

Palestinian Stone Vessels - The Evidence from Pella

Introduction

From early in the second millennium BC stone vessels formed a popular Egyptian import to Palestine. Most of these were made from calcite, a material sometimes described as 'Egyptian alabaster'.¹ Shapes include a range of cosmetic containers which were used to hold substances such as perfumed oils, ointments, kohl and medicines. The influx of Egyptian material seems to have triggered the development of local Palestinian workshops specialising in a similar range of luxury stone vessels. These often copied the shape of the imported examples but made use distinct raw materials which were locally available. At the same time, the repertoire expanded to include shapes of Palestinian origin to suit local tastes.²

The stylistic interaction between imported Egyptian stone vessels and locally produced material sometimes made it difficult to distinguish between the products of these two industries. It was not until the 1940s that clear criteria for isolating locally made from imported stone vessels were established. In a seminal article on the subject, Ben-Dor used a series of finished and unfinished gypsum vessels from Baysān as a starting point for studying the local industry as a whole.³ He was able to establish that both, choice of material and the manufacturing techniques used differed between Egyptian and Palestinian workshops. The former used many types of stone, amongst which calcite was the most prominent, and hollowed out the interior of each vessel using a tubular drill.⁴ Palestinian craftsmen employed gypsum, a softer stone than those commonly used in Egypt, but visually similar in many respects to calcite.⁵ The interiors of the gypsum

vessels were removed using a narrow-bladed chisel.⁶ This technique leaves a series of vertical and oblique ridges down the interior walls of vessels, quite distinct from the regular concentric ridges and grooves left by use of the Egyptian drill.⁷ This technological distinction between the industries is one that seems to have remained in place throughout the second millennium BC, suggesting that the Egyptian forms and ideas were introduced to Palestinian workshops primarily through imported goods, rather than through the movement of craftsmen between regions.

The number and location of these Palestinian gypsum vessel workshops is something that still needs to be established. Physical evidence for on-site manufacture is known only from Baysān, where a series of unfinished vessels were found in settlement deposits dating from the later Middle Bronze Age through to Iron I (levels X-VI).⁸ The types of unfinished vessels are well represented in the repertoire of completed examples from the site, a repertoire which displays a high degree of variability consistent with the idea of local workshops. Although comparable manufacturing debris has not been discovered elsewhere in the region, the presence of additional workshops can be inferred through a detailed stylistic analysis of the stone vessels, combined with a study of the distribution of finished examples. This paper will examine some recent evidence from Pella that points to the existence of further centres of production in northern Palestine during the MBII-LBI period.⁹

The Stone Vessel Repertoire at Pella

Located in the north Jordan valley, Pella had a rich and

¹ For problems in the terminology used to describe this material see Ben-Dor (1945: 94-96); Harrell (1990) and Aston (1994: 43).

² eg.: Sparks (1991); Ben-Dor (1945: 107-109, type F).

³ Ben-Dor 1945.

⁴ Ben-Dor (1945): 97. For studies on the technology involved, see Lucas and Harris (1962: 423-426) and references *infra*; Stocks (1986); *id.* 1993; Gorelick and Gwinnett (1983).

⁵ Many varieties of gypsum and calcite are white and partially translucent. This visual similarity is one of the main reasons why these

two materials are often confused in the archaeological literature- see Sparks (1998: 262).

⁶ Ben-Dor (1945: 97).

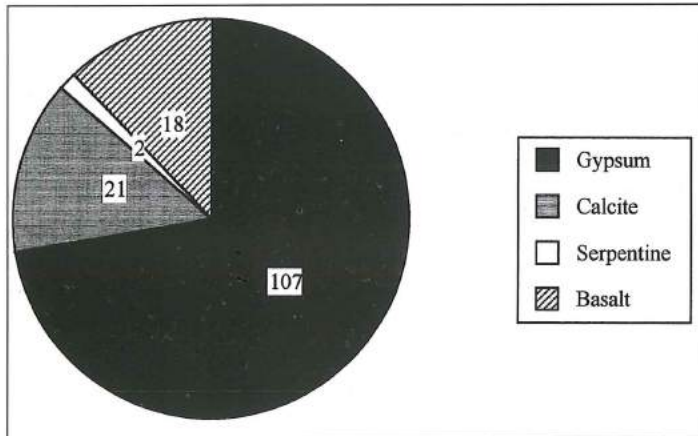
⁷ Compare, for example, Ben-Dor (1945: plates XXIII.8 and XXIII.9).

⁸ Ben-Dor (1945: 97-98); James (1966: figure 54.10).

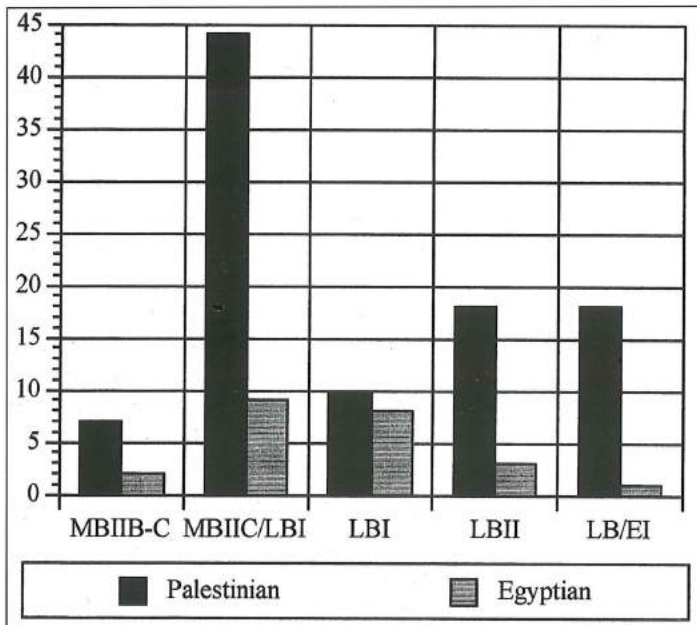
⁹ The possibility of additional workshops at Jericho during the Middle Bronze Age has been raised elsewhere (Dajani 1962: 69; Bienkowski 1986: 127; Sparks 1991: 53; Clamer 1992; Sparks 1998: 445-446).

varied stone vessel assemblage during the second millennium BC. There are currently one hundred and fifty stone vessels datable to this period, comprising a mixture of imported Egyptian calcite and serpentinite forms and Palestinian-made basalt and gypsum examples. A summary of these results is presented in FIG. 1.

Egyptian imports made up less than 25% of the total stone vessel repertoire at the site during the second millennium BC, with trade in these goods reaching a peak in the MBIIC-LBI period (FIG. 2). Closed cosmetic containers such as the alabastron were the most popular import, and the repertoire at Pella mirrored assemblages from



1. The stone vessel assemblage at Pella during the Middle and Late Bronze Ages - variation in material use.



2. Comparison of the frequency of Egyptian imported stone vessels to Palestinian-made gypsum vessels at Pella over time.

nearby sites such as Baysān or Megiddo. From LBII onwards, the quantity of Egyptian imports decreases, although sporadic examples continue to appear.

The basalt repertoire included a series of finely made bowls and plates closely paralleled by examples at Baysān, Megiddo, and Hazor, suggesting one or more workshops located somewhere in the Jezreel Valley or Eastern Galilee region.¹⁰ This workshop would appear to have been active from LBIIA down to the early Iron Age, and may have exported its products to Cyprus and Syria.¹¹

The stone vessel repertoire at Pella was dominated by Palestinian gypsum vessels. These are found not only in large numbers but also in a wide range of different types, appearing as early as MBIIB and becoming common during the MBIIC-LBI period. It was the quantity and variety of this assemblage which initially raised the question of whether there were workshops located at Pella itself, despite the cultural and geographical proximity of the site to Baysān, a known production centre at this time. This idea gained support from certain differences in the stone vessel repertoires of both sites, which could have been explained by the presence of multiple workshops in the region.

The most notable of these differences lay in the presence at Pella of a number of unique vessel forms alongside new subtypes which are not found at nearby sites. Some of these appear to be rare translations of ceramic forms into stone. One such example is a finely made carinated bowl with a pinched rim, concave lug handle, tall convex sides, a sharp carination towards the lower part of the vessel and a low ring base. This was found in an unusual plastered bin, associated with a number of libation funnels and miniature vessels that probably date to the LBI period (FIG. 3:1).¹² Although this shape has no good parallels in stone, comparable ceramic versions are known from Pella, Tall Dan, Gibeon and Tall Far'ah South.¹³

Another stone vessel from the site which seems to have ceramic antecedents is an unusual spouted jug found in Tomb 27, dating to the LBI period (FIG. 3:2). This is characterised by a simple pinched rim, a slightly irregular, baggy body with upright sides and a flat base, with a single strap handle extending from rim to base on one side of the body, and a long spout positioned just below the rim on the other. The spout itself may not have been functional, as the hole bored through it is extremely small. Again, this vessel has no parallels in stone, with its closest antecedents being a handful of ceramic 'teapots' found in LBI through to early LBII contexts in Palestine.¹⁴ The shape and positioning of the handle on this vessel also

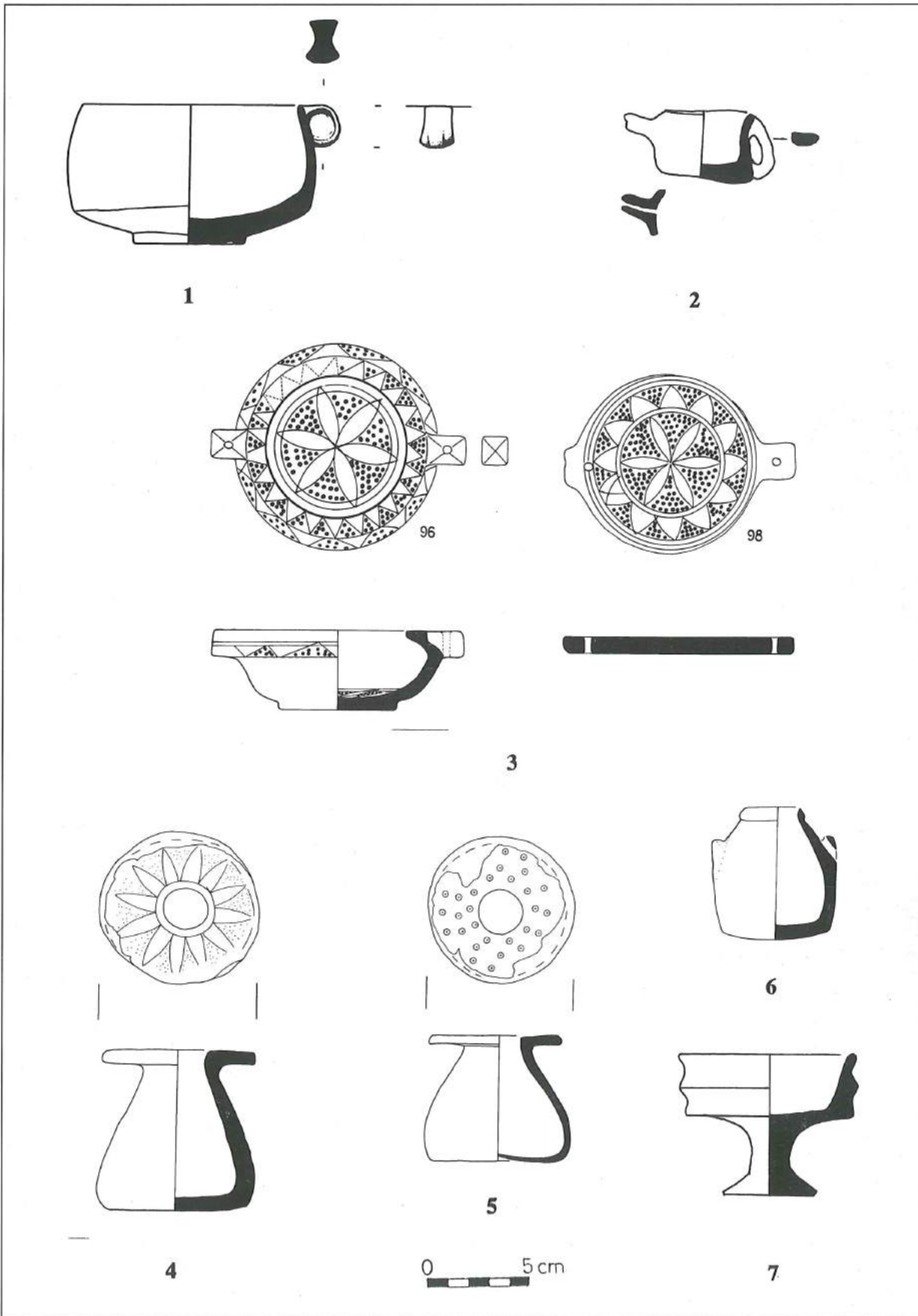
¹⁰ Bourke and Sparks (1995: 160); Rowe (1940: pl. XXII.21); James and McGovern (1993: fig. 121.1, 3, 6-7, 10); Guy and Engberg (1938: fig. 77); Yadin *et al.* (1960: pl. CXLIX.1).

¹¹ Sparks (1998: 23, 27); Xenophonos *et al.* (1988: 181-2).

¹² Bourke *et al.* (1998: fig. 23.1.12).

¹³ McNicoll *et al.* (1992: pl. 44.3); Biran *et al.* (1996: fig. 4.99.17); Pritchard (1963: fig. 27.4); Price-Williams (1977: figs 26.4, 35.5, 51.3).

¹⁴ Tufnell (1958: 216); Gonen (1992: 100).



3. Gypsum vessels from Pella

3.1: Carinated bowl, RN 180050, XXXIIF 11.4.

3.2: Spouted vessel, RN 42112, VI T.27.

3.3: Carinated pyxis and lid, RN 32212-3, XI T.20.

3.4: Alabastron, RN 70752, XI T.62 3E.

3.5: Alabastron, RN 70864, XI T.62 4C/D.

3.6: Lug-handled jar, RN 100135, II T.89 1.4.

3.7: Tazza, CN 5/126, DAJ T.2.

bears some similarity to another rare shape from the site, a handled form of the conical alabastron, known from two examples in Tomb 62 which date to the MBIIC-LBI period. This latter form is so far unparalleled outside Pella.

The strongest evidence for a local workshop is suggested by a series of gypsum vessels from Pella which form a cohesive group in terms of decoration and shape. This group consists of some twenty seven conical alabastra, two handled variants of this form, and a decorated pyxis with lid (FIG. 3:3-5). The alabastra feature broad, flat topped rims, which are usually used as a canvas for a range of incised and black inlaid motives.¹⁵ This shape is a variation on the usual Middle Bronze Age conical alabastron, as seen in examples from Baysān and Jericho featuring a funnel-shaped mouth.¹⁶

This group is closely allied by its decoration, which is stylistically similar in the choice of motives as well as in their execution. In all cases decoration is used to emphasise the circularity of the vessel, focusing on either the vessel mouth, or a central, circular motif. Some examples feature a delicate floral design, made up of a series of triangular leaves radiating from the mouth of the vessel, with the areas between the petals decorated with simple dots (FIG. 3:4). This motif is elaborated in the single pyxis known from the site, where it is combined with other geometric elements (FIG. 3:3). The origin of the floral pattern is not clear. It may have been influenced by contemporary Tall al-Yahūdiyyah ware, although in the latter the colour scheme is reversed, featuring inlaid white on a black or grey slip.¹⁷ Another popular motif is based around the dotted circle, or bullseye design (FIG. 3:5).

Both the floral and circle based patterns were popular decorative motives in contemporary Levantine wood, bone and ivory working, where they were also incised and inlaid with black pigment, creating a very similar 'dark on light' effect.¹⁸ This similarity of design and technique suggest that these crafts may have made use of similar tools. Several of the shapes employed also point to stylistic interaction between the stone and bone/ivory industries, such as the low carinated pyxis with lug handles, a form more commonly seen in ivory (FIG. 3:3).¹⁹ Such parallels serve to underline the local character of this group of vessels, which owe more to Syro-Palestinian tra-

ditions than Egyptian influence.

Elements of this style first appear during the MBIIC period, with examples known from Tombs 20 and 62, and last into the LBI in Tomb 27. Stylistic similarities within this group, and to several of the 'unique' shapes also found at Pella suggests that they came from a single workshop or school. This group appears to be concentrated at Pella, and to date only one further example is known from elsewhere in the region.²⁰ No parallels have been published from either Jericho or Baysān. On the current evidence Pella is the most likely place to locate this new workshop. Although there are no gypsum quarries in the region immediately surrounding the site, it seems probable that they made use of the same sources of gypsum as nearby Baysān.

During the LBII and Iron I periods, gypsum vessels continue to dominate the repertoire at Pella. At this time a new range of forms was introduced. One of the most popular of these was the lug-handled jar, a shape that developed independently of Egyptian influence. Seventeen jars and fragments of this type were found in a series of tombs and settlement debris at the Pella, ranging in date from LBII through the Iron Age (FIG. 3:6).²¹ Another popular new shape of the Late Bronze Age was the Palestinian tazza, a carinated cup with a trumpet shaped stemmed foot, an adaptation of an Egyptian prototype (FIG. 3:7).²² Nine examples and fragments were found at Pella, the majority coming from LBII funerary deposits.²³ Unlike the lug-handled jar, production of this form seems to have stopped at the end of the Late Bronze Age. These new shapes also continued to be manufactured using Palestinian techniques, with no technological input from Egyptian craftsmen evident.²⁴

One notable change in the stone vessel repertoire of Pella during the LBII period is an increased similarity to assemblages at Dayr 'Allā, Tall as-Sa'idiyyah, Tall al-Ḥuṣn and Baysān. This greater uniformity across the region makes it difficult to determine the number of workshops in operation at this time. This development may be linked to changed distribution patterns which show gypsum vessels becoming more widely dispersed during this period, particularly in areas outside the Jordan Valley. It is possible that this indicates the existence of new centres of manufacture.²⁵ Alternatively, improved dis-

¹⁵ 24 of these alabastra were decorated; the 3 undecorated examples share the same characteristic broad everted rims and body profiles as the decorated versions.

¹⁶ Ben-Dor (1945: 101-2, type B); Kenyon (1960: figs 187.1, 187.21); Kenyon (1965: figs 171.9, 179.19).

¹⁷ Amiran (1969: pl. 36.4, 8-9, 12, 22-23, 25-27, 33).

¹⁸ e.g.: Liebowitz (1977).

¹⁹ e.g.: Tufnell *et al.* (1940, pls XIX.18, XX.30); Loud (1948, pl. 200.1-2); Miron (1990: no. 514, pl. 43.1).

²⁰ This was sighted by the author at the Dayr 'Allā Museum in the early 1990's, and is presumed to have come from that site. It appeared

to be consistent with the Pella group in terms of material, shape and decoration.

²¹ Walmsley *et al.* (1993: fig. 16.6); Bourke and Sparks (1995: fig. 7.8-9).

²² Ben-Dor (1945: 106, type E); Clamer 1979; Aston (1994: types 170-171).

²³ Bourke *et al.* (1994: fig. 7.2); Bourke and Sparks (1995: fig. 6.1-7).

²⁴ Sparks (1996: 56-7).

²⁵ Tall Far'ah South may have developed as one such centre, specialising in forms such as the tazza (Sparks 1998:399,517).

tribution may be a by-product of better inter-site communication associated with increased Egyptian activity in Jezreel and western Palestine during the 20th Dynasty.

Conclusions

From as early as MBIIB, the luxury stone vessel repertoire at Pella included both imported Egyptian calcite vessels and Palestinian gypsum versions, with material recovered from both funerary and settlement deposits. The nature of the repertoire during MBIIC-LBI is sufficiently distinctive to suggest that there may have been a gypsum vessel workshop located at Pella. These products maintain generic ties to Egyptian imports, but the tool kits, decorative schemes and some of the forms used suggest interaction with contemporary Palestinian bone, ivory, wood and ceramic workshops. During the Late Bronze Age, the gypsum assemblages alter to include forms made popular by a new wave of Egyptian imports, but there is little to suggest that Egyptian craftsmen were involved directly in production, and the industry maintains a strong local character well into the Iron Age.

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