatment. In the meantime, the absence of Khirbet Kerak Ware and other EB II-III specialized wares in the Palace inventory has been seen as a consequence of the later date of such a ceramic assemblage, which can be ascribed to the last stage of development of the Early Bronze III horizon (Sala 2014a).

58 Nigro 2013a, 501; Nigro - Sala 2012, fig. 14.

6. EGYPTIAN AND EGYPTIAN STYLE FINDS IN BATRAWY

Most meaningful for the sake of the Copper Route characterization are finds attesting a connection with Pharaonic Egypt. Along with the carnelian and especially the biconical amethyst beads of the above mentioned four-strings necklace (§ 5.1.), a "lotus vase" and a siltstone palette might be enlisted among Egyptian or Egyptian-like items of the Batrawy Palace.

6.1. *The "lotus" shaped deep bowl*

A flaring vase with flat bottom (KB.11.B.1128/76; fig. 11),[59] of the type more often called "lotus" shaped bowl, was found in storeroom L.1120. Such vessel has been connected with a common type of coeval Egyptian-like pottery widely spread over Palestine during the Early Bronze Age.[60] Primary examples of this shape are specimens found in the *cachette* attributed to the layer (J-5) just over the Great Temple of Level J-4 at Tell el-Mutesellim/Megiddo,[61] even though their dating is markedly earlier than that of Palace B destruction.[62] Small "lotus vases" found in Megiddo are very near to the Batrawy specimen (fig. 12).

Though it is made of a local fabric, the Batrawy "lotus vase" exhibits a formal detail which is almost uniquely attested to on Egyptian originals, that is a narrow horizontal groove just under the rim (this might descend from the fact that the original type of this shape was made of stone).[63] Such a detail makes the Batrawy "lotus vase" a very faithful replica of its Egyptian prototypes.

The finding spots and chemical analyses suggests that it was used for an ointment or a semi-liquid substance. It might have been either an aromatized mud, to be devoted to a symbolic use (a perfume - possibly *nardus*), or a mineral glue or a make-up colour. Since "lotus vases" usually did not bear a lid, their shape allowed to mixing up a powder with a liquid (oil or aromatized water). This might have favoured the making up of curative or ornamental coloured muds, and the retrieval of red-ochre in Pillared Hall L.1040 might support such an interpretation. In any case, this vase and its content were possibly connected with the ruling élite luxury ostentation and, at a good extent, with funerary treatment (the largest number of such vessels retrieved in Palestine are found in tombs or in temple contexts, for example at Et-Tell/'Ai).[64] Its shape may be also paralleled with that of a distinct series of small Egyptian calcite vessels, possibly devoted to the same purpose, that is preparing and containing a semi-solid ointment or a gelatinous stuff (perfume or an ornamental colour) to be used in ritual acts or for funerary displacement.

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59 Nigro - Sala 2012, 50-51, fig. 13; Nigro 2013b, 204.

60 Sala 2014b.

61 Joffe 2000, 170-175; Goren - Ilan 2003.

62 Such a chronological discrepancy might be only partially overcome by ascribing the Megiddo Temple to Early Bronze II, as it was suggested by several hints at/scholars: Nigro 2010e, 335-338.

63 A similar, but less regular, incision runs all around the flat bottom of the vase (fig. 10).

64 Marquet-Krause 1949, 195-197, pls. LII:1534,1536,1541, LXV:1524,1534,1536, LXXVI:1541; Callaway 1972, 303-304, figs. 73:1, 76:3-5. Such vases were sometimes coated with a dark reddish slip, possibly to be connected with their function (e.g. Marquet-Kraus 1949, pl. LXV:1486; Callaway 1972, fig. 76:6).

6.2. *The Egyptian palette*

The most noticeable Egyptian find is the fragment of a siltstone palette (KB.11.B.100, fig. 13) of rectangular shape (width 9.5 cm; preserved length 9.3 cm; thickness 0.5 cm), with an incised design visible only for a very small portion of the original drawing.

The material is gray siltstone of a common Egyptian vein, according to literature extracted in Wadi Hammamat east of Thebes, characterized by a compact and fine texture and some light red-yellowish shadows. Remains of a dark pigment (kohl?) have been identified on the palette upper surface.

The sub-rectangular shape of the palette (which is, actually, broken: the lower part is missing under the incision, while the upper edge is badly eroded) is that known from several common specimens retrieved in coeval Palestine and, of course, in the homeland of such kind of items, i.e. Egypt.[65] A small round erosion on the upper edge suggests the location of a hole of diameter 0.4 mm, while the overall length can be reconstructed around 13 cm (fig. 14).

The incised motive is very marginal and might be integrated as the crest of an animal, like the flame of a bird (an eagle or a hawk?), or the mane of a lion, either the fins of a cat-fish. However, the incision (instead of carving) of a central figure in the palettes of this type is quite unusual and it is, thus, impossible to suggest a possible reconstruction of the motive. It cannot be even ruled out the hypothesis that the incised decoration is a secondary addition to the palette.[66] In this case, one might also compare it to the snake (a cobra?) and the scorpion plastically depicted in the *metopae* decorating the shoulder of a small jar retrieved in Pillared Hall L.1040.[67]

The location of the incised motive is also puzzling. The palette as it arrived to us is 9.5 cm wide and 9.3 high. Since the drawing has its top in the lower preserved part of it, one should surmise that the original artifact had an elongated rectangular shape (fig. 14), with the incised decoration developed just over a certain surface (maximum one third of the entire object). Nonetheless, square or sub-rectangular Egyptian siltstone palettes of the same type do not usually bear incised figures (relief-carved palettes are earlier; see note 63), and this makes more arduous the interpretation of the specimen retrieved in the Palace of Batrawy. It is, anyhow, an import from Egypt, as the petrographic analysis testified to.

The cosmetic function of such an object, commonly retrieved in tombs, and destined to personages of a high social status, allow to ascribe it to the group of luxury items gathered in the Palace of Batrawy, which also included finely worked bones used as kohl sticks.[68]

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65 For a comprehensive discussion of Egyptian palettes in Southern Levant, see Sala 2014b, 66-68; a good number of comparisons may be found in the on-line catalogue of the Petrie Museum of the University College, London.

66 In some rare examples rectangular siltstone palettes show a hatched decoration around their edges similar to the motive incised on KB.11.B.100; on the latter specimen, however, the motive is not along the object margin and the line is curvilinear, so that one has to rule out the possibility that the incised line belonged to such a frame.

67 Jar KB.11.B.1054/1 exhibits an applied and incised decoration on the shoulder showing a snake and a scorpion inside two opposite *metopae* separated by a herringbone motive.

68 Nigro 2010a, fig. on page 110.

7. ARCHITECTURAL REMAINS – IMPORTED TIMBERS AS BUILDING MATERIAL

Even though much of the organic content of the "Palace of the Copper Axes" vanished due to the fierce fire which drastically destroyed it, some sparse remains kept safe in the collapsed and burnt layer provide further insights into foreign raw materials imported into the city, as an outcome of wealth centralization and long-distance trade.[69]

The main building material employed in Batrawy public buildings and fortifications are several different kinds of limestone, set on in the massive foundations walls high in some spots more than 2 m (the superstructure was made of sun-baked clay bricks), which were basically extracted locally. Clay and limestone (of a relatively fine texture easy to be cut in regular blocks) were largely available in the area surrounding the site, and mortar and plaster were obtained by mixing lime, marl and clay (with sand, straw or even ash as dryers).[70]

Other perishable building materials employed in the palace architecture may, however, indicate import routes. Wooden beams used for ceilings and supporting pillars (or furnishings) into the building belong to different essences: tamarisk (*Tamarix palaestina*), terebinth (*Pistacia palaestina*), and especially Palestinian (*Quercus coccifera calliprinos*) and Turkish (*Quercus cerris*) oak, and Aleppo pine (*Pinus halepensis*). Wadi az-Zarqa could provide the first two of such plants, while Aleppo pine and the two different kinds of oak were imported from the north-west (Lebanon and Syria, where they grew copiously), even though forests of such trees may also have populated the western slopes of the not too far away Wadi Kufrinjeh, reachable with a one-day trip.

Apart from some special wood items, like a not-carved-yet cylinder seal (KB.10.B.147; fig. 15),[71] found carbonized in Pillared Hall L.1040,[72] which is made of boxwood (*Buxus sempervirens*) and might have been imported from the far east (Iran), the other essences all belong to the natural Northern Levantine environment.

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69 Nigro 2013a, 492-494.

70 The only possible foreign reference detectable from the study of Batrawy stone walls is offered by some traits of the EB II-III Main City-Wall, where some carefully cut parallelepiped blocks were employed, which may recall a building technique already identified in the Temple Et-Tell/ʿAi in Palestine (for a critical discussion, Sala 2008b, 254-255, note 134, with previous bibliography), thought to be inspired from a III Dynasty-onwards Egyptian technique of "stone bricks", exemplarily adopted in kings Djoser and Sekhemkhet pyramids and related temenos at Saqqara).

71 Nigro 2010d, 567.

72 Interesting enough, also in the Tell el-Hesi copper weapons hoard a wooden seal was included (Bliss 1894, 39-40, fig. 79).

8. EB III Batrawy and the Egyptian connection in a diachronic perspective

All the above mentioned finds from the EB IIIB Palace of Batrawy allowed to trace a map of the Near East with some major tracks over which retrieved items and stuffs were transported and exchanged (figs. 1, 5).

What seems definitively relevant, especially in the perspective of Southern Levantine urban rise characterization, is the connection with Egypt, which, after the initial boom during Early Bronze I,[73] developed in EB II along the "Way of Horus" basically involving Southern Palestine.[74] In the following Early Bronze III, the overland track across the Sinai Peninsula and beyond through the 'Arabah, continuing further north in what was later called the Kings' Highway, possibly represented an alternative way of trade between Transjordan and Egypt, which exploited the Copper Route also for other stuffs exchange. It, of course, was connected with the Jordan Valley, which during EB III occurred a distinct development.[75]

Copper industry and related trade along this track possibly enhanced the urban phenomenon, especially in the Jordan Valley and in the highlands east of it during Early Bronze III, when a series of towns and cities with their "small scale" palaces flourished.[76]

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73 Braun - van den Brink 2008.

74 Kafafi 2011.

75 A reinforced EB III connection between Egypt and the cities in the Jordan Valley was also recently suggested by the retrieval of a carved palette Khirbet Kerak: Greenberg - Wengrow - Paz 2010.

76 In a very schematic synthesis, one may indicate a list of fortified cities (from south to north: Numeira, Bâb edh-Dhrâ', and in the Jordan Valley: Tell es-Sultan/Jericho, Tell Hammam, Tell es-Saidiyeh, Pella-Tabaqat Fahl, Beth-Shean, Tell Abu-Kharaz, Tell esh-Shuna, Khirbet Kerak; in the highlands: El-Lehun, Khirbet al-Batrawy, Khirbet ez-Zeraqon), possibly representing a double-level polities system. EB III Palaces and city-states have in this region their dimensional and functional specific definition, depending on demographic, economic and cultural features and proportions: a proper definition of Southern Levantine urbanism, which takes into account the dimensional specificity, social characteristics and inner subdivisions of each region like Transjordan, falls beyond the limit of the present paper. It is quite obvious that comparisons with Mesopotamia, Anatolia and even Syria or central Palestine have to cope with the different geo-morfological and dimensional characteristics of each historical scenario.

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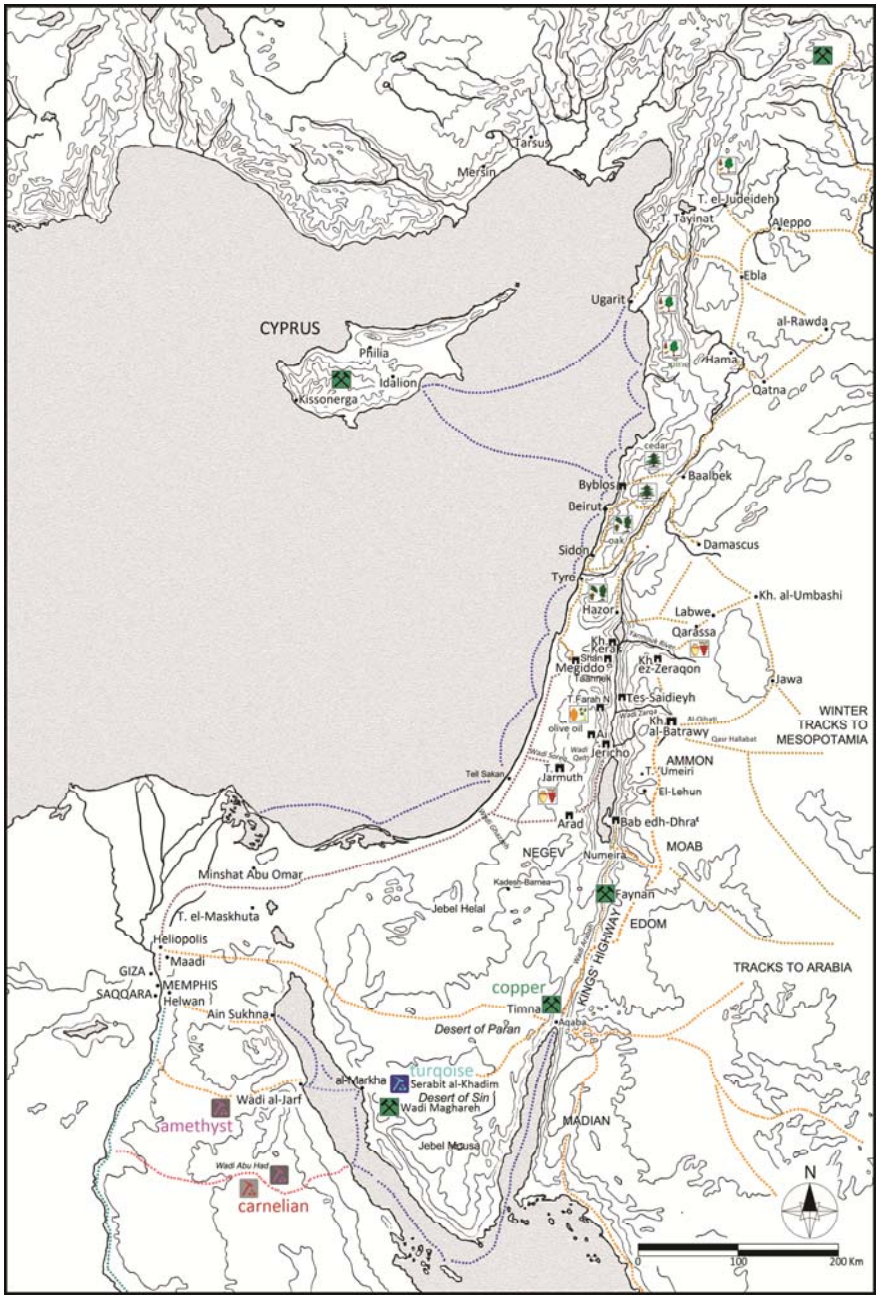

Fig. 1 - Map of Eastern Mediterranean illustrating supply points of gemstones, copper and other precious stuff, and trade routes during the 3rd millennium BC.

Fig. 2 - Reconstruction of the Batrawy fortified hill dominating the ford through the Zarqa river, from west.

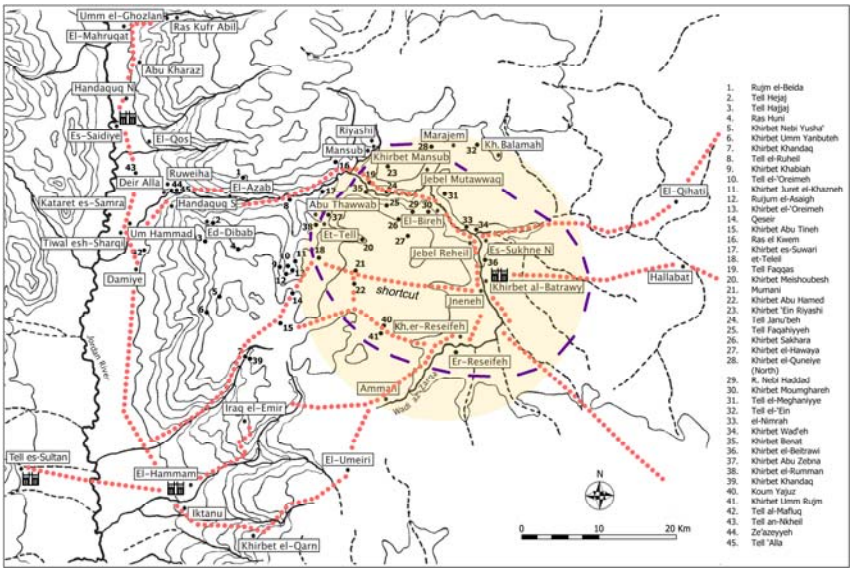

Fig. 3 - Tracks in the area of the Lower Jordan Valley and connected Wadi az-Zarqa, with highlighted the county possibly under the control of the ancient city of Batrawy.

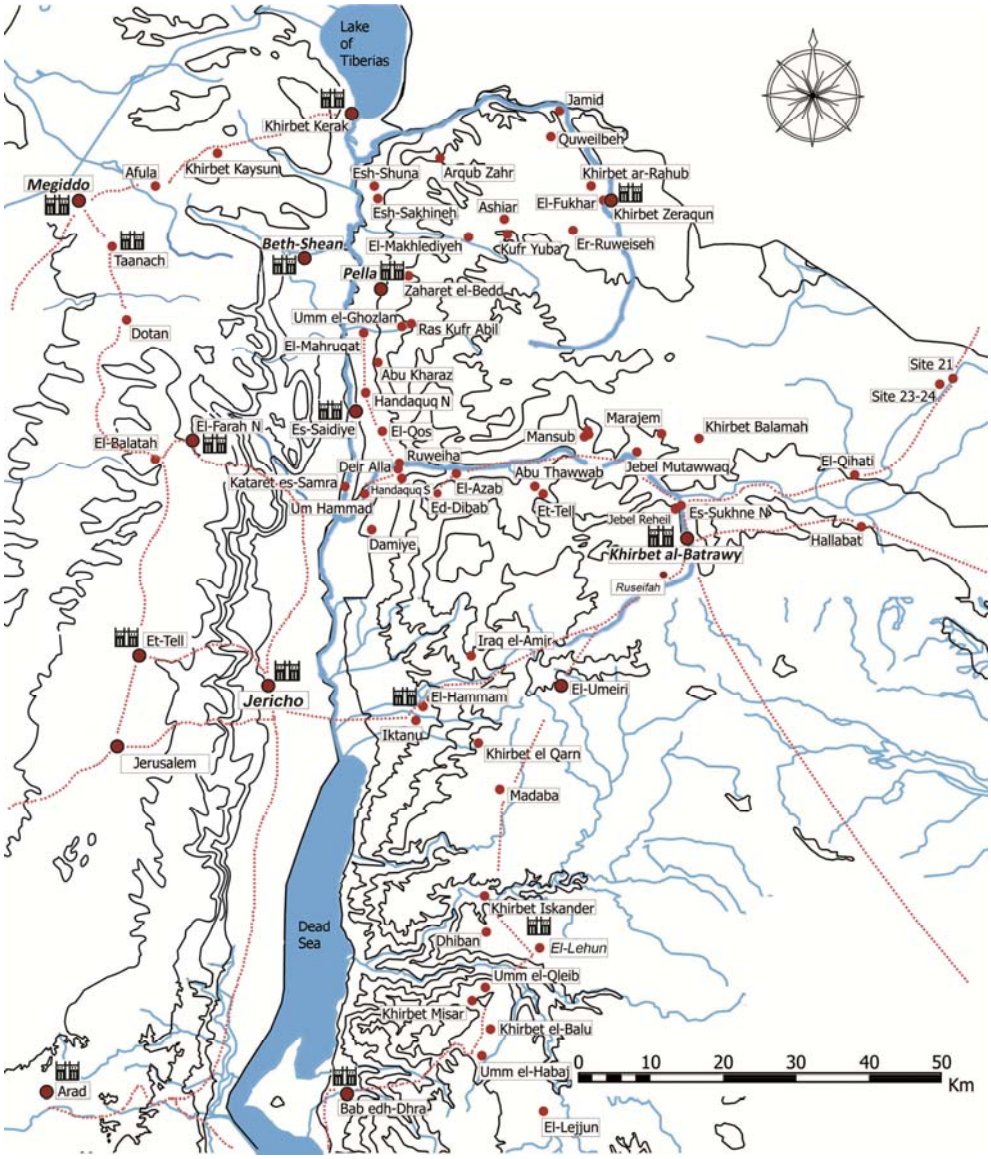

Fig. 4 - Early Bronze II-III road network, rivers and major centres in central Southern Levant, with the location of ancient palaces/ruling institutions.

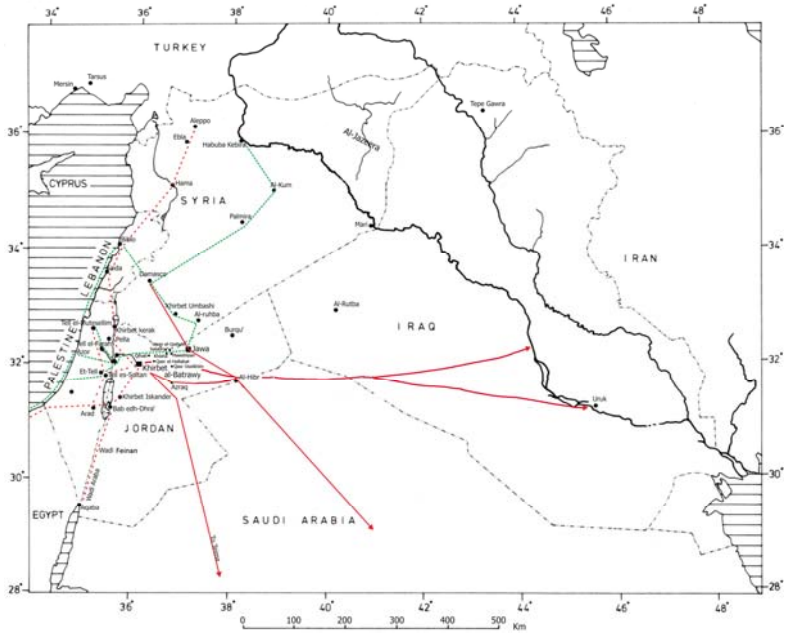

Fig. 5 - Map of long-distance interregional trade networks illustrating Batrawy as a key city in tracks crossing the desert eastwards.

Fig. 6 - The four axes retrieved in a *cachette* in Pillared Hall L.1040 and a fifth axe (the first on the left) from the nearby Hall L.1110 in Palace B of Khirbet al-Batrawy.

Fig. 7 - The destruction layer of EB IIIB Palace B of Khirbet al-Batrawy in Pillared Hall L.1040, from west.

Fig. 8 - Detail of the biconical central amethyst bead of the four-strings necklace retrieved in Hall L.1110 of EB IIIB Palace B at Khirbet al-Batrawy.

Fig. 9 - The ceremonial cup or krater on a high grooved foot, characterized by a finely highly obliquely burnished light reddish-brown slip (KB.10.B.1054/11) retrieved in Pillared Hall L.1040 of EB IIIB Palace B at Khirbet al-Batrawy.

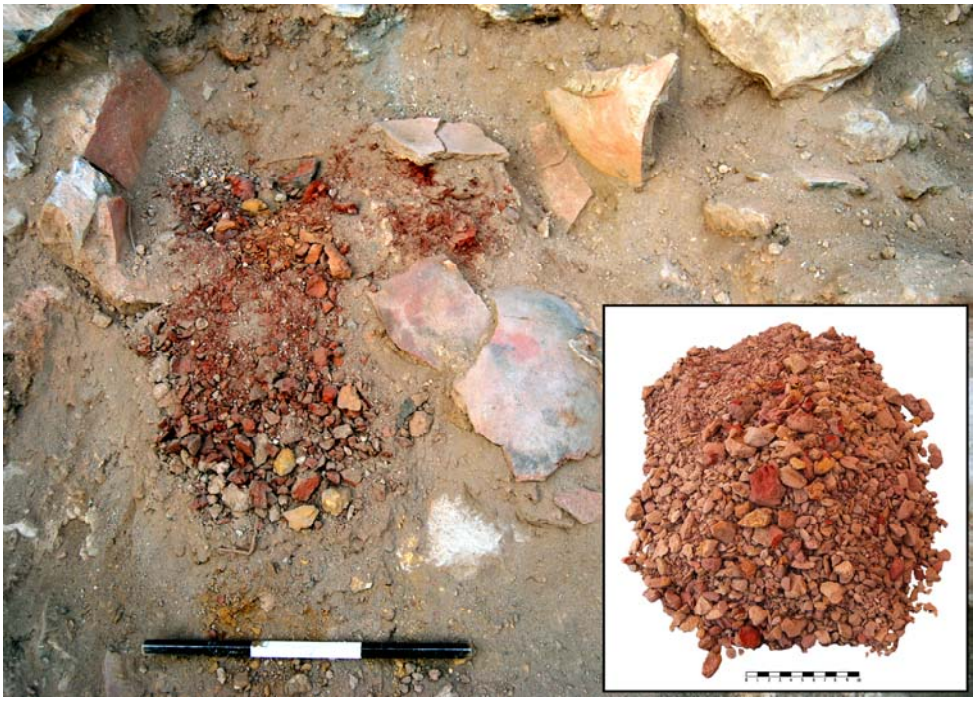

Fig. 10 - Red ochre at the moment of recovery, found in a pithos in Pillared Hall L.1040 of EB IIIB Palace B at Khirbet al-Batrawy.

Fig. 11 - "Lotus" shaped bowl (KB.11.B.1128/76) found in storeroom L.1120 of EB IIIB Palace B at Khirbet al-Batrawy.

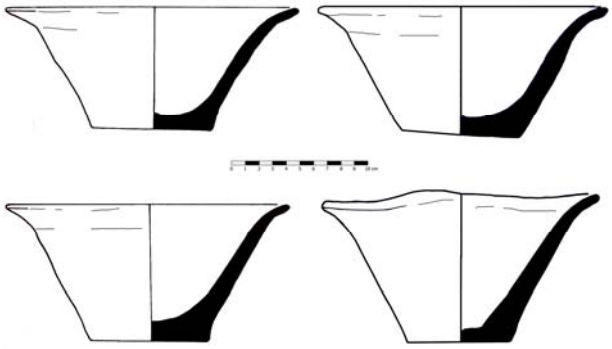

Fig. 12 - "Lotus vases" found in the *cachette* attributed to Stratum J-5 at Tell el-Mutesellim/Megiddo (Joffe 2000, fig. 8.6).

Fig. 13 - Egyptian siltstone palette (KB.11.B.100) retrieved in Pillared Hall L.1040 of EB IIIB Palace B at Khirbet al-Batrawy.

Fig. 14 - Reconstructive drawing of Egyptian palette KB.11.B.100.

Fig. 15 - Not-carved-yet cylinder seal (KB.10.B.147), found carbonized in Pillared Hall L.1040 of EB IIIB Palace B at Khirbet al-Batrawy.