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# Opuscula

Annual of the Swedish Institutes at Athens and Rome

12  
2019

STOCKHOLM

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Published with the aid of a grant from The Swedish Research Council (2017-01912)  
The English text was revised by Rebecca Montague, Hindon, Salisbury, UK

*Opuscula* is a peer reviewed journal. Contributions to *Opuscula* should be sent to the Secretary of the Editorial Committee before 1 November every year. Contributors are requested to include an abstract summarizing the main points and principal conclusions of their article. For style of references to be adopted, see [www.ecsi.se](http://www.ecsi.se). Books for review should be sent to the Secretary of the Editorial Committee.

ISSN 2000-0898  
ISBN 978-91-977799-1-3  
© Svenska Institutet i Athen and Svenska Institutet i Rom  
Printed by TMG STHLM, Sweden 2019  
Cover illustrations from Ingvarsson *et al.* in this volume, p. 23.

# Palaepaphos-Skales Tomb 277. More prestigious burials

With an appendix by Maria A. Socratous

## Abstract

Tomb 277 in the *Skales* cemetery at Palaepaphos, excavated by the Cyprus Department of Antiquities, is among the richest ever found in the south-west of the island. It dates to the Cypro-Geometric III period (c. 900–750 BC) and was used for multiple burials of important members of the Palaepaphian society, namely warriors and important women (priestesses of the Great Goddess?) judging from the abundant offerings of arms and armour as well as gold jewellery respectively (including gold plaques embossed with the head of the Egyptian goddess Hathor). Notable among the offerings are two bronze basins, six small hemispherical bronze bowls, two bronze mace-heads (symbols of authority), a bronze shield of a rare type, and two richly decorated belts of oriental type. We also mention two iron swords and a bronze spearhead. Among the pottery we note the high percentage of Phoenician imports. Both inhumations and a cremation burial were observed in the tomb.\*

*Keywords:* Cypro-Geometric III period, burial customs, pottery, arms and armour

<https://doi.org/10.30549/opathrom-12-11>

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\* We are grateful to the director of the Department of Antiquities, Dr Marina Solomidou-Ieronymidou, and the curator, Dr Despina Pilides, for permission to publish this tomb group excavated at Palaepaphos-Skales; and to Athanasios Athanasiou for photography, Jean Humbert for drawing several of the objects, Dr Maria A. Socratous for undertaking the study of the wood (see *Appendix*) and Dr Anna Spyrou for her comments on the astragali. Dr Jennifer M. Webb undertook the editing of the text, but also corrected inconsistencies and offered all kinds of advice. To the scientific and technical staff of the Cyprus Museum we owe special thanks for the conservation of metal objects. Lydia Kyprianou undertook the layout of the photographs. We would also like to thank the technical staff of the local Archaeological Museum of Kouklia (Palaepaphos) for their dedication and hard work during the study of the material at Kouklia, and two anonymous reviewers for their helpful comments. Efstathios Raptou (E.R.) wrote the excavation report and Vassos Karageorghis (V.K.) the rest. Last but not least, we would like to thank the Trustees of the Institute for Aegean Prehistory (INSTAP), whose grant enabled us to cover the expenses for the preparation of the material for publication.

## Introductory note

The publication of the vast and important material from the tombs excavated at Palaepaphos by Efstathios Raptou for the Department of Antiquities in 2013 is a time-consuming and expensive undertaking. Thanks to important grants provided by foundations and institutions outside Cyprus as well as some individuals, a fair amount of this material has already been published.<sup>1</sup> In order to publish the material we engaged retired technicians of the Department of Antiquities for the cleaning and mending of pottery and specialized technicians for the drawing and photographing of objects. The metal objects were treated in the laboratories of the Cyprus Museum and their photography was undertaken by the photographic studio of the Cyprus Museum.

Considering the time required for the preparation of the remaining material for publication and the difficulty of raising the necessary amount of money, we decided to publish individual tombs in the form of articles in archaeological journals, as one or more tomb groups are ready for this. The disadvantage in choosing this solution is that there is always a long waiting time. This, however, is the safest solution, considering that, having reached 90, I am not in position to undertake projects which require a long time and expense beyond what is reasonable to undertake.

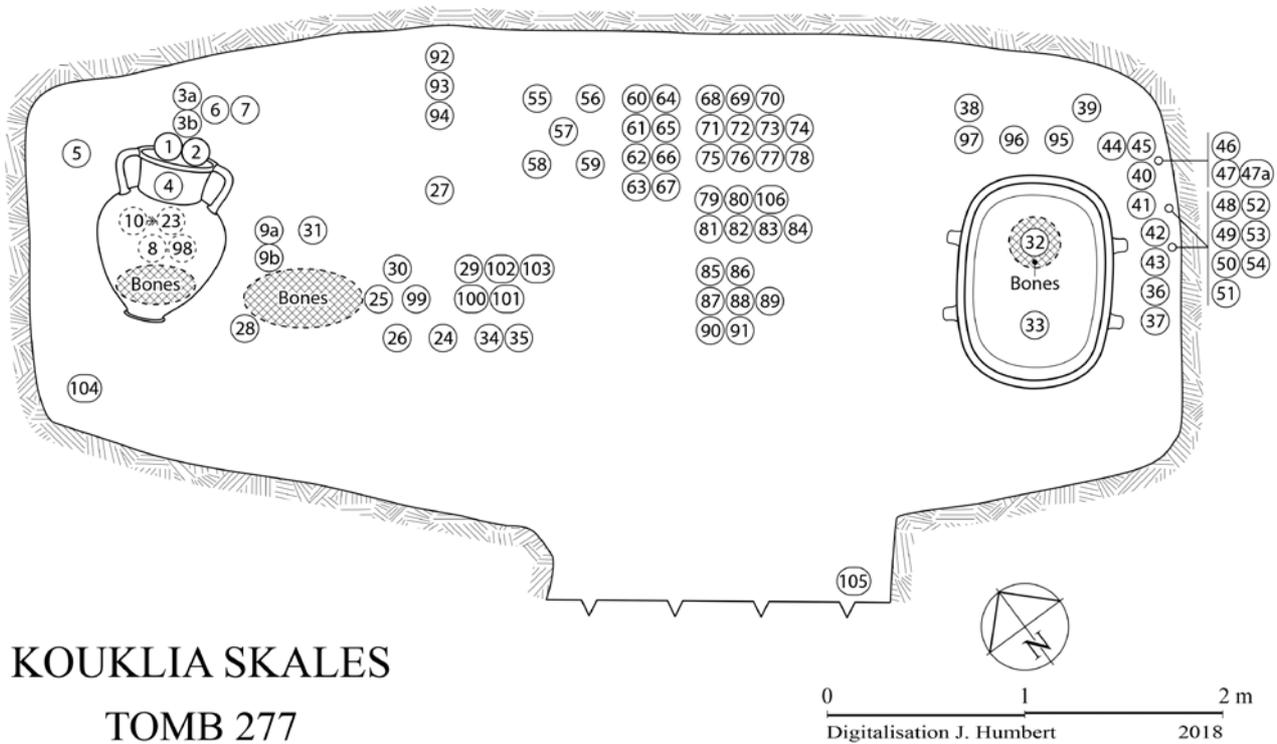
V.K.

## Excavation report

Early in 2013 a salvage excavation was undertaken by the Department of Antiquities under the direction of Efstathios Raptou, before the issue of a building permit at the site of

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<sup>1</sup> Karageorghis & Raptou 2014; 2016; 2018.



## KOUKLIJA SKALES TOMB 277

Fig. 1. Schematic plan of Palaepaphos-Skales Tomb 277 showing the position of the finds (Nos. 107–111 were reconstructed from sherds and are not shown).

Palaepaphos-Skales. This is the site of a well-known cemetery of Palaepaphos, the tombs of which are mostly dated to the Cypro-Geometric period (c. 1050–750 BC). These tombs are located south of the modern village of Koukليا in the south-west of Cyprus.

During this campaign a large number of Early Iron Age tombs were excavated, ranging chronologically from the Late Cypriot IIIB period to Cypro-Geometric III (11th–8th centuries BC), together with many other tombs dating from the Cypro-Archaic I to late Cypro-Classical periods (8th–4th centuries BC). Despite the large number of artefacts discovered which needed conservation, a number of these tombs have already been published,<sup>2</sup> while the material from others is being prepared for future publication. Some of these contained a significant number of exceptional finds attesting to the wealth and power of the buried persons. One such tomb has been chosen for presentation here, namely Tomb 277.

It is unfortunate that the burial chamber of this tomb had collapsed long ago, probably because of continuous agricultural activities in the area. The chamber was located on the slope of a low hill; the entrance faced south-west and it was entirely dug in to the soft bedrock of the site. The mechanical excavator operating in the area prior to our excavation reached

the *dromos* and the entrance, which was blocked by a mass of rubble. As the roof of the chamber had collapsed, nothing was discernible, except the contour line of the chamber, which seemed to be larger than those discovered in the vicinity within the same necropolis—being very broad and of a rather shallow depth, with its entrance opening at approximately the middle of the south-western long side.<sup>3</sup>

After the removal of masses of rubble and earth, the shape of the chamber was revealed. It had a roughly rectangular plan with rounded corners, measuring almost 6 m in width and 2.50 m in depth (Fig. 1), with the long axis aligned north-west/south-east. The entrance to the chamber faces south-west. The preserved height of the sides was about 1.75 m. The width of the entrance could not be estimated because of the collapsed bedrock into which the tomb was cut.

Excavation started on the north-western side of the chamber. Below a mass of accumulated earth and rubble from the fallen roof were several smashed vases. In that part of the chamber an exceptionally large amphoroid *pitnos* of White Painted III ware (No. 4 in the catalogue) was found leaning

<sup>2</sup> Karageorghis & Raptou 2014; 2016.

<sup>3</sup> The conditions under which this tomb was excavated unfortunately did not allow us to prepare an adequate plan of its chamber with all the finds *in situ*. The developer of the land was pressing for quick action on the part of the Department of Antiquities. See, however, Fig. 1.



Fig. 2. Northern part of the chamber with amphoroid pithos (No. 4) in situ.

against the corner, broken like the great majority of the pottery from the tomb, but with all its fragments preserved *in situ* (Fig. 2). The mouth of the amphora was covered by two large two-handled bronze bowls (Nos. 1–2), placed one inside the other (Fig. 3). The bowl at the top was broken, but the other was found complete and in good condition. Inside the upper large bowl four handleless hemispherical bowls of identical shape were found (Nos. 3a–3b, and 6–7), which were placed one inside the other and attached to each other by corrosion. After the removal of these bronze bowls, unburnt human remains were revealed inside the amphora, obviously belonging to a secondary burial. Another bowl of identical shape (No. 10) was discovered inside the amphoroid pithos. It contained various gold objects (Fig. 4): a gold earring (No. 23) of fine craftsmanship, a gold mouthpiece (No. 22), and seven gold dome-shaped sheets (Nos. 11–17) of very thin foil, one of them stuck to the bottom of the corroded bowl. The bowl also contained four small gold plaques, each decorated with the embossed head of the Egyptian goddess Hathor (Nos. 18–21),



Fig. 3. Bronze bowls over the mouth of amphoroid pithos No. 4.



Fig. 4. Bronze bowl No. 10, which contained an assemblage of gold objects.

of a type well known from other tombs at Palaepaphos.<sup>4</sup> After removal of the bones, two pieces of an iron sword were found (No. 8), carefully placed at the bottom of the amphora. At the moment of discovery, the iron sword was still covered with remains of wood, obviously belonging to its sheath. The sword was broken into two pieces, a custom that recalls the "ritual destruction" of weapons attested in other tombs of the same necropolis.<sup>5</sup>

Two more gold Hathoric plaques, identical to those contained in the amphora, were found on the floor of the chamber, but curiously at the other side of it, at the south-east (Nos. 48 and 96). In the same area another gold object (No. 97), identical to Nos. 11–17, was found. The dispersal of these objects, which apparently formed part of the decoration of the garments of the same person, suggests a rather hurried treatment of the remains of the dead when they were removed

<sup>4</sup> For other Hathoric plaques from the Palaepaphos tombs see e.g. Karageorghis 1983, 249, Tomb 79/6, 7, 8; Karageorghis & Raptou 2014, 62, Tomb 144/51, 74, Tomb 145/32, 34, 35, 45.

<sup>5</sup> Karageorghis 1983, 230. See also D'Onofrio 2011.



Fig. 5. Bronze spearhead No. 100 and bronze mace-heads Nos. 102 and 103 in situ.

from the floor to be placed in the large amphora (No. 4) for secondary burial.

Excavation in the middle of the chamber revealed the remains of another burial on the floor, disturbed and in a bad state of preservation. It was only possible to collect a few broken bones; the rest were destroyed during levelling by the bulldozer. However, some of the most interesting metal finds were located in connection with this burial, found among many broken pottery vessels, namely four fragments of bronze belts, scattered among pottery sherds on the floor next to the amphoroid *pithos* No. 4. After removal of all the pieces it became clear that the fragments belonged to two different belts (Nos. 9a and 9b). In the same area of the excavation, in the central part of the floor, two bronze sceptres or mace-heads were found in perfect condition (Nos. 102 and 103) together with a bronze spearhead (Nos. 100 and 101) of elongated trapezoidal shape (Fig. 5). These objects were found next to a bronze shield (No. 30), which was lying upside down. Nearby, and apparently related to this burial, an iron javelin (No. 35) was found together with four undecorated thin gold sheets (Nos. 34a–d).

On the right side of the chamber a large clay bathtub (No. 33) was found, broken in several pieces as a result of stones fallen from the collapsed roof. However, all fragments were found *in situ*, making possible its restoration. The bathtub was empty, except for a small hemispherical handleless bronze bowl found upside down on the left side of the bathtub. After turning it over, it was seen to contain burnt human bones. Close to the bathtub two gold Hathoric plaques were found (Nos. 48 and 96), identical with those found inside amphora No. 4. In the same area, between the bathtub and the wall, were more gold plaques (Nos. 36 and 49) identical to No. 34, a gold pin (No. 50), and many pieces belonging to iron objects, including fragments of three *obeloi* (Nos. 45–47), fragments of

an iron sword (No. 44), iron knives (Nos. 53 and 54), and a number of animal astragali (knuckle-bones) (No. 37).

Although the burial chamber was severely damaged and most of the funerary gifts were broken and disturbed, we were able to make some interesting observations. The chamber contained at least three burials, one found lying *in situ* in the centre of the floor; a previous one may have been removed to the amphoroid *pithos* No. 4 and a third burial, the remains of a cremation, was found in the bronze bowl (No. 32) inside the bathtub. Unfortunately, the skeletal remains were in all cases too fragmentary for osteological analysis.

The two first burials cited above are inhumations. That found *in situ* on the floor belonged to what is assumed on the basis of the grave goods to be a male individual, apparently a warrior. The rare finds, such as the bronze mace-heads, the bronze belts, the bronze shield and other weapons, underline his social rank as an important person in the local hierarchy. The tomb gifts recall those of other warrior burials excavated in the same necropolis (e.g. Palaepaphos-Skales Tomb 188),<sup>6</sup> as well as in the Palaepaphos-Plakes necropolis (Tomb 144).<sup>7</sup> In both these tombs we witness the presence of weapons placed in a pile on the floor, and in the case of Tomb 144 the finds, namely gold sheets and earrings, also testify to the presence of rich female burials. However, in Palaepaphos-Plakes Tomb 144 we observed the ceremonial placing of two iron *obeloi* together with the warrior's personal possessions, with the additional gift of a large bronze amphora.<sup>8</sup> In Tomb 277 there is no indication that a large bronze amphora was ever placed in the chamber. The tomb had, however, probably been disturbed and the material dispersed, perhaps by the later users of the chamber. Another feature common to other rich tombs at Palaepaphos is the presence of bathtubs.

The mixture of gold sheets, earrings and weapons does not help us distinguish between male and female burials.<sup>9</sup> However, it is uncommon to find a sword connected with a female burial, unless this signifies a special honour for an important lady of the local society. In addition, a large number of gold plaques found close to the weapons may have been connected with the decoration of male attire.

One of the burials, as already mentioned, was a cremation. Following the latest excavations, it has become clear that the custom of cremation was not all that rare in the necropolis of

<sup>6</sup> Karageorghis & Raptou 2016, 10–11, 38–42.

<sup>7</sup> Karageorghis & Raptou 2014, 8–12, 47–64.

<sup>8</sup> Karageorghis & Raptou 2014, fig. 12.

<sup>9</sup> For a relevant discussion see Strömberg 1993.

Palaepaphos. Remains of cremations have been found, especially in the Palaepaphos-Skales necropolis, and others were found in tombs still under study.<sup>10</sup> However, the number of cremations uncovered so far does not clarify the circumstances under which cremation rather than inhumation was used as a burial practice at Palaepaphos, especially since both types are found in the same tomb.<sup>11</sup>

The exceptional secondary burial that may be that of a woman shows that the removal of bones and their placement inside an amphoroid *pithos* constituted a ceremonial activity. This funerary rite is generally rare, but it is widely attested in Cyprus.<sup>12</sup> The most valuable of the tomb gifts were collected and placed inside a bowl to be put away together with the bones.

Finally, the extraordinary number of cups and drinking bowls found in the chamber of Tomb 277 may suggest funerary rites, possibly involving eating and drinking. However, the conditions under which the tomb was excavated, without a full clearance of the *dromos*, make any suggestions regarding specific rites rather hazardous.

E.R.

## Catalogue

*Figs. 6–20, Table 1.*<sup>13</sup>

**No. 1.** Large bronze bowl with convex sides, thick incurving rim, round base, slightly damaged. Two opposed up-curving horizontal loop handles fixed to the body below rim through a flat cast attachment with a circular disc for each handle branch; the two discs are joined by a flat strap; each disc is attached to the body by three rivets, the large dome-shaped heads of which are visible on the interior. The handles are “bridged” to the upper part of the discs by two struts of twisted wire, one on each side of the handle. Ht. 17 cm. Rim D. 36 cm (*Fig. 17*).

**No. 2.** Large bronze bowl comparable to *No. 1*, but without the “bridging” wires at the handles. Ht. 15 cm. Rim D. 33 cm (*Fig. 17*).

**No. 3a.** Fragmentary small bronze bowl. Hemispherical body, lower half missing. Rim D. 13.5 cm.

**No. 3b.** Fragmentary small bronze bowl, as *No. 3a*. Rim D. 15.5 cm.

**No. 4.** Large amphora or amphoroid *pithos* of White Painted III ware. Ovoid body, short cylindrical neck, flat out-turned rim, two opposed flat handles from rim to shoulder, ridge round neckline, raised flat base. Ht. 80.7 cm. Rim D. 44 cm. The neck on either side of the handles is decorated with three panels, one with a large diamond filled with smaller hatched diamonds and two others consisting of two adjacent vertical narrow panels, each filled with a vertical chain of hatched diamonds; a small group of concentric circles near each handle; zig-zag band on flat part of handles; circular band below the base of each handle filled with a zig-zag band; transversal bands on flat part of rim; horizontal band round neck just below rim and on neck-ridge; horizontal band inside neck below rim (*Fig. 6*).

**No. 5.** Jug of Bichrome III ware. Globular body, concave neck with ridge round the middle, out-curved rim, handle from neck-ridge to shoulder, ring base. Ht. 26 cm. Group of concentric bands vertically arranged on body on either side of handle, enclosing a solid disc in the centre within concentric bands; diagonals on shoulder opposite handle; groups of transversal strokes on outer part of handle and on rim (*Fig. 9*).

**Nos. 6 and 7.** Two small bronze hemispherical bowls, found one inside the other; the upper one has a horizontal ridge inside below rim (cf. *No. 32*); thin-walled and hammered. The upper bowl is 6 cm high and 13.6 cm in diameter: they have not been separated (*Fig. 17*).

**No. 8.** Iron sword, complete. Leaf-shaped blade with straight sides and low midrib; round shoulder, bulging hilt, fish-tail finial, pommel spur, traces of bone or ivory preserved; six iron rivets survive. Wood of sheath partly preserved. L. 67 cm. Found in two pieces inside amphora *No. 4* (*Figs. 15 and 20*).

**No. 9a.** Belt consisting of a thin bronze band; at one end it is cut away on both sides, creating a narrow strip, thicker than the rest of the band, with a hooked terminal; at the other end there were three partly swinging loops of thin wire, arranged in a horizontal row along the middle of the band; each loop is attached to the band through two perforations, the one above the other; the terminals of the wire at the back of the band are bent, to keep the loop in place. The belt was worn by fitting

<sup>10</sup> Karageorghis & Raptou 2016, 3–4.

<sup>11</sup> E.g. Karageorghis 1983, 325; Karageorghis & Raptou 2016, 7, Tomb 185.

<sup>12</sup> E.g. at Palaepaphos: Karageorghis & Raptou 2014, 95; at Ktima: Deshayes 1963, 79, 95–99, 115–137; at Kition: Hadjisavvas 2012, 229; 2014, 201–202 and elsewhere. This wide distribution suggests a foreign rite, attested in the Cypro-Geometric III–Cypro-Archaic I periods, which suits perfectly Palaepaphos-Skales Tomb 277.

<sup>13</sup> Numbers were allocated according to the process of recovery and recording during excavation.

the hooked terminal in one of the loops, allowing three options for tightening or loosening the belt. The three loops are not placed at the very end of the band but further in, allowing part of the band at the very end to cover the space behind the narrow strip with the hook when the belt was worn. L. of belt: c. 102 cm (made up from numerous fragments, not all of them flat); W. 5.8 cm. Perforations along the two edges of the band for fixing a leather or cloth surface, traces of which have survived. The outer surface of the band was covered throughout with elaborate punctured or finely engraved abstract motifs, partly surviving; grooved “rope” pattern and embossed rib along both edges of the band. There is a crack at the lower edge of the band which was repaired in antiquity with two small strips of bronze fixed on either side of the band with two rivets (Figs. 18 and 19).

**No. 9b.** Bronze belt, comparable to *No. 9a*. L. c. 102 cm. W. 6.2 cm. The motifs of the finely engraved and punctured decoration differ from those of *No. 9a*. The belt is very corroded and still under conservation. Only a few traces of the decoration survive on the outer surface (Fig. 19).

**No. 10.** Hemispherical bronze bowl with thick plain rim, round base. Ht. 7 cm. Rim D. 14.9 cm (Fig. 17).

**No. 11.** Round thin sheet of gold, dome-shaped, folded all round its perimeter; two opposed perforations near the perimeter. D. 4.7 cm. Undecorated.

**No. 12.** As *No. 11*.

**No. 13.** As *No. 11*.

**No. 14.** As *No. 11*.

**No. 15.** As *No. 11* (Fig. 14).

**No. 16.** As *No. 11*, D. 4.5 cm.

**No. 17.** As *No. 11*, D. 4.4 cm.

**No. 18.** Rectangular plaque of thin sheet of gold; all four sides are rolled, the vertical ones round a thin bronze wire. The plaque is entirely filled with an embossed Hathoric head, rendered *en face*; locks of hair terminate in coils on either side of neck; strings of beads round neck. Ht. 4.4 cm. W. 2.9 cm. Facial characteristics poorly preserved (Fig. 14).

**No. 19.** As *No. 18* (Fig. 14).

**No. 20.** As *No. 18* (Fig. 14).

**No. 21.** As *No. 18*, but with a perforation in each of the upper corners (roll broken in antiquity) (Fig. 14).

**No. 22.** Thin sheet of gold, elliptical in shape, perforated at either end. L. 10.9 cm. Plain surface (Fig. 14).

**No. 23.** Gold-plated (probably over bronze) earring. Oblong loop with overlapping ends. Seven small globules and discs of different sizes, arranged vertically, pendent from the lower part of the loop; thin wire round the lower body of the loop, which does not allow us to see any sign which would suggest that the loop was hollow with a core. L. 5.1 cm (Fig. 14).

**No. 24.** Black Polished I(III)–II(IV) ware jug. Ovoid depressed body, short concave neck, trefoil mouth, ridge round neckline, flat handle from rim to shoulder, ring base. Ht. 24.5 cm (Fig. 8).

**No. 25.** Small, footed bowl of White Painted III ware. Vertical sides with slightly out-curving rim, sharply carinated profile, two opposed small horizontal loop handles on body below rim, short stem, conical splaying foot, concave base. Ht. 7.7 cm. Max. rim D. 11.7 cm. Thick horizontal band round body above and below handles, paint on handles and foot; thick horizontal band inside below rim, circular band at bottom (Fig. 13).

**No. 26.** Jug of Red Slip ware, shape as *No. 24*. Ht. 24 cm (Fig. 8).

**No. 27.** Fragmentary Phoenician imported amphora, mended from numerous sherds and partly restored. Preserved Ht. 42 cm. Very low rim (Fig. 12).

**No. 28.** Jug of Bichrome III ware, as *No. 5*. Ht. 25.7 cm (Fig. 12).

**No. 29.** Small bowl of White Painted III ware, comparable to *No. 25*, with an extra horizontal band inside body. Ht. 7.5 cm. Rim D. 12 cm (Fig. 13).

**No. 30.** Bronze round shield, almost complete, now partly restored, of the type known as a *Herzsprung* or *Lambda* shield. It has a central boss with concentric circles in *repoussé* all round it, alternating with zones of “rope” pattern; the concentric circles and “rope” pattern are interrupted by a  $\Lambda$ -shaped notch. Two opposed pairs of perforations arranged at the edge of the perimeter for rivetting;  $\Lambda$ -shaped cut on central boss and flat disc with “rope” pattern lining at the inside. An eight-petalled rosette within two concentric circles embossed at the middle of the  $\Lambda$ -shaped notch. D. 34.5 cm (Fig. 16).

**No. 31.** Large jug of Bichrome III ware. Barrel-shaped body, concave neck widening upwards, horizontal ridge round lower part of neck, out-curved rim, nipples in the middle of either side, triple handle from neck-ridge to shoulder. Ht. 43.8 cm. Groups of concentric bands arranged vertically on either side of body enclosing a “Maltese” cross in the centre;

two vertically arranged framed latticed lozenges on body opposite handle, terminating above and below in triangular tails, one solid, the other (at the top) latticed; similar decoration on opposite side, below base of handle; horizontal bands round neck, transversal strokes on neck-ridge and rim; horizontal band inside neck below rim, solid paint on handle (*Fig. 8*).

*No. 32.* Small bronze bowl, as *No. 10*, deformed. Ht. 6.5 cm. Max. rim D. 14.5 cm. It contained burnt human bones (*Fig. 17*).

*No. 33.* Clay bathtub, roughly rectangular with slightly curving sides and rounded corners, thick rim rectangular in section, two vertical loop handles on either of the long sides below rim, flat floor, pierced through at the floor near one of the short sides but blocked with gypsum at a later stage in antiquity. Ht. 42–44 cm. Max. outer L. 107.5 cm. Max. W. 78 cm. Depth 40 cm. L. at floor (inside) 91 cm (*Fig. 13*).

*Nos. 34a and b.* Two fragments from one thin rectangular sheet of gold; three perforations along the lower short side and two along the opposite side. Ht. 4.5 cm. W. 5.8 cm. Plain surface.

*No. 34c.* As *Nos. 34a and b*. One perforation in each corner. Ht. 4.5 cm. W. 5.7 cm.

*No. 34d.* As *No. 34c*, deformed.

*No. 34e.* As *No. 34c*, one perforation in each corner. Ht. 4.4 cm. W. 5.8 cm.

They seem to have been attached to a rectangular object, which has left a kind of a frame on all four sides.

*No. 35.* Fragmentary iron javelin. Leaf-shaped blade with low midrib, tubular socket with slit, wood preserved in socket. Point missing. L. 19.4 cm (*Fig. 15*).

*Nos. 36a–c.* Three rectangular thin sheets of gold; *No. 36c* has two perforations along one of its short sides. *No. 36a*: Ht. 9.4 cm. W. 5.3 cm (*Fig. 14*). *No. 36b*: very small fragment. *No. 36c*: Ht. 9.1 cm. W. 5 cm. Plain surface.

*No. 37.* 17 complete and eight fragmentary animal astragali (*Fig. 14*).

*No. 38.* Juglet of Bichrome III ware. Barrel-shaped body, narrow concave neck widening upwards, nipple in the middle on either side, handle from lower part of neck to shoulder. Ht. 8.9 cm. Groups of concentric rings arranged vertically on body on either side of handle, solid disc at the centre; horizontal band round neckline, bands round upper part of neck; transversal strokes on outer part of handle (*Fig. 8*).

*No. 39.* Jug of Red Slip ware, as *No. 26*. Ht. 25 cm (*Fig. 8*).

*No. 40.* Footed bowl of Black-on-Red I(III) ware. Straight oblique sides, carinated profile, two opposed small horizontal loop handles on body below rim, ridge on either side at the level of the handles, low splaying foot. Ht. 13.3 cm. Rim D. 20.6 cm. Horizontal rings round body, inside and outside, paint on handles, ridge, and foot (*Fig. 10*).

*No. 41.* Shallow bowl of Black-on-Red I(III) ware. Convex sides, incurving rim, two opposed horizontal loop handles on body below rim, curving upwards, ring base. Ht. 6.1 cm. D. 27 cm. Groups of horizontal rings inside and outside, circle at bottom, paint on rim, handles, and foot (*Fig. 12*).

*No. 42.* Flask of Phoenician fabric, undecorated. Lentoid body, concave narrow neck, funnel mouth, two opposed handles from neck to body. Ht. 13.5 cm (*Fig. 12*).

*No. 43.* Juglet of White Painted III ware. Barrel-shaped body with nipples in the middle on either side, concave neck widening upwards, rim damaged, ridge round lower part of mouth, handle from neck-ridge to shoulder. Preserved Ht. 7.2 cm. Groups of concentric bands and rings vertically arranged on either side of handle and body; thick circular band in the middle on each side, enclosing a spiral; latticed lozenge below base of handle with side tails terminating in a hatched triangle at lower part; similar motif on shoulder opposite handle (*Fig. 8*).

*No. 44.* Iron sword, made up from many fragments, point missing. Preserved L. 66.5 cm. Three bronze rivets preserved; no traces of wood for the sheath. Pommel spur missing (*Figs. 15 and 20*).

*Nos. 45, 46, and 47.* Fragments from the shafts of iron *obeloi*, rectangular in section and three fragments of tubular sockets with slits, with traces of wood inside (*Fig. 15*).

*No. 47a.* Bronze ring (not finger-ring), cast, circular in section. D. 2.8 cm (*Fig. 15*).

*No. 48.* Gold plaque with embossed Hathoric head, as *No. 18*. Ht. 4.4 cm. W. 2.9 cm (*Fig. 14*).

*Nos. 49a–d.* Four rectangular thin gold sheets, comparable to *Nos. 36a–c*.

*No. 50.* Gold pin made of two thin sheets of gold, hollow. One of them, with a narrow end, is curved forward and encloses the body of the pin, leaving a loop at the top. The shaft was probably made by rolling the rest of the sheet into a cylinder. L. 7.4 cm (*Fig. 14*).

*No. 51.* Shallow bowl of Black-on-Red I(III) ware. Convex sides, plain rim, two opposed horizontal lug handles at rim perforated vertically. Ht. 6.9 cm. Rim D. 22 cm. Groups of horizontal rings round body, inside and outside; circles at bottom; paint on rim and handles (*Fig. 11*).

*No. 52.* Jug of Bichrome Red I(III) Burnished ware. Globular body, tall cylindrical neck, flat out-turned rim, horizontal ridge round upper part of neck, two horizontal grooves round upper part of shoulder below neckline, twin handle, ring base. Ht. 23.3 cm. Stroke-polished body, groups of concentric lines vertically arranged on body on either side of handle, horizontal bands round upper part of neck, transversal lines on outer part of handle (*Fig. 8*).

*No. 53.* Fragmentary iron knife, single-edged; part of flat tang preserved, with one long rivet and traces of wood on tang. Preserved L. 10.8 cm (*Fig. 15*).

*No. 54.* Fragmentary iron knife, comparable to *No. 53*, with slightly curving blade; one bronze rivet survives, traces of wood on tang. Preserved L. 18 cm (*Fig. 15*).

*No. 55.* Shallow bowl of Black-on-Red I(III) ware, comparable to *No. 51*. Painted decoration largely worn off. Ht. 5.3 cm. Rim D. 20.2 cm (*Fig. 11*).

*No. 56.* *Hydria* of White Painted III ware. Ovoid depressed body, cylindrical neck slightly narrowing upwards, broad out-curved rim, two opposed horizontal loop handles on body, vertical handle from neck to shoulder, ring base. Ht. 45.9 cm. Horizontal bands and rings round body above and below level of horizontal handles, six groups of concentric circles round shoulder, two horizontal wavy lines round upper part of neck, band round neckline, paint on rim inside and outside, paint on horizontal handles, zig-zag band on outer part of vertical handle, paint on foot (*Fig. 7*).

*No. 57.* Jug of White Painted III ware. Ovoid depressed to globular body, short concave neck, trefoil mouth, handle from rim to shoulder, ring base. Ht. 35 cm. Group of horizontal bands and rings round body, horizontal band round neckline, horizontal wavy line just below it; two horizontal wavy lines round neck, paint on rim, band along the middle of the outer part of handle, paint on foot. Paint very worn (*Fig. 9*).

*No. 58.* Jug of White Painted III ware, comparable to *No. 57*. Ht. 37.2 cm (*Fig. 9*).

*No. 59.* Jug of White Painted III ware, comparable to *Nos. 57* and *58*, but with eight concentric circles round the shoulder and no wavy line below the neckline. Ht. 36.7 cm (*Fig. 9*).

*No. 60.* Black Slip III ware jug. Ovoid body, short concave neck narrowing upwards, trefoil mouth, flat handle from rim to shoulder, ring base. Horizontal grooves round shoulder, vertical shallow grooves round body. Ht. 32.7 cm (*Fig. 10*).

*No. 61.* Large shallow bowl of Black-on-Red I(III) ware, comparable to *Nos. 51* and *55*. Painted decoration largely worn off. Ht. 9.6 cm. Rim D. 31.2 cm. Two vertical perforations on each lug handle (*Fig. 11*).

*No. 62.* Footed bowl of White Painted III ware. Deep conical body, convex sides, two opposed horizontal loop handles on body, short splaying foot. Ht. 17 cm. Max. D. 23.1 cm. The two horizontal zones on either side of the body between the handles are decorated with two triglyphs containing a vertical chain of hatched lozenges terminating in hatched triangles above and below; horizontal bands at rim and round lower part on body; paint on handles and foot, horizontal bands inside, circle at bottom (*Fig. 10*).

*No. 63.* Shallow bowl of Black-on-Red I(III) ware, comparable to *Nos. 51* and *55*. Painted decoration largely worn off. Ht. 8.3 cm. Rim D. 26.5 cm (*Fig. 11*).

*No. 64.* Footed bowl of Red Slip ware. Convex sides, horizontal ridge on either side at the level of the handles, two horizontal loop handles on body below rim, short splaying foot. Traces of burnishing on body, inside and outside. Ht. 17 cm. Rim D. 29 cm (*Fig. 10*).

*No. 65.* Small amphora of White Painted III ware. Ovoid body, cylindrical neck, out-turned rim, two opposed horizontal loop handles on shoulder, ring base. Ht. 24 cm. Three groups of concentric circles round neck, two on either side at the level of the handles; horizontal band round neckline and round upper part of neck; two horizontal wavy lines on either side of body at the level of the base of handles; paint on handles, rim, and foot (*Fig. 7*).

*No. 66.* Footed bowl of Black-on-Red I(III) ware, comparable to *No. 40*. Ht. 14 cm. Rim D. 22 cm (*Fig. 10*).

*No. 67.* Plain White ware handmade saucer-shaped lamp with pinched nozzle; traces of burning on nozzle; round base. Ht. 5.5 cm. D. 13.9 cm (*Fig. 13*).

*No. 68.* Jug of White Painted III ware. Barrel-shaped body, concave neck widening upwards, ridge round lower part of body, flat handle from neck-ridge to shoulder. Ht. 22.8 cm. Groups of concentric bands and rings arranged vertically on either side of handle on body; concentric bands and rings on either side of body at the middle; hatched lozenge with winged sides terminating in a hatched tail on shoulder oppo-

site handle and below base of handle; horizontal bands and rings round neck, horizontal wavy band below neck-ridge; zig-zag band along outer part of handle (*Fig. 8*).

*No. 69.* Jug of Red Slip ware, comparable to *No. 26*. Ht. 21 cm (*Fig. 9*).

*No. 70.* Bowl of White Painted III ware. Deep body, convex sides, two opposed horizontal loop handles on body below rim, plain rim, three deep horizontal grooves round upper part of body below rim, ring base. Ht. 15.5 cm. Rim D. 25 cm. Horizontal band round upper part of body at rim and round lower part of body; three groups of concentric circles arranged horizontally round the middle of body on either side between handles; concentric bands and rings at bottom; paint on handles and foot and circular band round base (*Fig. 10*).

*No. 71.* Jug of Bichrome III ware. Barrel-shaped body, concave neck widening upwards, out-turned rim, sloping lip, horizontal ridge round lower part of neck; flat handle from neck-ridge to body. Ht. 16.5 cm. Groups of concentric rings and bands arranged vertically on body on either side of handle, concentric bands and rings in the middle of both sides of body; hatched lozenge with hatched tail and side wings on shoulder opposite handle and below base of handle; horizontal bands and rings round shoulder; paint on neck-ridge, transversal bands along outer part of handle (*Fig. 8*).

*No. 72.* Fragments from a deep, footed bowl of White Painted III ware, comparable to *No. 62*.

*No. 73.* Small, footed bowl of White Painted III ware, comparable to *No. 25*. Carinated profile, two opposed horizontal loop handles on body below rim, high splaying foot. Ht. 7.7 cm. Rim D. 11 cm. Thick horizontal band outside body above and below level of handles, bands inside.

*No. 74.* Small, footed bowl of White Painted III ware, comparable to *No. 73*. Ht. 7.7 cm. Rim D. 11 cm.

*No. 75.* Cup of White Painted III ware, deformed. Convex sides, handle from rim to body, ring base. Ht. 6 cm. Max. rim D. 14.6 cm. Horizontal band at the level of base of handle, paint on rim and outer part of handle, band inside (*Fig. 13*).

*No. 76.* Fragmentary cup of White Painted III ware comparable to *No. 75*. Ht. 6.5 cm. Rim D. 11.6 cm.

*No. 77.* Fragmentary cup of White Painted III ware comparable to *No. 75*. Ht. 6.5 cm. Rim D. 12 cm.

*No. 78.* Footed bowl of White Painted III ware, comparable to *No. 73*. Ht. 6.5 cm. Rim D. 12 cm.

*No. 79.* Fragmentary cup of White Painted III ware comparable to *No. 75*. Ht. 7 cm. Rim D. 12.5 cm (*Fig. 13*).

*No. 80.* Fragmentary cup of White Painted III ware comparable to *No. 75*. Ht. 6 cm. Rim D. 12 cm.

*No. 81.* Small, deep, footed bowl of White Painted III ware, comparable to *No. 73*. Ht. 8 cm. Rim D. 11 cm.

*No. 82.* Fragmentary cup of White Painted III ware comparable to *No. 75*. Ht. 6.4 cm. Rim D. 12.5 cm.

*No. 83.* Small, deep, footed bowl of White Painted III ware, comparable to *No. 73*. Ht. 8 cm. Rim D. 11.8 cm.

*No. 84.* Small, deep, footed bowl of White Painted III ware, comparable to *No. 73*. Ht. 7.5 cm. Rim D. 12 cm.

*No. 85.* Small, deep, footed bowl of White Painted III ware, comparable to *No. 73*. Ht. 8 cm. Rim D. 10 cm.

*No. 86.* Small, deep, footed bowl of White Painted III ware, comparable to *No. 73*. Ht. 7 cm.

*No. 87.* Coarse Wheel-made ware amphora, much deformed. Ovoid body, cylindrical neck, plain rim, two opposed flat handles from rim to shoulder, raised flat base. Ht. 34 cm (*Fig. 13*).

*No. 88.* Bichrome Phoenician jug, lower part missing. Globular body, tall concave neck with horizontal ridge round the middle, out-curved rim, handle from neck-ridge to shoulder. Preserved Ht. 26 cm. Concentric bands and rings vertically arranged on body on either side of handle; double diagonals on shoulder opposite handle; transversal strokes on outer part of handle (*Fig. 12*).

*No. 89.* Fragmentary footed bowl of Black-on-Red I(III) ware, comparable to *No. 40*. Ht. 14 cm. Rim D. 24.5 cm.

*No. 90.* Jug of Bichrome Red I(III) Burnished ware, comparable to *No. 52*. Ht. 21.5 cm (*Fig. 8*).

*No. 91.* Fragmentary jug of Red Slip ware, comparable to *No. 24*, with three horizontal grooves round shoulder just below neck-line; rim missing; twin handle; ring base. Preserved Ht. 21.5 cm (*Fig. 9*).

*No. 92.* Large belly-handled amphora of White Painted III ware. Ovoid body, concave neck, flat out-turned rim, two opposed loop handles on body, ring base. Ht. 48.5 cm. Rim D. 25 cm. The shoulder zone is decorated with triglyphs, filled with a hatched lozenge with hatched triangle above and below, symmetrically arranged; horizontal bands and lines round body above and below handles; horizontal wavy band

Table 1. Summary of the catalogued contents of Tomb 277.

White Painted III ware	4, 25, 29, 43, 56–59, 62, 65, 68, 70, 72–86, 92–94, 104	31
Bichrome III ware	5, 28, 31, 38, 71	5
Black Polished I(III)–II(IV)	24	1
Red Slip ware	26, 39, 64, 69, 91	5
Black-on-Red I(III) ware	40, 41, 51, 55, 61, 63, 66, 89, 106	9
Bichrome Red I(III) ware	52, 90	2
Black Slip III ware	60	1
Coarse Wheel-made ware	87	1
Phoenician, imported	27, 42, 88, 107–111	8
Red Lustrous Wheel-made ware	105	1
Bronze	1, 2, 3a, 3b, 6, 7, 9a, 9b, 10, 30, 32, 47a, 98, 100, 101, 102, 103	16
Iron	8, 35, 44–47, 53, 54	8
Gold	11–23, 34a–c, 36a–c, 48, 49a–d, 50, 95–97, 99	31
Clay	33, 67	2
Animal bones	37	1
<b>Total</b>		<b>122</b>

on either side between handles; thick horizontal bands and lines round neck; transversal bands on flat part of rim; paint on foot and handles (Fig. 7).

**No. 93.** Belly-handled amphora of White Painted III ware, comparable to *No. 92*. Ht. 41 cm. Rim D. 21 cm (Fig. 7).

**No. 94.** Belly-handled amphora of White Painted III ware, comparable to *Nos. 92* and *93*, but instead of four triglyphs with a hatched lozenge there is a stylized tree motif repeated symmetrically four times round the shoulder zone. Ht. 50 cm. Rim D. 28.5 cm (Fig. 7).

**No. 95.** Thin sheet of gold, comparable to *No. 22*. L. 10.3 cm. Plain surface (Fig. 14).

**No. 96.** Rectangular plaque of thin sheet of gold, comparable to *No. 18*. Ht. 4.4 cm. W. 2.9 cm (Fig. 14).

**No. 97.** Round thin sheet of gold, comparable to *No. 11*. D. 4.7 cm.

**No. 98.** Fragmentary bronze nail? Circular in section. Preserved L. 3.7 cm (Fig. 17).

**No. 99.** Round thin sheet of gold, comparable to *No. 11*. D. 4.7 cm.

**Nos. 100 and 101.** Bronze spearhead of a “bayonet-shape” type. Narrow blade with prominent broad midrib continuing straight to the tip. Tubular-triangular slit-socket perforated on either side. Bronze cast ring at the lower end of the socket (*No. 101*). L. 25.5 cm. The cutting edges of the blade are not straight but slightly angular, which is a peculiarity, making the blade more slender. Wood preserved in the socket (see *Appendix*) (Figs. 15 and 20).

**No. 102.** Bronze mace-head, moulded, of the knobbed type, consisting of a central ribbed swelling at about the middle of a cylindrical sleeve. The swelling has a fluting of six vertical sharp-edged almond-shaped projections; horizontal grooves round the cylindrical sleeve, above and below the swelling and ring in relief at either end of the sleeve. Traces of wood preserved in the socket (see *Appendix*). L. 9.2 cm (Figs. 14 and 20).

**No. 103.** Bronze mace-head, comparable to *No. 102*. L. 9.4 cm. Wood preserved inside the sleeve (see *Appendix*) (Figs. 14 and 20).

**No. 104.** *Hydria* of White Painted III ware. Ovoid body, short neck narrowing upwards, out-curved rim, two horizontal loop handles on body, flat handle from neck to shoulder, ring base. Ht. 40 cm. Rim D. 14 cm. The shoulder zone is decorated with four groups of small concentric circles; two horizontal wavy bands round upper part of neck; horizontal wavy band round upper part of shoulder, just below neckline; horizontal bands round body above and below level of handles; horizontal bands at neckline and rim; paint on horizontal handles, wavy band along outer part of handle flanked by bands along the edges, paint on foot (Fig. 8).

**No. 105.** Fragmentary bottle of Red Lustrous Wheel-made ware. Upper part of neck missing. Spindle-shaped body, splaying foot, concave base. Preserved Ht. 19.4 cm (Fig. 13).

**No. 106.** Footed bowl of Black-on-Red I(III) ware, comparable to *No. 40*. Ht. 15 cm. Rim D. 22.5 cm (Fig. 10).

**No. 107.** Sherds (shoulder and handles) of a Phoenician imported amphora, comparable to *No. 27* (Fig. 13).

**No. 108.** Two small fragments from the body and handle of a lentoid flask, comparable to *No. 42*.

**No. 109.** Sherds from a Bichrome Phoenician jug, comparable to *Nos. 27* and *28* (Fig. 12).

**No. 110.** Fragments from the neck and handle of a jug, comparable to *No. 109* (Fig. 12).

**No. 111.** Fragments from the body and handle of a Phoenician White Painted lentoid flask (Fig. 12).

## Commentary

### I. POTTERY

Tomb 277 is rich in metal objects, including gold jewellery, but its pottery is of rather common and in many cases of rather repetitive styles. Many vases are deformed and of poor ceramic quality, especially the small, footed bowls and cups.

#### (i) Amphoroid *pithos* of White Painted III ware (Figs. 2, 3, and 6)

*No. 4*. It is strikingly similar to one from Palaepaphos-*Skales* Tomb 210/1, both in size and decoration.<sup>14</sup> Judging from the style of pottery, metal objects, and jewellery found at Palaepaphos-*Plakes* and Palaepaphos-*Skales*, it is clear that the various cemeteries of Palaepaphos were furnished with gifts from the same workshops.<sup>15</sup>

#### (ii) Belly-handled amphorae of White Painted III ware (Fig. 7)

*Nos. 92–94* are more or less comparable, but *No. 93* is also decorated with a stylized tree motif. This type may have started at the very end of Cypro-Geometric II, but the three examples mentioned above are of White Painted III ware.<sup>16</sup> *No. 65* may be compared with Hadji Abdoullah Tomb 135, no. 124, which we assigned to White Painted IV,<sup>17</sup> but the horizontal wavy band may suggest White Painted III; cf. also Palaepaphos-*Plakes* Tomb 148/73, with one horizontal wavy band between handles.<sup>18</sup>

#### (iii) *Hydriae* of White Painted III ware (Figs. 7 and 8)

*Nos. 56* and *104* may be compared with Palaepaphos-*Skales* Tomb 210, no. 6.<sup>19</sup>

#### (iv) Barrel-shaped jugs of White Painted III and Bichrome III ware (Fig. 8)

*Nos. 43* and *68* of White Painted III ware may be compared with Palaepaphos-*Plakes* Tomb 148, type (v).<sup>20</sup>

*No. 31* (a juglet) and large jug *No. 38*, of Bichrome III ware, may be compared as follows: *No. 31* with a slightly earli-

er type, since it is decorated with latticed lozenges;<sup>21</sup> juglet *No. 38* may also be compared with Palaepaphos-*Plakes* Tomb 148, no. 49. *No. 71* may be compared with both White Painted III and Bichrome III ware barrel-shaped jugs.<sup>22</sup>

#### (v) Jugs of Bichrome Red I(III) Burnished ware (Fig. 8)

*Nos. 52* and *90*, with their black and white painted decoration on a red or beige burnished body, may recall the rare type found in Palaepaphos-*Plakes* Tomb 146 (nos. 3 and 40), where the potter/painter was experimenting with purple, instead of white paint. In the same tomb jugs nos. 60 and 61, of White Painted II–III and Bichrome II–III ware respectively, were found. Similar jugs were found in Tomb 144.<sup>23</sup> We are aware that there is no Bichrome Red I(III) classification in Gjerstad 1948. No doubt the potter/painter was experimenting before finalizing the Black-on-Red I(III) type which became predominant.

#### (vi) Jugs of Red or Black Slip ware (Figs. 8, 9, and 10)

*Nos. 26, 39, 64, 69, and 91*. This fabric is not uncommon at Palaepaphos, for jugs, bowls, or dishes, where we classified it as Red Slip I(III) local (and not Phoenician).<sup>24</sup> The surface of *Nos. 24, 26* and *91* is polished, that of *Nos. 39* and *69* is burnished. The grooved shoulder of *No. 91* recalls that of *No. 9* of Bichrome Red I(III) (type (v) above). *No. 24* may be identified as Black Polished I(III)–II(IV).

#### (vii) Footed bowl of Red Slip ware (Fig. 10)

*No. 64*. The shape resembles that of Black-on-Red I(III) ware bowls (see type (x) below).

#### (viii) Jugs of White Painted III ware (Fig. 9)

*Nos. 57–59*. Cf. Palaepaphos-*Plakes* Tomb 148, type (vi).<sup>25</sup>

#### (ix) Footed bowls of White Painted III ware (Fig. 10)

*Nos. 62* and *72*. They are identical, obviously from the same workshop.<sup>26</sup>

<sup>14</sup> Karageorghis & Raptou 2016, 88, pls. 62, 95.

<sup>15</sup> Cf. e.g. Karageorghis & Raptou 2014, 89, nos. 115–119, gold jewellery of the same type from Palaepaphos-*Plakes* Tomb 146 and Palaepaphos-*Skales* Tomb 67. Cf. Iacovou 2017, 203.

<sup>16</sup> Cf. Karageorghis & Raptou 2016, 85, type (ii) and no. 74, type (i), no. 73.

<sup>17</sup> Karageorghis & Raptou 2014, 109, type (iii), no. 124.

<sup>18</sup> Cf. Karageorghis & Raptou 2014, 100, type (ii); also Palaepaphos-*Skales* Tomb 46, no. 59, Karageorghis 1983, pls. 43, 59.

<sup>19</sup> Karageorghis & Raptou 2016, 91, type (iii).

<sup>20</sup> Karageorghis & Raptou 2014, 100.

<sup>21</sup> Karageorghis & Raptou 2014, 100, Tomb 148, type (iv), where we suggested that some such jugs “herald” the Cypro-Geometric III type.

<sup>22</sup> E.g. Karageorghis & Raptou 2014, 100, type (v).

<sup>23</sup> Karageorghis & Raptou 2014, 46, type (iii).

<sup>24</sup> Cf. Palaepaphos-*Plakes* Tomb 146, no. 63, in Karageorghis & Raptou 2014, 85, type (xxvii); see also Karageorghis & Raptou 2014, 100, Tomb 148, types (vii) and (viii).

<sup>25</sup> Karageorghis & Raptou 2014, 100.

<sup>26</sup> Cf. Palaepaphos-*Plakes* Tomb 148, type (xiv), Karageorghis & Raptou 2014, 101.

**(x) Footed bowls of Black-on-Red I(III) ware (Fig. 10)**

Nos. 40, 66, 89, and 106. They may be compared with Palaepaphos-Plakes Tomb 146, type (xxx).<sup>27</sup>

**(xi) Deep bowl of White Painted III ware (Fig. 10)**

No. 70 with horizontal grooves below the rim and decoration with a horizontal row of concentric circles on either side between the handles. Cf. Palaepaphos-Plakes Tomb 145, type (xxi),<sup>28</sup> where similar bowls are dated to Cypro-Geometric II. In the case of bowl No. 70, we may accept even a Cypro-Geometric III classification.

**(xii) Black-on-Red I(III) ware shallow bowls with pierced lug handles (Fig. 11)**

Nos. 51, 55, 61, and 63. This type of shallow bowl as well as the following type (xiii) were dated by us in previous publications to the Cypro-Achaic I period;<sup>29</sup> similarly Nos. 13 and 14, bowls with horizontal loop handles. A bowl with two pierced horizontal loop handles from Palaepaphos-Skales Tomb 86 (no. 22) was dated by us to Cypro-Geometric III.<sup>30</sup> Considering the date of the pottery of the rest of Tomb 277, we may date the bowls of types (xii) and (xiii) to Cypro-Geometric III.

**(xiii) Black-on-Red I(III) ware shallow bowls with two up-curved horizontal loop handles (Fig. 12)**

No. 41. Cf. Palaepaphos-Plakes Tomb 146, type (xxxi).<sup>31</sup> For its dating cf. type (xii) above.

**(xiv) Bichrome III ware jug with neck-ridge (Fig. 9)**

No. 5. The fabric of this vase is typically Cypriot, very different from the Phoenician fabric of type (xv) below. For a discussion see Bikai.<sup>32</sup>

**(xv) Phoenician imports (Figs. 12 and 13)**

Nos. 28 and 88. Cf. Bikai.<sup>33</sup> No. 42, a lentoid flask, is of common Phoenician type.<sup>34</sup> See also sherds Nos. 108–111. For No.

111 cf. Bikai.<sup>35</sup> See also No. 27 and sherds No. 107 of a common Phoenician type.<sup>36</sup>

**(xvi) Small footed bowls with two horizontal handles, of White Painted III ware (Figs. 12 and 13)**

Nos. 25, 29, 73–74, 78, 81, 83–85, and 107–111. This is a very common type of vase at Palaepaphos. It started as a Proto-White Painted ware type in Late Cypriot IIIB and continued almost unchanged in shape and decoration down to the Cypro-Geometric III period. The only difference in the late types is the angular profile of the body. In publishing tomb groups from Palaepaphos cemeteries we were often misled in assigning some late examples to the Cypro-Geometric I–II periods; e.g. Karageorghis & Raptou 2014, Tomb 147, no. 78.<sup>37</sup>

**(xvii) Cups with ring base of Cypro-Geometric III (Fig. 13)**

Nos. 75–77, 79–80, 82, and 86. This type is also very common at Palaepaphos. It started in the Cypro-Geometric I period, with a high conical foot,<sup>38</sup> and continued down to Cypro-Geometric III, with a ring base and a very pronounced painted bracket springing from the base of the handle and terminating at the rim. In the early phase it was decorated with two horizontal wavy bands round the upper part of the body; on the Cypro-Geometric III examples the horizontal bands are straight.

**(xviii) Black Slip ware jug (Fig. 10)**

No. 60. This is a very common type at Palaepaphos.<sup>39</sup>

**(xix) Coarse Wheel-made ware amphora (Fig. 13)**

No. 87 is made of dark grey clay, with a deformed body and neck.

**(xx) A fragmentary Red Lustrous Wheel-made ware bottle (Fig. 13)**

No. 105. This is no doubt a residual piece from the Late Bronze Age and may have been left over from another, earlier tomb.

<sup>27</sup> Karageorghis & Raptou 2014, 85–86.

<sup>28</sup> Karageorghis & Raptou 2014, 73.

<sup>29</sup> E.g. Palaepaphos-Plakes Tomb 146, nos. 128–129, Karageorghis & Raptou 2014, 86, type (xxxi).

<sup>30</sup> Karageorghis 1983, 304.

<sup>31</sup> Karageorghis & Raptou 2014, 86.

<sup>32</sup> Bikai 1983, 402–403.

<sup>33</sup> Bikai 1983, 402, 2(a); 1987, pl. 5, middle and lower rows.

<sup>34</sup> Cf. Bikai 1987, pl. 7, 105.

<sup>35</sup> Bikai 1987, pl. 7, nos. 101, 110.

<sup>36</sup> E.g. Bikai 1987, 45–46, nos. 591–602; Karageorghis & Raptou 2016, 35, Tomb 187, type (iii).

<sup>37</sup> Cf. Karageorghis & Raptou 2014, 94, type (vii), found in a tomb where the vast majority of vases date to the Cypro-Geometric III period.

<sup>38</sup> E.g. Karageorghis 1983, 364, type XIV.

<sup>39</sup> E.g. Palaepaphos-Plakes Tomb 146, nos. 11, 30, 33; Tomb 148, nos. 29, 47, 76, 103.

## 2. OTHER OBJECTS

### Bronze

#### (i) Bronze shield, No. 30 (Fig. 16)

This is the second example of this type of shield in the area, known as *Herzprung*, a name owed to the original find-spot in north Germany and as *Lambda*, because of the  $\Lambda$ -shaped notch of its decoration, which resembles the letter  $\Lambda$  of the Greek alphabet. The first shield from Palaepaphos was found at *Kato Alonia*, in a tomb of the 7th century BC.<sup>40</sup> This type of shield was briefly discussed by Anthony Snodgrass,<sup>41</sup> who mentioned also the first example, found in Idalion, which he considered to be the earliest. He also mentioned examples from Delphi and miniatures found in Crete, Samos, and Rhodes. It was Lucien Lerat,<sup>42</sup> however, who made a thorough study of this type, based on the more or less well-preserved example found at Delphi. According to Lerat, these are the central metallic parts of shields which were made of wood or leather, now lost, on which the bronze part was fixed with rivets through four pairs of holes. He also published two large fragments of a bronze shield of a similar type, also found at Delphi,<sup>43</sup> and illustrated with a commentary the fragmentary shield from Idalion, mentioned above, which was published for the first time in 1885.<sup>44</sup>

It is important to draw attention to the fact that the shield found in a tomb at Palaepaphos-*Kato Alonia* has a diameter of 32 cm and the shield from Palaepaphos-*Skales Tomb 277* has a diameter of 34.5 cm, while the one found at Idalion measures 83 cm in diameter and the other from Delphi 92 cm. In all cases the bronze shields are more or less complete, with their perforated perimeters for fixing onto another material, wood or leather. The question arises: are the two bronze shields from Palaepaphos with such small diameters substitutes, or just very small shields? A bronze round shield found in a Cypro-Archaic tomb at Salamis (Tomb 3) has a diameter of 56 cm.<sup>45</sup> It is unlikely that the Palaepaphos shields were votives, since one expects to find functional arms and armour in tombs of warriors. A bronze shield of a different type found in the Necropolis of Eleuftherna in Crete, with a diameter of 40 cm, was considered by Nikolaos Stampolides to be the lid of a receptacle.<sup>46</sup> We know that there were small shields in Assyria, e.g. those used by soldiers on the reliefs of Tiglath-

Pileser III (744–727 BC),<sup>47</sup> but a shield with a diameter of 32 cm is simply too small to be functional. We may compare the Palaepaphos shields with the two shield bosses from Idalion,<sup>48</sup> complete by themselves, with a diameter of 23.5 and 23.3 cm respectively, and conclude that the two Palaepaphos examples were not actual shields, but shield bosses, constituting the central parts of shields which were of wood or leather. It should be noted that no traces of a grip have been found on these two bronze examples.

Lerat proposed that the *Herzprung* or *Lambda* shield type, which he called *du type d'Idalion*, after the one published in 1885, was of Cypriot origin and that from Cyprus it found its way to the Aegean and to other places, such as the Iberian peninsula, Ireland, Scandinavia, and Central Europe.<sup>49</sup> Lerat<sup>50</sup> also discussed the various interpretations which have been proposed for the characteristic notches on the shields, but found none convincing.

The new Palaepaphos-*Skales Tomb 277, No. 30* shield boss is an important addition to the relatively limited number of examples of this type. The type may have developed in Cyprus during the Cypro-Geometric III period (c. 800 BC). Such objects appear in two sizes: in the size of a real shield, such as the 1885 shield from Idalion and the shield from Delphi, with a diameter between 80 and 90 cm, and in the size of a shield boss, occupying the central part of a shield of wood or leather, with a diameter of c. 30 cm. There are no traces of any bronze shields from Cyprus prior to c. 800 BC.<sup>51</sup> It is possible that the type was introduced to the island from the Near East and developed according to local requirements, but it should be mentioned also that the Achaean immigrants who reached the island at the end of the Late Bronze Age were already using small shields.<sup>52</sup>

The Cypriot origin of this shield type has recently been disputed, “because of the scarcity of the examples found on the island”.<sup>53</sup>

A new bronze shield of the *Herzprung* type (or the Idalion type according to Lerat) was found in the oracle sanctuary of Apollo at Kalapodi (ancient Phokis); the site was previously known as the Sanctuary of Apollo and Artemis.<sup>54</sup> It has a reconstructed diameter of 88 cm and in this respect may be compared with the shields from Idalion and Delphi; it is also

<sup>40</sup> Karageorghis 1963, 273–274, figs. 10–11.

<sup>41</sup> Snodgrass 1964, 55.

<sup>42</sup> Lerat 1980, 93–103.

<sup>43</sup> Lerat 1980, 96–98, figs. 4–6.

<sup>44</sup> Lerat 1980, 98.

<sup>45</sup> Karageorghis 1967a, 36, no. 25.

<sup>46</sup> Stampolides 2003, no. 853.

<sup>47</sup> Collins 2008, 64–65.

<sup>48</sup> Gjerstad *et al.* 1935, pl. 175:1, 3, nos. 133, 298.

<sup>49</sup> Lerat 1980, 102–103; similarly, Partida 2003.

<sup>50</sup> Lerat 1980, 100–102.

<sup>51</sup> Fragments of what was believed to be a shield from Kourion-*Kaloriziki* are now re-attributed to a helmet (Matthäus & Schumacher-Matthäus 2015, 79–81).

<sup>52</sup> E.g. Vermeule & Karageorghis 1982, 108–109, vase X.1.

<sup>53</sup> Aurigny 2016, 225, 230.

<sup>54</sup> Felsch 2007, 226–227, pl. 56, no. 2054; Baitinger 2011, 50–51.

decorated with three zones of “rope” ornament, occupying the space between the V-shaped notch and the outer perimeter. It should be noted that the decorated zones on the smaller shields (the two from Palaepaphos) are cut by the V-shaped notch, except the outer one which runs round the outer perimeter of the shield. Another notable element is the “rope” ornament filling the zones of both the Palaepaphos-Skales Tomb 277 shield and the Kalapodi shield.

From the above descriptions it is obvious that the *Herzprung* type shields resemble one another in their basic characteristics (central boss, notches, encircling zones in *repoussé*—except for the Delphi shield, the decoration of which is engraved), but they are not identical.

With regard to the origin of the *Herzprung* shield type, we do not seem to possess conclusive evidence.<sup>55</sup> We would agree with Lerat that the type may have been exported from the Orient to Cyprus in the 8th century BC but why not also directly to the Aegean and elsewhere? Oriental goods were plentiful in the Aegean during the 8th–7th centuries BC. There is no need for Cyprus to always have been involved in this export trade. It is also possible that the imported prototype inspired local imitations, hence the variations of the derivative elements in all known examples.

#### (ii) Bronze belts, Nos. 9a and 9b (Figs. 18 and 19)

Bronze belts must already have been part of the dress of both men and women in the Bronze Age. Metal belts were known in the Near East from the Middle Bronze Age onwards.<sup>56</sup> In Cyprus a folded bronze belt was found in a tomb at Ayios Sozomenos near Idalion in a 17th-century BC context,<sup>57</sup> and an almost identical one, also found in a Late Cypriot I–II tomb, at Kazaphani, near the northern coast.<sup>58</sup> The excavators of Ayios Sozomenos proposed that their belt may have been made by a Palestinian craftsman working in Cyprus.<sup>59</sup> The Palaepaphos belts are of a different type and should not be considered as a development of the Bronze Age belts. They are the first to be found in Cyprus in a Cypro-Geometric context. A third bronze belt was found at Pyla-Kokkinokremos; it formed part of the Founder’s Hoard (containing objects to be remelted) and is dated to c. 1200 BC.<sup>60</sup> We first identified it as a folded bronze bowl, but on closer inspection it looks like a belt with a loop of wire at one terminal.<sup>61</sup>

Bronze belts were common in neighbouring regions, namely Anatolia and Assyria in the first half of the 1st millen-

nium BC, and were imitated in the Greek world.<sup>62</sup> They differ typologically from one another, the best known being those from Urartu and Phrygia. The Urartian examples, dating to the 8th–7th centuries BC, are richly decorated with incisions and in *repoussé* with mainly pictorial motifs.<sup>63</sup>

We consider the two Palaepaphos belts as having been inspired by Anatolian and Near Eastern prototypes. Cyprus, as we know, had close cultural links with Anatolia and Near East during the 8th century BC. One may say that the Palaepaphos belts are a simplification of the Urartian belts, with a hook at one end and a continuous band without a buckle, and a catchplate at the other end, with three loops fixed on the one side of the band, the one behind the other.<sup>64</sup>

As mentioned already, some Urartian belts found their way to the Aegean.<sup>65</sup> Our Palaepaphos belts, however, may not be considered as imports but as imitations. They are not decorated pictorially, but with finely engraved abstract motifs. Belts similarly decorated are common in Assyrian iconography,<sup>66</sup> and on some large-scale painted terracotta representations from locality *Toumba* at Salamis, the publication of which is forthcoming. We mention in particular the belt of a hunter on an Assyrian relief, of a form strikingly similar to that of the Palaepaphos belts, also decorated with engraved motifs (Fig. 19). Cypriot bronze work of the 8th century BC was strongly influenced by Urartu and Assyria, as illustrated by examples from Salamis Tomb 79. Edith Porada, commenting on the Salamis bronzes, observed that “the Urartian elements in the basically Assyrianizing design indicate the hand of a Urartian workman or, perhaps more likely, one trained in Urartian design, who sought employment in Cyprus after the decisive defeat of the Urartian army in North Syria at the beginning of the reign of the Assyrian king Tiglath-pileser III (744–727 B.C.).”<sup>67</sup> One may say the same about the bronze helmet from a Cypro-Achaic tomb at Palaepaphos with a simplified Urartian decoration.<sup>68</sup> It is also likely that Cypriots themselves tried to imitate Urartian belts but without their pictorial ornament.<sup>69</sup> There must also have been plain Assyrian belts, such as two from Nimrud, which are round at one end with a circular hole centrally positioned, and at the other end probably cut off square; an embossed rib follows the outline of the belt and along the edge there is a series of pierced holes, so that the

<sup>55</sup> Felsch 2007, 226–227.

<sup>56</sup> For a general survey see Moorey 1967, 84–85.

<sup>57</sup> Overbeck & Swiny 1972, 8, figs. 7–8, ill. 5.

<sup>58</sup> Karageorghis 1972, 1011, 1015, fig. 13.

<sup>59</sup> Overbeck & Swiny 1972, 20–23.

<sup>60</sup> Karageorghis & Demas 1984, 38, no. 66.

<sup>61</sup> For a better photograph see Karageorghis 2002, 85, fig. 164, top left.

<sup>62</sup> For a general account see Völlig 1998 and Vassileva 2005.

<sup>63</sup> For a short account see Kellner 1991.

<sup>64</sup> For a short account of Urartian belts and a good illustration see Vassileva 2012, 324–325, fig. 10; see also Collins 2008, 70, detail reproduced in fig. 9.

<sup>65</sup> E.g. Coulié & Filimonos-Tsopotou 2014, 210, no. 39.

<sup>66</sup> E.g. Collins 2008, 35, 70, 82.

<sup>67</sup> Karageorghis 1973, 86.

<sup>68</sup> Karageorghis 1967b, 234–235.

<sup>69</sup> Cf. Kellner 1991, 158–159.

belt could be sewn to a leather or cloth backing.<sup>70</sup> The two ends were probably joined by a thong. Such belts were worn by Assyrian soldiers from the reign of Ashurnasirpal II (883–859 BC) to Ashurbanipal (668–631 BC).<sup>71</sup>

It is not easy to say whether a particular belt was worn by a woman or by a man when found in a tomb, or whether it was dedicated to a male or a female divinity, when found in a sanctuary.<sup>72</sup> We assume that the two Palaepaphos belts, found in a tomb together with gifts mostly offered to a warrior, may be considered as part of a warrior's attire. Homer mentions in the *Iliad* a “ζωστήρα παναιόλον” (“flashing girdle”) of silver, worn by Agamemnon (*Il.* 11.236) and another belonging to Nestor (*Il.* 10.77). Bellerephon's girdle was “Φοίνικι φαινός” (“brilliant red”), probably of copper. It is not easy either to say whether such belts were worn regularly or served only for ceremonial occasions.<sup>73</sup> They were worn by high-class warriors and may have been objects offered as gifts. The belts from Tomb 277 may add to the “Homeric” from Palaepaphos, illustrating the rich gifts which accompanied a noble warrior to his grave, like the bronze shield, the iron swords, and the iron *obeloi* found in the same tomb.

### (iii) Bronze mace-heads, Nos. 102 and 103

Bronze moulded mace-heads of the tubular type with a wooden shaft appear in Cyprus in the Cypro-Geometric I period.<sup>74</sup> At Palaepaphos there was one previously known example from Cypro-Geometric I Palaepaphos-*Skales* Tomb 188, no. 34.<sup>75</sup> The examples from Tomb 277 are typologically comparable and contemporaneous (Cypro-Geometric III) with those found in Amathus.<sup>76</sup> Nota Kourou<sup>77</sup> plausibly suggested that these mace-heads were used as insignia by prominent people performing a managerial function. They were certainly not “royal sceptres” like the gold and enamel sceptre from Kourion-*Kaloriziki* Tomb 40.<sup>78</sup> In any case we know very little of those who held political power in Cypriot cities during the Early Iron Age. The system of the *wanax* of the Mycenaean period must have been eclipsed or modified with the collapse of the palace system on the Mycenaean Mainland. The *basileis* gradually became representatives of local or regional élites, who shared power or controlled bronze production over cer-

tain privileged bodies.<sup>79</sup> One of those privileged bodies may have been involved in the administration of local sanctuaries, in Palaepaphos the renowned Sanctuary of Aphrodite.<sup>80</sup> Kourou<sup>81</sup> suggested a North Syrian development of the Cypro-Geometric knobbed type of mace-head.

It is interesting that *No.* 103 preserves part of its wooden shaft, like one of the mace-heads from Amathus,<sup>82</sup> found in a Cypro-Geometric III tomb.

### (iv) Two large bronze bowls with handles, Nos. 1 and 2 (Figs. 3 and 17)

Such large bowls, often with lotus bud handles, which may have been used as cauldrons or basins, are found in Cyprus but were also exported.<sup>83</sup> They held liquids, including wine.<sup>84</sup> Metal basins had a long tradition in the Near East, Anatolia, and Cyprus and occur in palaces and sanctuaries.<sup>85</sup> The Cypriot examples, with loop handles, were no doubt made on the island.

An early Iron Age example (Cypro-Geometric I if not Late Cypriot IIIB) was found in Tomb BA at Prinias in Crete; this is a pit burial with a single cremation, which is dated by its pottery to the Subminoan period.<sup>86</sup> The type is a variant of the more common lotus bowls, which are known from the tombs at Palaepaphos-*Skales* and Palaepaphos-*Plakes* in well-dated Cypro-Geometric contexts. The bowls from Palaepaphos-*Skales* Tomb 277 show that the type continued into the Cypro-Geometric III period.<sup>87</sup>

### (v) Small hemispherical handleless bowls, Nos. 3a, 3b, 6, 7, 10, and 32 (Figs. 3, 4, and 17)

Such bowls are very common in Cyprus from the end of the Late Bronze Age onwards. They are particularly common at Palaepaphos during the Cypro-Geometric and later periods.<sup>88</sup> The horizontal ridge inside below the rim of some of these bowls may be purely ornamental. Few such bowls were

<sup>70</sup> Curtis 2013, 122, pl. 94.

<sup>71</sup> Curtis 2013, 122.

<sup>72</sup> Cf. Vassileva 2005, 94–96.

<sup>73</sup> Cf. Vassileva 2005, 97.

<sup>74</sup> For a detailed typological discussion see Kourou 1994.

<sup>75</sup> Karageorghis & Raptou 2016, 41–42.

<sup>76</sup> E.g. Kourou 1994, 217, fig. 2, nos. 2, 5.

<sup>77</sup> Kourou 1994, 214.

<sup>78</sup> Karageorghis 2002, 134–135.

<sup>79</sup> Crielaard 2011, 83–85, in agreement with Kourou 1994, referred to above.

<sup>80</sup> For a discussion of this proposal and references to Weingarten, Iacovou, and others see Crielaard 2011, 85.

<sup>81</sup> Kourou 1994, 211.

<sup>82</sup> Kourou 1994, fig. 2, no. 5.

<sup>83</sup> Cf. Karageorghis *et al.* 2014, 197.

<sup>84</sup> Cf. Crielaard 2015, 355–358.

<sup>85</sup> Crielaard 2015, 355–358.

<sup>86</sup> Matthäus 2016, 185, fig. 5.

<sup>87</sup> For bronze bowls of a rather small size with up-curving horizontal loop handles from Palaepaphos-*Skales*, see Karageorghis & Raptou 2016, 91. For examples with struts “bridging” the handles to the body, see Karageorghis 1983, 75 and no. 116; see also Matthäus 2016, 186–187, fig. 12, from Prinias in Crete, but of Cypriot origin. For a further discussion on Palaepaphos-*Plakes* Tomb 142, no. 1, see Karageorghis & Raptou 2014, 39–40, type (i).

<sup>88</sup> Karageorghis 2014, 74, 117.

exported to the Aegean. They were first identified by Hartmut Matthäus.<sup>89</sup>

(vi) **Bronze spearhead, Nos. 100 and 101 (Figs. 5, 15, and 20)**  
This type, with a very narrow blade and a prominent broad midrib continuing straight to the tip has been named by Christian Vohhoff the “bayonet shape”. Such spearheads, used as thrusting weapons, were common throughout Cyprus during the whole of the Cypro-Geometric period.<sup>90</sup> The Palaepaphos-*Skales* cemetery has yielded several such spearheads, mostly of Cypro-Geometric I date.<sup>91</sup> The almost angular edges of the blade of our spearhead could certainly have inflicted a serious wound. This particular shape is currently unique in Cyprus.

(vii) **Bronze ring, No. 47a (Fig. 15)**

This is an enigmatic item. It could not be a ring used round the end of the socket of a spearhead, as No. 101 of spearhead Nos. 100 and 101, because it is too thick and circular in section. The added ring round the socket of a spearhead is flat in section. It is also too heavy to be worn as a finger ring. A similar ring from *Kaloriziki* Tomb 40 was described by Matthäus and Gisela Schumacher-Matthäus<sup>92</sup> as probably a finger ring. Could it be an attachment for the wooden part of shield No. 30 or the wooden shaft of sword No. 8?

## Iron

(i) **Iron swords, Nos. 8 and 44 (Figs. 15 and 20)**

Several swords of this type have been found in the tombs of Palaepaphos.<sup>93</sup> They are of the Naue II type, which was also made in Cyprus from the end of Late Cypriot III to Cypro-Geometric III and even in Cypro-Archaic I. These weapons were intended for the aristocratic élite. Assyrian warriors were also fond of such long swords.<sup>94</sup>

The nearest parallel for swords Nos. 8 and 44 was found in Palaepaphos-*Skales* Tomb 210, no. 11; it is 64.5 cm long and was found in a Cypro-Geometric III context.<sup>95</sup>

Similar swords, dating from Cypro-Geometric I to Cypro-Archaic I have also been found in tombs at Amathus. They betray their ultimate origin in the bronze Naue II type cut-and-thrust weapon.<sup>96</sup> The type is of central European origin

and was introduced to Greece, from where it reached Cyprus at the end of Late Bronze Age. It became very popular on the island throughout the Cypro-Geometric period and even at the beginning of Cypro-Archaic I.<sup>97</sup>

(ii) **Iron javelin, No. 35 (Fig. 15)**

The Palaepaphos tombs have yielded several iron javelins. They were probably used for hunting or for athletic games.<sup>98</sup>

(iii) **Iron knives, Nos. 53 and 54 (Fig. 15)**

The Palaepaphos tombs have yielded numerous such knives, with a wooden or bone handle.<sup>99</sup> They first appear at the site in the Cypro-Geometric I period. There is an earlier example, of Late Cypriot IIIA date, from Enkomi.<sup>100</sup> The type may have been introduced to Cyprus from the Levant. Knives were used as personal weapons but also to kill and skin animals for sacrifice.

(iv) **Iron obeloi, Nos. 45, 46 and 47 (Fig. 15)**

Since their correct identification several such *obeloi* have been identified from funerary contexts in various parts of the island, particularly in the area of Palaepaphos, but very rarely together with firedogs.<sup>101</sup>

## Gold

(i) **Gold plaques decorated with a Hathoric head, Nos. 18–21, 48, and 96 (Fig. 14)**

Gold plaques with identical or very similar embossed decoration have been found in the necropoleis of Palaepaphos.<sup>102</sup> Similar plaques were also found elsewhere in Cyprus.<sup>103</sup> The head of Hathor may be associated with Astarte or may represent Astarte herself.<sup>104</sup>

*Loures*, found in Cypro-Geometric III contexts, in Violaris & Stefani 2017, 243, fig. 11a, and 247–248, fig. 17a. They have ivory handles fixed with bronze rivets.

<sup>89</sup> Cf. Violaris & Stefani 2017, 243, 247.

<sup>90</sup> Karageorghis & Raptou 2016, 45 (ii).

<sup>91</sup> Cf. e.g. Karageorghis & Raptou 2014, 62 (i); 2016, 37–38 (ii).

<sup>92</sup> Courtois 1984, 26–27.

<sup>93</sup> For a discussion and bibliography see Karageorghis & Raptou 2014, 62–63 (v).

<sup>94</sup> Palaepaphos-*Skales* Tomb 79, nos. 6–8: Karageorghis 1983, 249, pl. 155:6–8; Palaepaphos-*Plakes* Tomb 142, nos. 6–8, Tomb 145, nos. 32, 34, 35, 45, Tomb 146, nos. 102–105: Karageorghis & Raptou 2014, 40–41, 74, 89.

<sup>95</sup> E.g. in Lapithos Tomb 403, Gjerstad *et al.* 1934, pl. 44:1, 3, 41.

<sup>96</sup> For the function of such plaques see Karageorghis 1983, 174–175. For a comprehensive study see Kontomichali 2002.

<sup>89</sup> Matthäus 1985, 109–112; see also Matthäus 2014, 71–72.

<sup>90</sup> Vohhoff 2013, 199–201.

<sup>91</sup> Cf. Vohhoff 2013, 200, no. 32.

<sup>92</sup> Matthäus & Schumacher-Matthäus 2015, 49–50.

<sup>93</sup> Cf. Karageorghis & Raptou 2014, 74, nos. 61, 67.

<sup>94</sup> See e.g. Collins 2008, 118–120, 132.

<sup>95</sup> Karageorghis & Raptou 2016, 91.

<sup>96</sup> For a detailed discussion see Snodgrass 1981, 128–134 and Macdonald 1992, 43–46. See also recently published examples from Amathus-

**(ii) Rectangular thin sheets of gold, plain, Nos. 34a–e and 36a–c**

Similar sheets were found in a warrior's tomb at Palaepaphos, dating to the Cypro-Archaic I period.<sup>105</sup> They were usually sewn on clothing as ornaments, not only in Cyprus, but also in the Near East. Some were decorated with embossed motifs. The Queens' Tombs at Nimrud demonstrate very clearly how the garments of members of the royal family were decorated, with stripes of embossed sheets of gold.<sup>106</sup>

**(iii) Dome-shaped thin sheets of gold, Nos. 11–17 and 97 (Fig. 14)**

These probably covered large buttons of a hard material, on which they were fixed through the two opposed holes near their perimeter. Similar objects were found in Palaepaphos-Skales Tomb 69, nos. 16–19, 20, 77, and 78, in a Cypro-Geometric I–III context.<sup>107</sup>

**(iv) Gold mouth-pieces, Nos. 22 and 95 (Fig. 14)**

Palaepaphos tombs have yielded similar mouth-pieces, but with simple engraved or *repoussé* decoration.<sup>108</sup>

**(v) Gold-plated (?) earring, No. 23 (Fig. 14)**

This is a rather rare type, but not unknown at Palaepaphos.<sup>109</sup> A similar earring (again not in a pair) was found in Palaepaphos-Plakes Tomb 148, no. 24,<sup>110</sup> also dating to the Cypro-Geometric III period. We identified it as gold-plated.<sup>111</sup>

**(vi) Gold pin, No. 50 (Fig. 14)**

Several such pins have been found in tombs at Palaepaphos, mainly of the Cypro-Geometric III period.<sup>112</sup> For the technique of making these pins, see Elizabeth Goring.<sup>113</sup>

**Clay****(i) Clay bathtub, No. 33 (Fig. 13)**

Six bathtubs have been found up to now in tombs at Palaepaphos, dating to the Cypro-Geometric I and III periods. Two

are of limestone and four of clay.<sup>114</sup> It is interesting to note that most of the bathtubs of the Cypro-Geometric period were found in the south-western part of Cyprus in the area of Palaepaphos.

We have argued on several occasions that bathtubs found in tombs were offerings to the dead of the aristocratic élite, who would have enjoyed this luxury during their lifetime.<sup>115</sup>

One may argue that bathtubs, like bronze cauldrons, were used for ritual purposes, e.g. for cleansing the corpse before the *prothesis* (a form of the custom of lying in repose in ancient Greece), but also for domestic purposes. They have been found in settlements of the 13th–12th centuries BC, e.g. at Enkomi, Pyla-Kokkinokremos, and Maa-Palaeokastro, without any association with religious or funerary ritual.<sup>116</sup> A clay bathtub, however, of Late Cypriot III date, was found in the Sanctuary of Aphrodite at Palaepaphos, obviously associated with ritual.<sup>117</sup>

**(ii) Clay saucer-shaped lamp, No. 67 (Fig. 13)**

This type of lamp has a long history in the archaeological record of Cyprus. It appeared in the Late Bronze Age at Enkomi and elsewhere,<sup>118</sup> and occurs throughout the Cypro-Geometric and Cypro-Archaic periods.<sup>119</sup>

**Bone****(i) Worked animal astragali, No. 37 (Fig. 14)**

Numerous sites in Cyprus have yielded worked animal astragali, dating from the Late Cypriot to the Cypro-Geometric periods.<sup>120</sup> Quite a few were found in funerary contexts in the area of Palaepaphos.<sup>121</sup> They were mainly used as gaming pieces and have been found in settlements, sanctuaries, and tombs. Playing with astragali is well-known from Homeric epic (e.g. *Il.* 23.88).<sup>122</sup>

The astragali from Tomb 277 have been studied by Dr Anna Spyrou, whose brief report follows.

A group of 25 astragali (knuckle-bones) was retrieved from Tomb 277 at Palaepaphos-Skales. Most of them are intact, although a number of specimens presented poor bone surface conditions due to post-depositional events. Unsurprisingly the majority of astragali (N=23) have been assigned to sheep/

<sup>105</sup> Karageorghis 1967b, 237, 243, fig. 22, nos. 2, 3, 6, 7.

<sup>106</sup> Hussein 2016, 21–22, 37, pls. 77, 151.

<sup>107</sup> Karageorghis 1983, 174; cf. also Decaudin 1987, 204, no. 44, with further references.

<sup>108</sup> Karageorghis & Raptou 2014, 89 (v); see also Karageorghis 1983, 230, no. 82.

<sup>109</sup> For its technique see Goring 1983, 420.

<sup>110</sup> Karageorghis & Raptou 2014, 101–102, no. 24.

<sup>111</sup> Cf. also Laffineur 1992, pl. 1, Tomb 229/58, from Amathus.

<sup>112</sup> E.g. Karageorghis & Raptou 2014, Palaepaphos-Plakes Tombs 135, 142, 145.

<sup>113</sup> Goring 1983, 421.

<sup>114</sup> For a discussion see Karageorghis 1983, 435–438; Karageorghis & Raptou 2014, 38–39; 2016, 91, 107.

<sup>115</sup> Cf. e.g. Karageorghis & Raptou 2014, 38–39.

<sup>116</sup> Cf. also Crielaard 2016, 73.

<sup>117</sup> Maier & Karageorghis 1984, 96, fig. 78. See also Collard 2008, 40–46.

<sup>118</sup> Dikaios 1969, 231, 240, 274, 290.

<sup>119</sup> Gjerstad 1948, 169, 223, fig. 37, type 3.

<sup>120</sup> See recently Reese 2016, 411–416.

<sup>121</sup> See e.g. Karageorghis & Raptou 2014, 92; Croft 2016, 149–150.

<sup>122</sup> For a recent reference to the use of astragali, see Erlich 2017, 44–46.

goat (*Ovis/Capra* sp.) while deer (*Dama* sp.) bones only represent a marginal component of the assemblage (N=2). Even though it is possible to distinguish sheep and goat, following the criteria of Joachim Boessneck *et al.*,<sup>123</sup> this was beyond the scope of this paper and future studies will provide further zoo-archaeological information.

Of particular interest are the modifications observed on several specimens. The single ovicaprid and two fallow deer (*Dama dama*) astragali have been smoothed on their dorsal and plantar surfaces, while two specimens belonging to sheep/goat were drilled on their plantar surface.

The virtual absence of any cut-marks combined with the presence of human modifications on some of the specimens and their find location—isolated from any other animal remains—confirms their non-subsistence-related function, suggesting that those skeletal elements were most often used for games of chance, but also served a ritual function in cultic and funerary contexts.<sup>124</sup>

## Chronology

While there is some doubt about the date of the shallow bowls of Black-on-Red ware (types (xii) and (xiii)), the rest of the pottery is of common Cypro-Geometric III date (c. 900–750 BC). Some of the metal objects, e.g. the large bowl with struts strengthening the handles, may be of earlier date, but objects of the Cypro-Geometric I–II periods (c. 1050–900 BC) could have survived, as heirlooms, down to Cypro-Geometric III. In view of the fact that there were several burials in the tomb, we propose that all burials may fall within Cypro-Geometric III.

## General remarks

Tomb 277 yielded a large number of vases of rather ordinary types, especially small drinking vessels of a repetitive character. Many of these are deformed and of a poor ceramic quality. The tomb, however, contained an extraordinarily large number of metal objects, namely bronze vessels but also bronze and iron weapons which usually accompany male “heroic” burials. There is also an abundance of gold jewellery, namely thin gold plaques, both with embossed decoration and plain, which may suggest at least one female burial. It is not uncommon to have in the same tomb burials of warriors and of women belonging to aristocratic families, usually the spouses of the

deceased male. In some cases, they were given secondary cremation burials, as in *Kaloriziki* Tomb 40.<sup>125</sup>

No bronze cremation krater was found in Tomb 277.<sup>126</sup> We have, however, evidence for a secondary cremation burial, namely some cremated remains found in a bronze bowl placed in a bathtub (see the excavation report). Secondary cremation burials are known from other tombs at Palaepaphos.<sup>127</sup> Such burials date mainly to the early Cypro-Geometric period, except for the cremation burial of a “princess” in Salamis Tomb 1, which dates to the early Cypro-Archaic I period (c. 750–600 BC).<sup>128</sup>

As mentioned, Tomb 277 was used for multiple burials throughout the Cypro-Geometric III period (see excavation report). Although the pottery which it contained is not of particularly fine quality, as already noted, the metal objects which it contained are extraordinary. In this respect we may compare the funerary gifts of Tomb 277 with those of the built tombs of the same period recently discovered at *Loures* at Amathus. These tombs, bearing numbers 964 and 967 and for which there is only a preliminary report,<sup>129</sup> contained iron weapons and pottery comparable with those found in Tomb 277. In previous publications of material from Palaepaphos we noticed the similarity between the funerary gifts found at Palaepaphos and those found at neighbouring Kourion.<sup>130</sup> A new site may now be included for comparison, namely Amathus. It is natural that these three important urban coastal centres should have communicated and traded with each other and also exercised influence on one another. Their inter-communication may have been by sea rather than by land.<sup>131</sup> Amathus was built in the 11th century BC—the period when Palaepaphos and Kourion experienced a high degree of prosperity—and developed commercial relations both with the Aegean and the Syro-Palestinian coast throughout the Cypro-Geometric period and well into the Cypro-Archaic period.<sup>132</sup> Its proximity to the copper mines of Kalavassos, as well as the enterprising character of the Phoenician component of its population,<sup>133</sup> may have contributed to its economic growth. The Phoenician imported pottery from the south-west of Cyprus (Palaepaphos, Episkopi, and Amathus) is well-known.<sup>134</sup> The increasing numbers of Phoenician vases from Palaepa-

<sup>123</sup> Boessneck *et al.* 1964.

<sup>124</sup> Gilmour 1997.

<sup>125</sup> Crielaard 2016, 69–72.

<sup>126</sup> For bronze cremation kraters and bibliography, see Papasavvas 2017, 151–153.

<sup>127</sup> See Karageorghis 1983, 7; Karageorghis & Raptou 2016, 105–106; Raptou 2017, 224.

<sup>128</sup> Dikaios 1963, 144–146.

<sup>129</sup> Violaris & Stefani 2017.

<sup>130</sup> Karageorghis & Raptou 2016, 101–107.

<sup>131</sup> Iacovou 2017, 196–197.

<sup>132</sup> Hermary & Iacovou 1999, 159–160.

<sup>133</sup> See Violaris & Stefani 2017, 238.

<sup>134</sup> Bikai 1987.

phos (eight items from Tomb 277) may be indicative of the role played by the Phoenicians in this part of the island during the Cypro-Geometric period, especially in Cypro-Geometric III.

Notably, the custom of cremation burial in bronze or pottery urns is visible both at Palaepaphos and Kourion in Cypro-Geometric I, though it remained rather rare.<sup>135</sup> The placement of cremated remains of adults in pottery urns has been observed at Amathus during the Cypro-Archaic period.<sup>136</sup> This, however, follows a Phoenician tradition,<sup>137</sup> where cremations are found in an urnfield, whereas in Palaepaphos a foreign custom has been amalgamated with local traditions. It will be interesting to compare the burial customs of these three urban centres from the beginning of the Cypro-Geometric period down to the Cypro-Archaic. Funerary evidence is of decisive importance in studying social, economic, and cultural conditions as the intensive exploration of the necropoleis at Palaepaphos and Salamis has demonstrated.

Jan Paul Crielaard has recently published an interesting review of metal urn cremations in Early Iron Age Greece, Cyprus, and Italy,<sup>138</sup> and pointed out that there is a strong Cypriot connection in these burials, in several of which Cypriot bronze amphoroid kraters were found, namely in the Protogeometric building at the cemetery of Toumba, Lefkandi, and in Pantanassa Amariou in Crete. Several similar amphoroid kraters, richly decorated in *repoussé* are known from Cyprus and their numbers have increased considerably as a result of extensive excavations in the necropoleis of Palaepaphos.<sup>139</sup> Crielaard points out that in both Cyprus and the Aegean metal urn cremations continued in small numbers during the early Cypro-Geometric period and somewhat larger numbers during the 8th–7th centuries BC. He suggests that in both periods the Aegean urn cremations testify to Cypriot influence or involve Cypriot imports. He added that similar concepts of heroizing burial rites may have existed in Cyprus and that Cyprus may have been an important source of inspiration for this type of burial ritual. He concludes his discussion by wondering “what this tells us about the circulation and creation of epic poetry.”<sup>140</sup>

We believe that this problem should be examined within the framework of the general political, social, and cultural conditions which prevailed in Cyprus and the rest of the Mediterranean from the end of the Late Bronze Age to the so-called Orientalizing period. Greek immigrants arrived in

Cyprus after the collapse of the Mycenaean world (c. 1200 BC) and later. By the 11th–10th centuries BC we observe a flourishing élite society at sites like Palaepaphos and Kourion. At Palaepaphos we witness the earliest use of the Greek language and a number of funerary rites such as cremation as well as the introduction of Mycenaean funerary architecture.<sup>141</sup>

It is now broadly accepted that social conditions prevailing in Cyprus in the 11th–10th centuries BC were not different from the Aegean.<sup>142</sup> We believe that the Cypriot bronze amphoroid kraters and other imported objects which are found in secondary cremation burials in the Aegean do not prove the influence of a Cypriot funerary ritual, but simply indicate how much Aegean people valued these Cypriot products which they imported as exotic goods.<sup>143</sup>

The situation differs in the 9th–8th centuries BC when “Homeric”, as they are known, burial customs begin to appear, often before Homer, not only in the Aegean and Cyprus, but in the whole of the Mediterranean. The role of the Phoenicians in spreading these customs may not be negligible; they are no doubt responsible for the character of the rich burials in the “royal” necropolis of Salamis, with ivory beds and thrones, bronze cauldrons, and silver bowls, and in faraway places like Huelva in Spain, with chariots and horses.<sup>144</sup> This “Homeric” culture of the 9th–8th centuries BC, which is encountered in a lively manner in the main urban centres of Cyprus, including Palaepaphos, is characteristic of the multicultural societies flourishing in many parts of the Mediterranean, a culture which is described in Homeric epic, with heroes who “lived away from home long enough to acquaint themselves with customs of men in faraway places.”<sup>145</sup> These are the people who were responsible for the growth of the Orientalizing period of culture in the Mediterranean, and Cyprus had a pivotal role to play in its development and diffusion.

As already mentioned, Palaepaphos has yielded some extraordinarily rich tombs dating to the 11th and 10th centuries BC, illustrating this period of wealth and prosperity. What was the source of this wealth? Maria Iacovou has proposed that it was the exploitation of the copper mines along the south-western slopes of the Troodos mountains. This is now being partly substantiated thanks to recent research carried out by the Palaepaphos Urban Landscape Project.<sup>146</sup>

The contents of Tomb 277 and some other tombs from the cemetery of Palaepaphos-*Skales* bear witness to the fact that Palaepaphos was prosperous for a long period and this may in-

<sup>135</sup> See Matthäus & Schumacher-Matthäus 2015, 82.

<sup>136</sup> Cf. Christou 1998.

<sup>137</sup> See Violaris & Stefani 2017, 238.

<sup>138</sup> Crielaard 2016.

<sup>139</sup> Karageorghis & Raptou 2016, 117–124, with references.

<sup>140</sup> Crielaard 2016, 76.

<sup>141</sup> For a general discussion see Karageorghis 2002, 115–117.

<sup>142</sup> Cf. Petit 2015, 362; Sherratt 2017, 46–47.

<sup>143</sup> See also Papasavvas 2017.

<sup>144</sup> See Karageorghis 2014.

<sup>145</sup> Crielaard 2016, 77. For a recent discussion see Janes 2013.

<sup>146</sup> Iacovou 2017, 200–203.

dicate that the Palaepaphians continued exploiting the copper mines as late as the Cypro-Geometric III period if not later.

The information which we have derived from the necropoleis of Palaepaphos is inestimable for the reconstruction of the history of this region throughout the Cypro-Geometric period, for which other evidence is still scanty. The systematic excavation of its cemeteries and the prompt publication of the results are of great importance and it is disturbing to observe that these cemeteries have suffered considerably in recent years as a result of levelling operations and the systematic looting of tombs.

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## Appendix Analysis of wood specimens from Palaepaphos-Skales Tomb 277

By Maria A. Socratous<sup>147</sup>

### INTRODUCTION

This appendix presents preliminary results of the study of four wood fragments from Tomb 277 at Palaepaphos-Skales, all of which have been mineralized by iron and copper corrosion in direct contact with a metal object.<sup>148</sup> The associated metal grave goods include a long iron sword, *No. 8*, with traces of a wooden sheath, and a bronze spearhead, *No. 100*, and two mace-heads, *Nos. 102* and *103*, the latter three all with remnants of wooden shafts. The preservation of mineralized wood

makes these objects unique in Cyprus. The tomb dates to Cypro-Geometric III (c. 900–750 BC).

In Cyprus, remnants of non-charred wood are usually poorly preserved in archaeological deposits,<sup>149</sup> limiting our understanding of this important raw material and component of past socio-economic systems on the island. Systematic studies of wood and especially charcoal have begun to appear only recently.<sup>150</sup>

This study aims to identify the species of wood used for the four artefacts since this has a bearing on the operational characteristics of the tool.

### MATERIAL AND METHODS

Samples of mineral replaced wood from the burial chamber of Tomb 277 were collected by hand during excavation or artefact conservation and cleaning. They were subsequently examined by the author for wood identification at the Cyprus Museum in Nicosia. Samples were taken either from detached parts of the objects or from crumbling materials lying around the object. In addition, traceologic analysis was performed to identify and record any worked surfaces and tool marks preserved on the artefacts.

At the laboratory, specimens were fractured manually along the three planes of observation (transversal, longitudinal tangential, longitudinal radial). Anatomical features were observed with the assistance of a light reflecting compound microscope, at magnifications ranging from 50x to 600x. The taxonomic identification was achieved using keys and atlases of wood anatomy<sup>151</sup> and by comparison with a charcoal reference collection. Where possible, digital images of the specimens were acquired and stored on a computer. All wood identifications were performed according to standard procedures. During these analyses, some information on the wood conservation state was noted. The distinctive anatomical features observed, which vary in different woody species,<sup>152</sup> led to the identification of the following taxa: *Alnus* sp. (alder),<sup>153</sup>

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<sup>148</sup> See Socratous forthcoming.

<sup>149</sup> Exceptions are the waterlogged timbers from the Kyrenia and Mazotos shipwrecks and mineralized wood from the ancient mines in Cyprus.

<sup>150</sup> See Asouti 2003; Kassianidou & Socratous 2011, 193–195; Socratous 2013, 1–119; Thiébault 2003, 221–230; Socratous *et al.* 2015, 377–384; Ntinou 2013.

<sup>151</sup> Jacquot *et al.* 1973; Schweingruber 1990; Schoch *et al.* 2004; Crivellaro & Schweingruber 2013.

<sup>152</sup> Chabal *et al.* 1999, 45–47.

<sup>153</sup> Schweingruber 1990, 211; Crivellaro & Schweingruber 2013; Tsintides *et al.* 2002, 111.

*Populus/Salix* (poplar/willow),<sup>154</sup> *Prunus* cf. *avium* (wild cherry),<sup>155</sup> and *Quercus alnifolia/coccifera* (evergreen oak).<sup>156</sup>

## WOOD ANALYSIS RESULTS AND WOOD-RELATED PROPERTIES

One of the main objectives of the study was to establish whether particular woods were used for the manufacture of specific artefacts, such as the sheath of an iron sword or the shaft of a mace-head or spearhead.

Although not all anatomical features could be clearly observed due to poor preservation, all the samples could be identified to species or genus level. The results of the analysis are presented in Table 2. Anatomical features and distinctive characteristics visible along the three anatomical sections of observation are described below. A total of four *taxa* out of four wood samples was identified.

The wooden shaft of a mace-head, *No. 102*, was identified as wild cherry, *Prunus* cf. *avium*. Diagnostic features comprise semi-ring porous wood with radial pore files and pore clusters regularly distributed. Heterogeneous uniseriate and three–four-cell-wide rays with an average height of multiseriate rays of 17 to 37 cells were observed. Vessel-ray pits with distinct borders, simple perforation plates, and spiral thickenings in vessels are also visible.<sup>157</sup>

The heartwood of wild cherry varies from light to dark reddish-brown and has a moderate natural lustre. The wood has a fairly uniform texture and very good machining properties. It is also moderately strong and heavy with good shock resistance. It is appreciated because of its high strength, high resistance against abrasion, flexibility, and vibration damping.<sup>158</sup>

In contrast, the wooden shaft from the second mace-head, *No. 103* (Fig. 14), was identified as alder, *Alnus* sp. The wood is diffuse to semi-ring porous. Pores are densely packed in radial multiples and clusters with scalariform perforation plates with 15 to 22 bars, homogeneous uniseriate rays with an average height of 10 to 17 cells and short rays with two cells and relatively small ray-vessel pits.<sup>159</sup> Some other diagnostic microscopic features were harder to observe because most of the cells were deformed or disintegrated.

According to Fritz Hans Schweingruber, the species *Alnus orientalis*, *A. cordata*, *A. glutinosa* and *A. incana* cannot be dis-

Table 2. Mineralized wood samples from Tomb 277.

Sample no.	Artefact Museum no.	Identification	Item
T 277/103	RRKM 602-T 277/103	<i>Alnus</i> sp. (alder)	shaft of mace-head
T 277/102	RRKM 602-T 277/102	<i>Prunus</i> cf. <i>avium</i> (wild cherry)	shaft of mace-head
T 277/100	RRKM 602-T 277/100	<i>Quercus alnifolia/coccifera</i> (Cyprian golden oak or kermes oak)	shaft of bronze spearhead
T 277/8	RRKM 602-T 277/8	<i>Populus/Salix</i> (poplar/willow)	sheath of iron sword

tinguished on the basis of their wood anatomy.<sup>160</sup> Nevertheless, based on the ecology and biogeography of *Alnus* in Cyprus and on the cautious assumption that this object was made in Cyprus, the sample can be assigned to *Alnus orientalis*.<sup>161</sup>

Alder wood is very soft and rarely used for non-specific artefacts. Its colour tends to be a light tan to reddish brown. It loses about a third of its weight and a twelfth of its bulk in drying, but does not warp subsequently, so that it is suitable for turning and carving. Although it has relatively high shrinkage, it is very dimensionally stable after drying. The lightness of this wood together with its resistance to splitting and cracking could have been among the advantages of using this timber.<sup>162</sup>

The remains of the wooden shaft which was in the socket of bronze spearhead *No. 100* (Fig. 15) was identified as oak, *Quercus* sp. evergreen type. Diagnostic features comprise: diffuse-porous wood, vessels in dendritic pattern predominantly solitary, tangential bands of apotracheal parenchyma, simple perforation plates, vascular tracheids with circular bordered pits and uniseriate and multiseriate rays.<sup>163</sup> The wood shows several types of biological alteration, such as decay by fungal colonies (causing soft rot) and longitudinal and transversal cracking and vitrification.

Durability of this heartwood is very high due to tannin content, which improves resistance to microbial deterioration.<sup>164</sup> The wood is worked fairly easily with hand and machine tools and finishes well in most operations. From archaeological evidence we know that oak wood was often used in antiquity for the fabrication of the bent handles of tools<sup>165</sup> and planks, and more rarely for receptacles.

Differentiation based only on wood anatomy between evergreen oaks is very difficult and often impossible. How-

<sup>154</sup> Schweingruber 1990, 673, 675; Crivellaro & Schweingruber 2013; Tsintides *et al.* 2002, 104, 107.

<sup>155</sup> Schweingruber 1990, 631, 635, 643; Crivellaro & Schweingruber 2013; Tsintides *et al.* 2002, 195.

<sup>156</sup> Schweingruber 1990, 402–403; Crivellaro & Schweingruber 2013; Tsintides *et al.* 2002, 115–116.

<sup>157</sup> Schweingruber 1990, 631, 643.

<sup>158</sup> Meier 2007. <http://www.wood-database.com/sweet-cherry/>; Klein *et al.* 2016, 199.

<sup>159</sup> Schweingruber 1990, 211.

<sup>160</sup> Schweingruber 1990, 211.

<sup>161</sup> Meikle 1977, 1473.

<sup>162</sup> Cywa 2017, 126.

<sup>163</sup> Schweingruber 1990, 402–403.

<sup>164</sup> Dogu *et al.* 2011, 1011.

<sup>165</sup> Tsintides *et al.* 2002, 117.

ever, according to the ecology and biogeography of evergreen *Quercus* in Cyprus, the sample most likely belongs to *Quercus alnifolia* or *Quercus coccifera*.<sup>166</sup>

Finally, the wooden sheath of iron sword No. 8 (Fig. 15) was identified as poplar/willow, *Populus/Salix*. The wood is diffuse to semi-ring porous. Pores are numerous, sometimes solitary but mostly in short radial multiples and clusters. Rays are almost exclusively uniseriate and generally homogeneous to slightly heterogeneous. Simple perforation plates and large and simple vessel-ray pits are visible.<sup>167</sup>

The timbers of poplar and willow are very similar. Both are lightweight hardwood with low density. The wood is very soft and they are the easiest of all hardwoods to work with hand and machine tools but are very susceptible to insect attack. The pores of the wood are generally small enough to allow fine surface finishing. Their durability makes them suitable for turning and carving.<sup>168</sup> With its good dimensional stability properties after drying related to its low shrinkage,<sup>169</sup> poplar is the most suitable for wooden sheath manufacture.

## DISCUSSION AND CONCLUSIONS

Given the very small number of samples studied, it is difficult to infer specific connections between wood species and artefact types, but some interesting results have emerged.

Firstly, the findings add to our knowledge about the fabrication of weapons<sup>170</sup> and the gathering and use of timber in ancient Cyprus. Different parts of an object have to

deal with different loads and thus the choice of wood species is a complex matter.<sup>171</sup> The results of this study show that the species selected in each case was chosen for its specific properties in relation to the function of the artefact.

For instance, the wood of wild cherry and alder is likely to have been selected for the manufacture of the wooden mace-head shafts because of their high resistance to abrasion, good vibration damping, and high shock resistance but also for aesthetic reasons (i.e. the colour of the wood).<sup>172</sup> The wooden shaft of the bronze spearhead is made of oak which has high dimensional stability, is strong, elastic, and durable, and objects made from it rarely warp or crack. Finally, the poplar/willow may have been selected for the fabrication of the sheath of the iron sword because both poplar and willow are very soft and easy to work, lightweight and, most importantly, have good dimensional stability properties.<sup>173</sup>

While we cannot be certain that the objects were manufactured locally, the selection of these wood species suggests that the inhabitants of Palaepaphos had an in-depth understanding and knowledge of their characteristics. Moreover, it is clear from the wood analysis that a variety of habitats were exploited for timber selection, including broadleaved, riverside, and mixed forests. This indicates that they took full advantage of the available species on the island and made the objects they required by exploiting the characteristics of the timbers to which they had access. The use of different tree species may have been linked not only to the technological characteristics of their wood, but also to their availability.

<sup>166</sup> Tsintides *et al.* 2002, 115–116.

<sup>167</sup> Schweingruber 1990, 675.

<sup>168</sup> Tsintides *et al.* 2002, 104; Meier 2007, <http://www.wood-database.com/black-poplar/>.

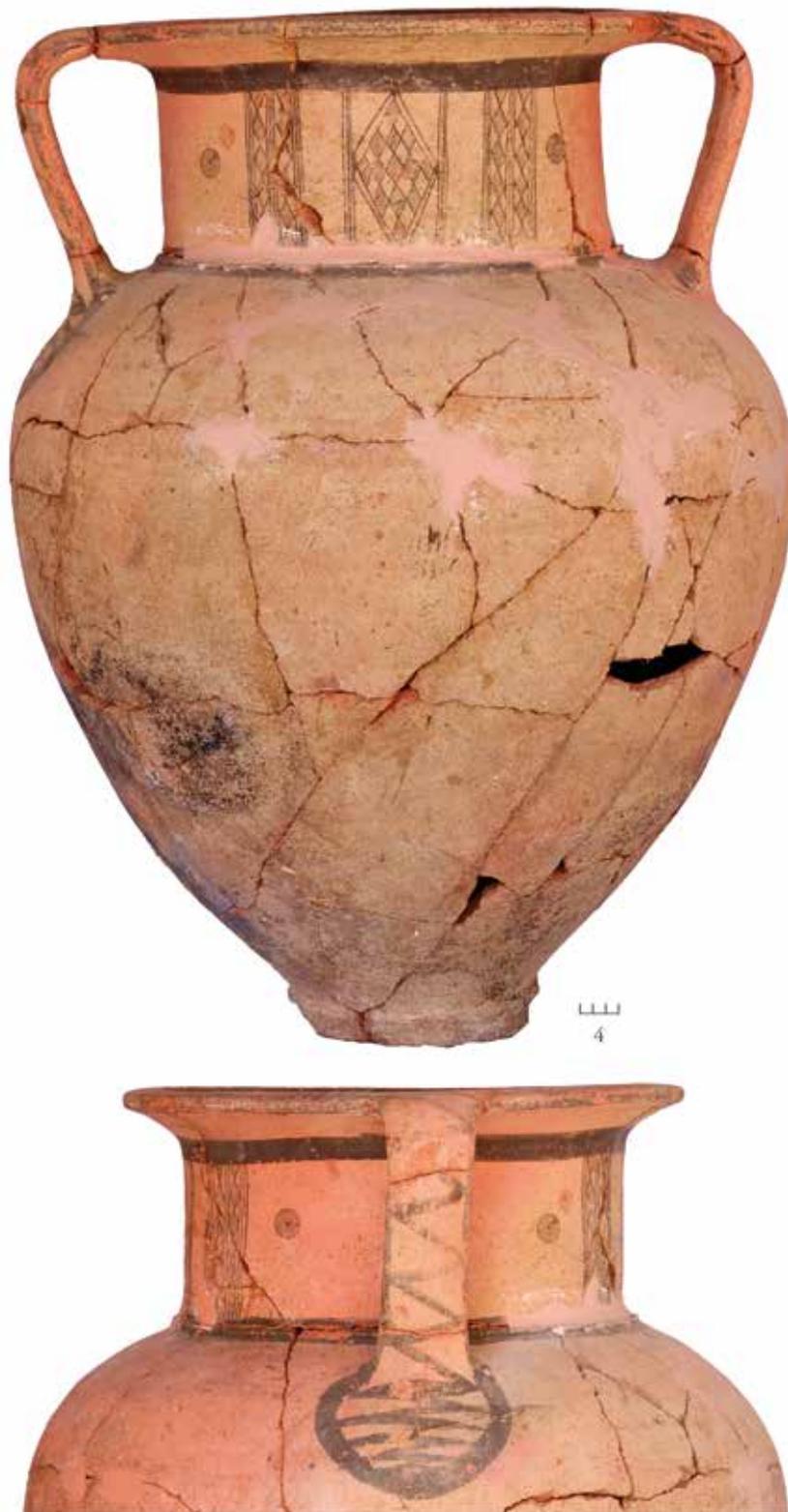
<sup>169</sup> The initial shrinkage during seasoning is relatively large for poplar, but the wood stays in place well after drying.

<sup>170</sup> Unfortunately, no tool marks are visible on the artefacts.

<sup>171</sup> Klein *et al.* 2016, 195.

<sup>172</sup> Meier 2007, <http://www.wood-database.com/sweet-cherry/>; Klein *et al.* 2016, 199.

<sup>173</sup> Klein *et al.* 2016, 197.



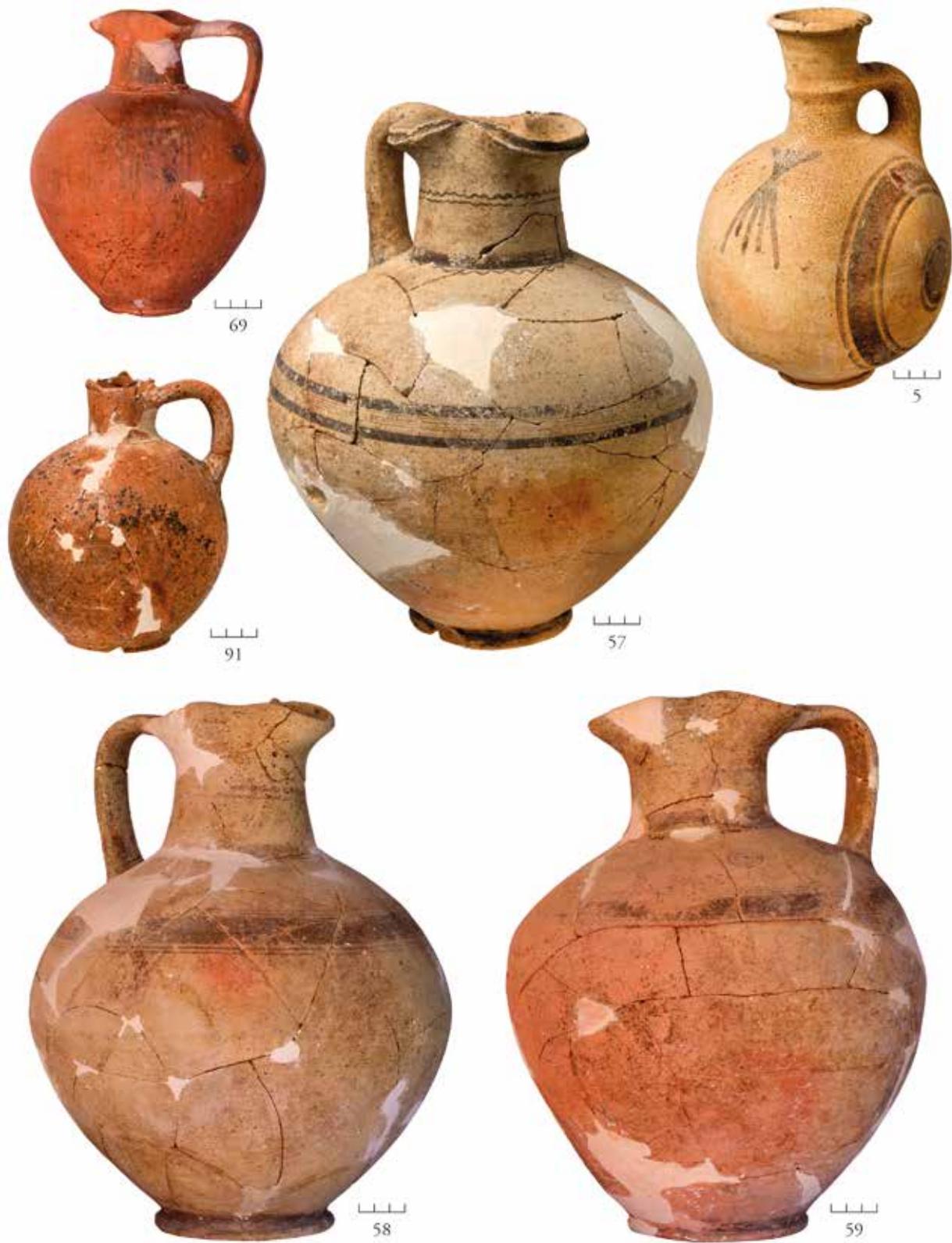
*Fig. 6. Large amphora or amphoroid pithos of White Painted III ware (No. 4).*



Fig. 7. Hydria and amphorae of White Painted III ware (Nos. 56, 65, and 92–94).



Fig. 8. Jugs, juglets and hydria of White Painted III (Nos. 43, 68, and 104), Bichrome III (Nos. 31, 38, and 71), Bichrome Red I(III) Burnished (Nos. 52 and 90), Black Polished I(III)–II(IV) (No. 24), and Red Slip (Nos. 26 and 39) wares.



*Fig. 9. Jugs of Bichrome III (No. 5), White Painted III (Nos. 57–59), and Red Slip (Nos. 69 and 91) wares.*



Fig. 10. Jug and bowls of Black-on-Red I(III) (Nos. 40, 66, and 106), White Painted III (Nos. 62 and 70), Black Slip III (No. 60), and Red Slip (No. 64) wares.



Fig. 11. Shallow bowls of Black-on-Red I(III) ware, Nos. 51, 55, 61, and 63.



Fig. 12. Shallow bowl of Black-on-Red I(III) (No. 41), jugs of Bichrome III (No. 28), and Bichrome Phoenician (Nos. 88, 109, and 110), flask of Phoenician fabric (No. 42) and Phoenician White Painted (No. 111) wares and fragments of a Phoenician imported jar (No. 27).



Fig. 13. Bowls and cups of White Painted III (Nos. 25, 29, 75, and 79), lamp of Plain White (No. 67), amphora of Coarse Wheel-made (No. 87), and bottle of Red Lustrous (No. 105) wares; Phoenician imported jar fragments (No. 107) and clay bathtub (No. 33).



Fig. 14. Gold plaques (Nos. 18–21, 48, and 96), sheets (Nos. 15, 22, 36a, and 95), earring (No. 23), and pin (No. 50); bronze mace-heads and wood (Nos. 102 and 103); animal astragali (No. 37).



Fig. 15. Bronze spearhead with wood (Nos. 100 and 101) and ring (No. 47a); iron knives (Nos. 53 and 54), swords (Nos. 8 and 44), javelin (No. 35) and fragments of obeloi (Nos. 45, 46, and 47).

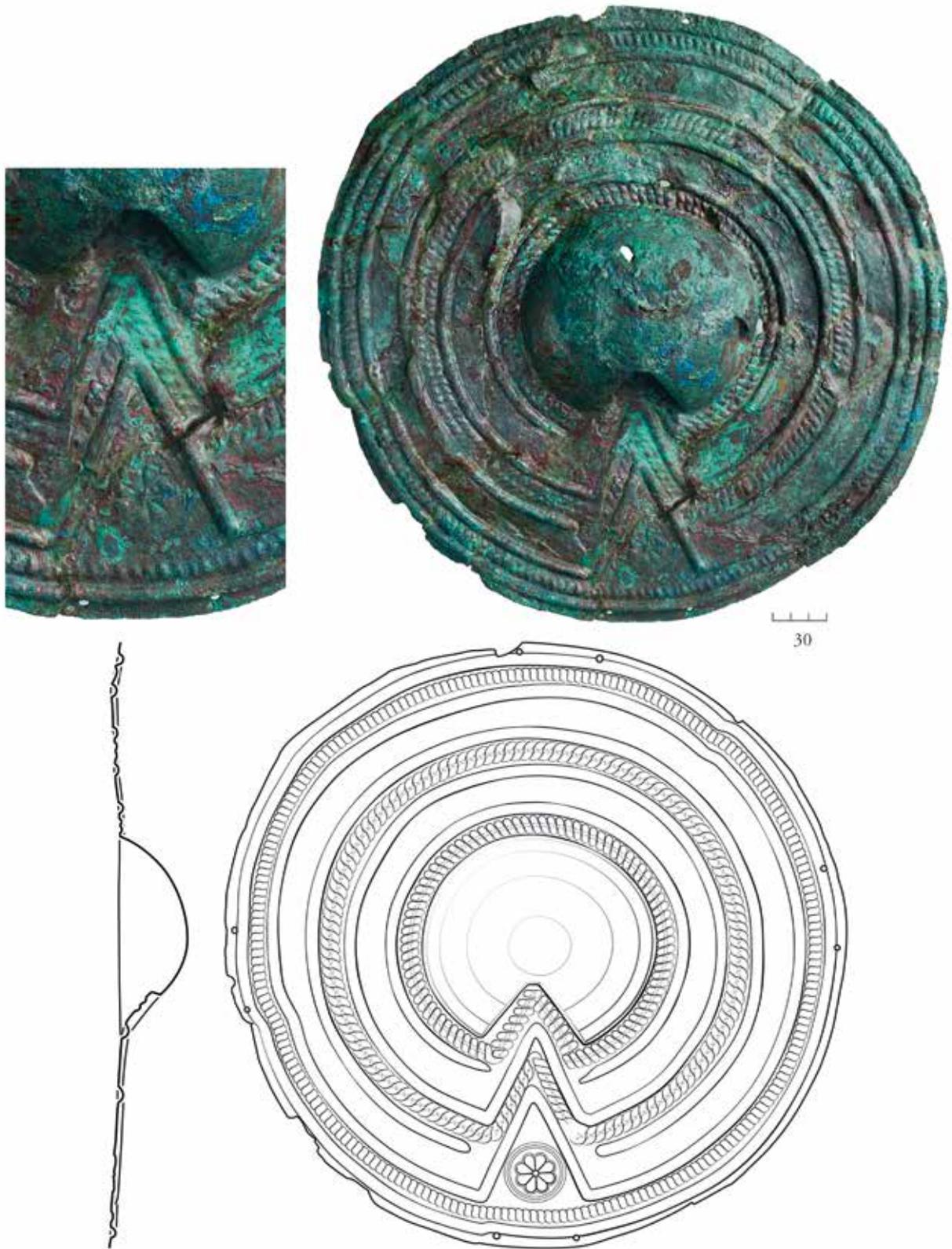


Fig. 16. Bronze shield (No. 30).

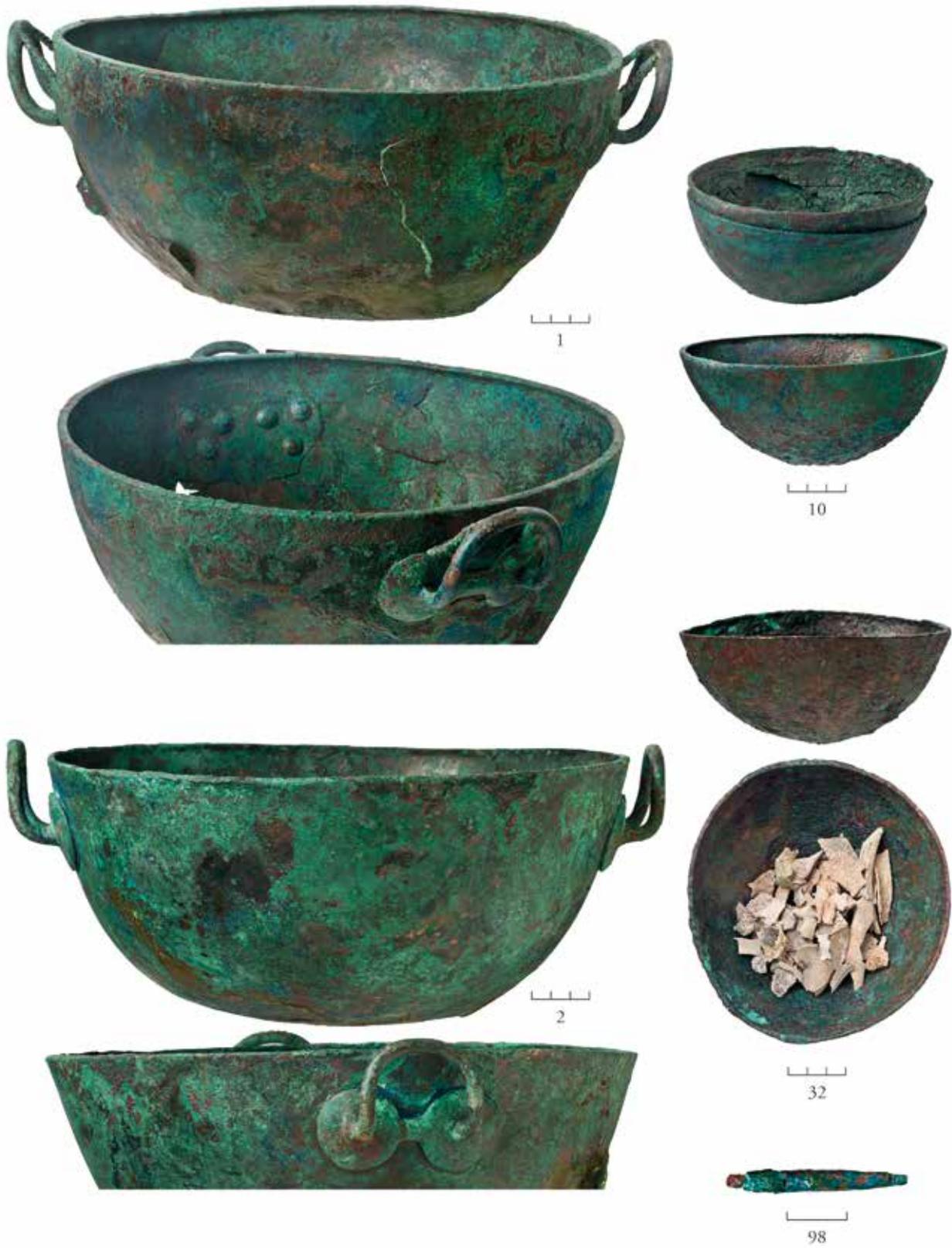
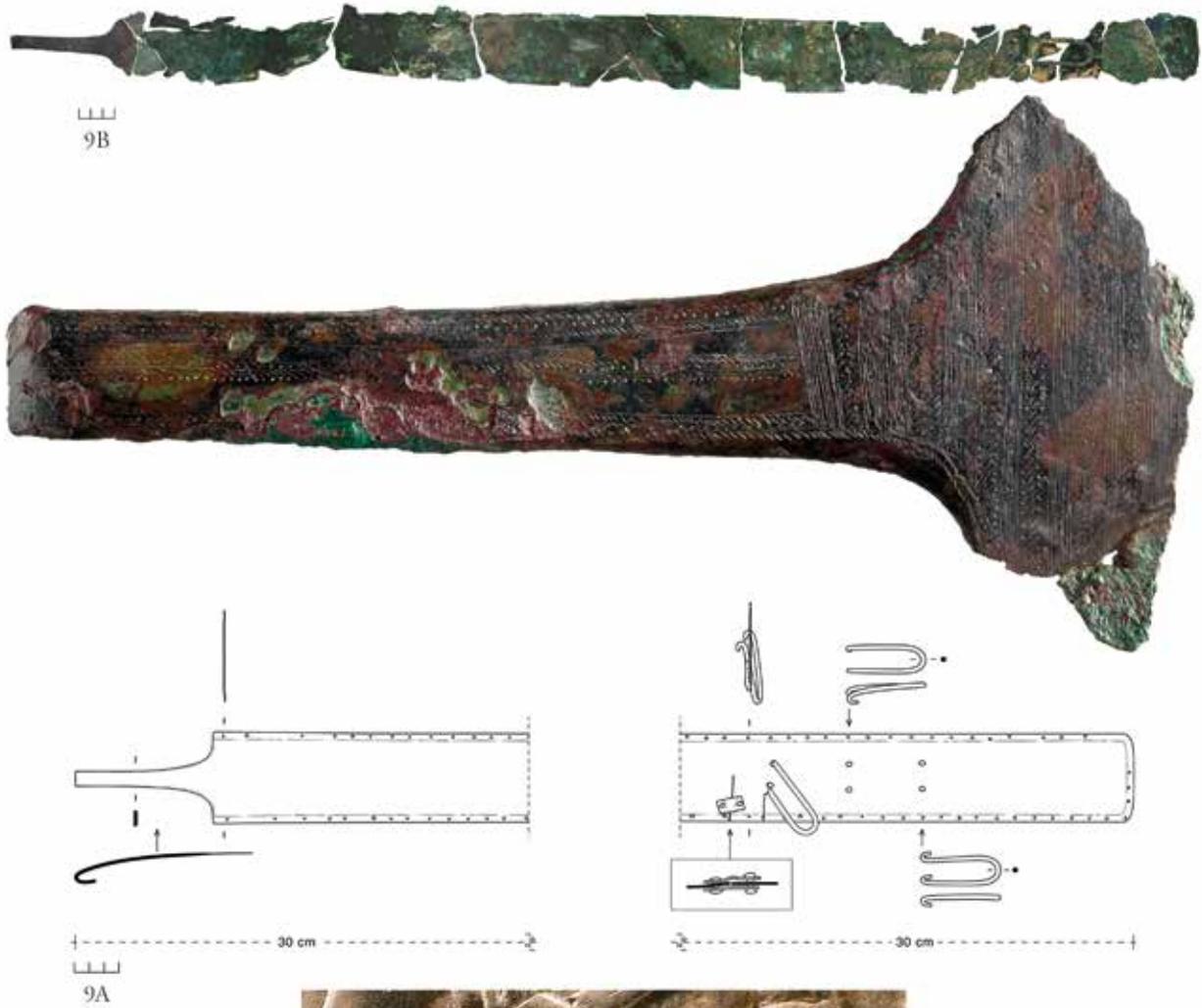


Fig. 17. Bronze bowls (Nos. 1, 2, 6, 7, 10, and 32) and nail? (No. 98).



Fig. 18. Bronze belt, No. 9a.



(Detail of Assyrian hunter wearing belt, after Collins 2008, 70)

Fig. 19. Bronze belts, Nos. 9a and 9b; detail of Assyrian hunter wearing a belt (after Collins 2008, 70).

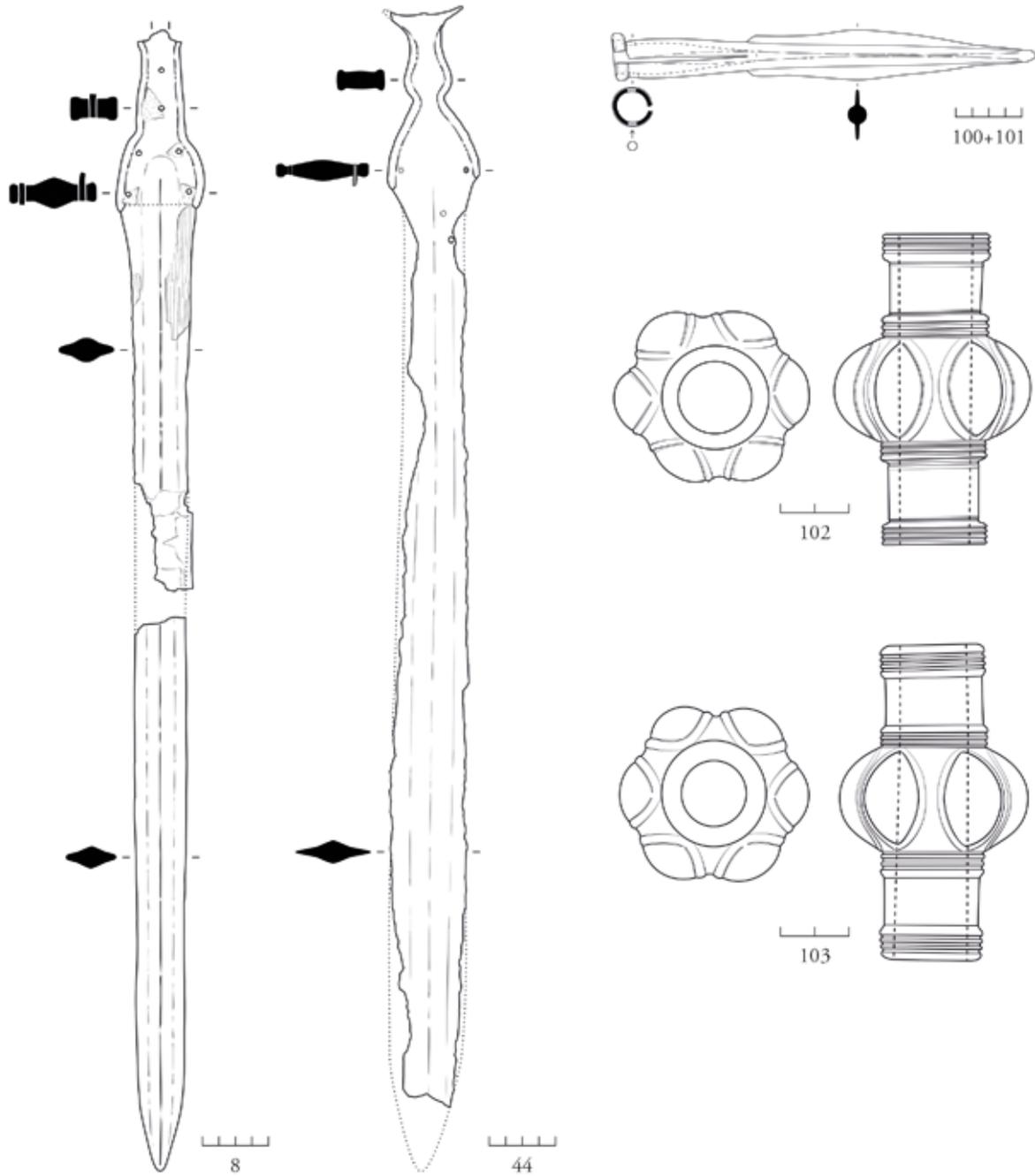


Fig. 20. Bronze spearhead (Nos. 100, and 101) and mace-heads (Nos. 102 and 103); iron swords (Nos. 8 and 44).

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