OIL LAMPS OF THE ROMAN PERIOD FROM APOLLONIA-ARSUF¹

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Introduction

Apollonia-Arsuf has yielded many oil lamps, most of them were found during the two most recent excavation seasons (1991–1992), in strata dating to the Persian through Crusader Periods (Roll and Ayalon 1982; 1989; Roll 1990; on the lamps see Kaplan and Kaplan 1975; Sussman 1983). In this article we discuss only the Roman oil lamps uncovered in the southern area of the site (Area E).² Such lamps are known from other sites where Roman Period (2nd–3rd centuries C.E.) strata have been exposed (see Kahane 1961); archaeologists ascribe them to a group of lamps produced in the eastern provinces of the Roman Empire.

According to Rosenthal and Sivan (1978:85–90), the lamps belong to the 'Round Lamps with Decorated Discus' type which were molded in two halves and then joined before firing (Type 9 according to Broneer 1930:74; Fig. 34; for the production method see Israeli and Avida 1969). Lamps of this type have been found in the region of Syria-Palestine and include the sub-type 'Lamps with Double axes' (see Sub-groups 1–2, 1–4 and 2–3 of the Apollonia lamps in this article).

Sixty-nine well-preserved Roman lamps have been discovered at Apollonia-Arsuf, as well as fragments of about 60 additional lamps. The lamps belong to the 'Small Round Nozzle' type characteristic of the Mediterranean World from the 1st century C.E. onwards (Rosenthal and Sivan 1978:85–86).

The quality of the clay varies from one lamp to another, even among lamps in the same group. Basically, the lamps were made from two types of clay which, after firing, acquired either a pinkish-red or a yellowish-green hue. The pinkish-red ware is well-levigated and well-fired, while the yellowish-green ware is of poorer quality. Furthermore, the red-clay lamps were often coated with a red-brown paint while the lamps of yellowish-green clay were painted black or dark brown. In all cases, the

¹ The authors wish to thank Prof. Israel Roll for his permission to publish the Roman lamps from Apollonia-Arsuf, and for his advice and assistance in preparing this paper.

² Lamps of the Roman Period were also found in Area E in the 2nd, 3rd and 7th seasons. The 8th and 9th seasons were conducted in the autumn of 1991 and 1992 under the direction of Prof. I. Roll and G. Gilboa on behalf of the Institute of Archaeology of Tel Aviv University. Lior Wexler was the registrar of the excavation. The Herzliya Municipality sponsored the excavation, which was an educational project for junior high school students. Tel Aviv University students, youth from Herzliya and surrounding areas, new immigrants and students at the Walworth Barbour American International School in Kfar Shmaryahu also took part in this project.

paint was applied prior to firing. Apparently, every potter had several different molds from which he produced lamps of different clays and different colourings.³ It should be noted that within these groups, the surface colour of the clay also varied somewhat due to uneven firing temperatures.

Certain decorative elements occur frequently on the Roman lamps and appear to have been drawn from standard patterns and forms. Unique ornamentation does, however, also occur (see below). The discus is usually the part on which the decoration varies (see Elgavish 1962), and it is unfortunate that the discus seldom survived intact. With only one exception, all our lamps were found broken in the centre and with the discus missing.

The lamps are of a fairly standard size (Fig. 1:1-3) with an average diameter of 7 cm. (±0.2 cm.), one exception being the lamp in Fig. 2 whose diameter is 9.9 cm.

Decorative Motifs

As noted above, the general shape, size and production process of the lamps are similar. The decorative motifs on these lamps are similar to those on other lamps from the Syria-Palestine region.

The following description of motifs will establish a uniform terminology to be used later, when lamp decoration is discussed more fully. We have divided the motifs into Group A (motifs on the rim) and Group B (decoration on the discus).

A. Motifs on the Rim

A-1. Volutes (Fig. 3, Element 1).

Volutes are the most common decoration on the rim of lamps discovered at Apollonia. The volutes are symmetrically arranged on both sides of the nozzle. Sometimes the volute has only one spiral instead of two (Fig. 3:1A-C).

A-2. Lines between the volutes (Fig. 3, Element 2).

Short parallel lines appear between the volutes on some lamps of good quality. A variation of this motif is circles in relief (Fig. 3; Rosenthal and Sivan 1978:88; lamp No. 358).

A-3. Necklace pattern (Fig. 3, Element 3).

What we call here the 'necklace pattern' appears on the outer part of the rim as a chain of identical shapes. The geometric or naturalistic look of these shapes depends on the quality of the mold and on the artisan's skill. The pattern may

³ The authors thank Mrs. Varda Sussman for dedicating her time to a critical reading of this manuscript. Mrs. Sussman does not accept this idea; she believes that the patterns and shapes were 'stamped' on the lamp's upper side while the clay was still leather hard.

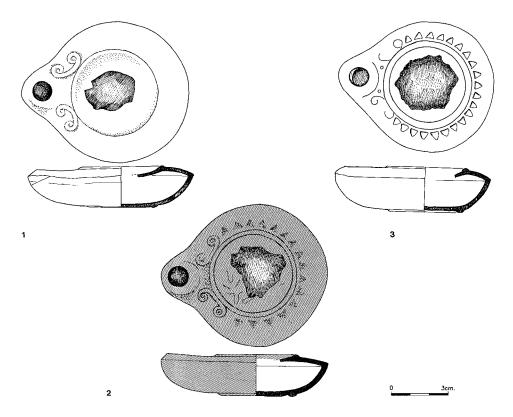


Fig. 1. The lamp standard. (h.= height, d.= diameter, dd.= discus diameter). Lamp 1 (2-1:5 in the catalogue): Reg. No. 12533/1, L.1320, h.=2.2 cm., d.=7.4 cm., dd.=4.3 cm. Pinkish-red clay, unpainted. One false ring-base. Lamp 2 (1-1:1): Reg. No. 8152, L.816 (Roman dump), h.=2.2 cm., d.= 7.5 cm., dd.=4.6 cm. Pinkish-red clay with brownish-red paint. Well-made and well-fired. One false ring-base. Lamp 3 (1-1:3): Reg. No. 12495/1, L.1288 (Roman fill under a Byzantine floor), h.=2.1 cm., d.=6.9 cm., dd.=4.3 cm. Buff clay, unpainted. One false ring-base.

resemble ovals, hearts, fern leaves, double half-circles, stylized grape clusters and leaves, full circles, triangles or short lines (see Fig. 3:3A-E).

This style of decoration, which began to appear on pottery as early as the Greek Archaic Period (Boardman 1988: Figs. 114; 257; 258), occurs on about half of the lamps from Apollonia.

On one lamp fragment (Fig. 4) a necklace pattern of exceptional design occurs close to the outer rim of the lamp rather than around the discus.

A-4. Double-axes (Fig. 3, Element 4).

Double-axes appear on both sides of the rim, at 90° angles from the centre of the nozzle. This decoration appears on about one fourth of the lamps surveyed here.

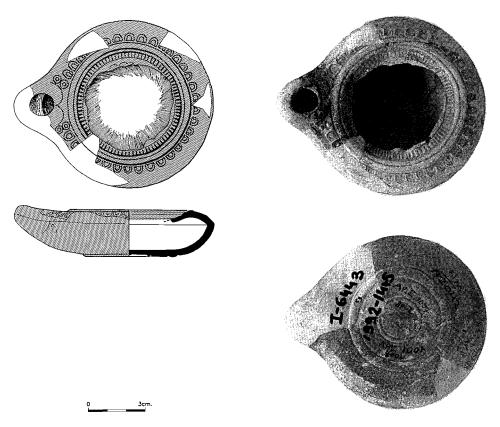


Fig. 2. Lamp 8002, of exceptional size.

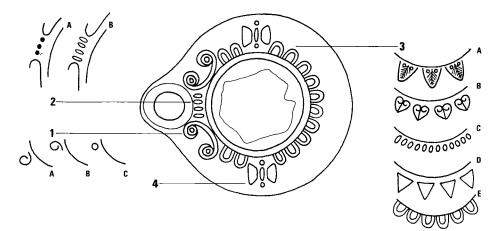


Fig. 3. Motifs on the rims of the lamps: 1. Volutes; 2. Lines between the volutes; 3. Necklace pattern; 4. Double-axes.

B. Decoration on the Discus

The finds from Apollonia-Arsuf include a nearly intact lamp (Fig. 5; its nozzle is broken) with a decorated discus (see section below on exceptional lamps), a few lamps on which a discus decoration is discernible, and several discus fragments (Fig. 6). On some of the discusse appear motifs taken from the flora and fauna

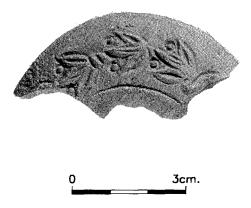


Fig. 4. Necklace pattern.

Fragment. Reg. No. 8172, L.825 (Roman fill over the upper floor of the southern Roman room), h=2.2 cm. Reddish clay, unpainted, good quality. Well-made and well-fired. Decoration: three lily flowers in a row.



Fig. 5. Lamp 12317.

genre, while others have human faces or mythological figures. The artist apparently felt the need to create new and unique figures here as the discus was the focal point of the lamp. Their new images were based on the usual themes common in this part of the world, such as the head of Helios surrounded by rays; a man seated under a mandala; a satyr, sometimes in motion; a horned animal; and floral and foliate motifs, e.g. a design resembling a vine leaf, a daisy flower or ivy leaves. Some lamps apparently had unornamented discuses. It should be noted that all but one of the lamps were found with the discus missing.

B-1. Raised/three-dimensional decoration in the centre of the discus

It is clear that certain lamps — before their discus was broken — had been ornamented with a raised decoration, and on some it is even possible to recognize the pattern.

B-2. Background to the discus decoration

Examples include wide leaves which form a design resembling a flower (usually a daisy), and radial lines (Fig. 7). Occasionally a figure is embedded in the centre.

Two Additional Features

There are two features on the lamps which do not appear in the world of decorative motifs:

1. 'V-signs'

V-signs appear on the underside of the nozzle of several lamps (Fig. 8). They may have been either a kind of signature of the potter or a decoration intended to camouflage the joint at the nozzle.⁴

2. 'Potter's marks'

Potter's marks appear on the bases of five lamps (Fig. 9). The mark on fragments Pm1 and Pm2 resembles the marks on lamps from Antipatris (Neidinger 1982: Pls. 23:11 and 12:23 respectively). Fragment Pm4 bears a mark similar to one published by Israeli and Avida (1969:32; lamp No. 44). The fact that only a small percentage of the lamps bear such a mark might indicate some special status held by the potter who made these lamps.

Classification by Type

The Apollonia lamps may be divided into groups⁵ according to the decorative

⁴ Sussman claims that the 'V-sign' is more common on lamps of the Late Roman Period. According to her, this mark emphasized the place at which the nozzle emerges from the body.

⁵ The division into groups included only lamps and fragments bearing visible combinations of the aforementioned decorations. Lamps and fragments on which no decoration was visible were not included. Accordingly, statistics are based on a total of 37 lamps.

motifs appearing on their rims. The lamps were first divided into two groups: Group 1 — lamps on which a necklace pattern (Decoration A-3) appears around the edge of the discus, and Group 2 — lamps on which the edge of the discus is not decorated. Each group was then divided into sub-groups.

Group 1

Sub-group 1-1 Necklace pattern (A-3) plus volutes (A-1); 21% of the complete lamps (Fig. 10:1-1).

Sub-group 1-2 Necklace pattern (A-3) plus volutes (A-1) plus double axes (A-4); about 8% of the complete lamps (Fig. 10:1-2).

Sub-group 1-3 Necklace pattern (A-3) plus volutes (A-1) plus small lines (A-2); about 24% of the complete lamps (Fig. 10: 1-3).

Sub-group 1-4 Necklace pattern (A-3) plus volutes (A-1) plus small lines (A-2) plus double-axes(A-4); about 8% of the complete lamps (Fig. 10:1-4).

Group 2

Sub-group 2-1 Volutes only (A-4); about 13% of the complete lamps (Lamps 22-26 in the catalogue, to be published in the excavation report, Fig. 3: 2–1). Sub-group 2-2 Volutes (A-1) plus small lines (A-2); on only one lamp (Fig. 10:2–2).

Sub-group 2-3 Volutes (A-1) plus small lines (A-2) plus double-axes (A-4); about 26% of the complete lamps (Fig. 10:2-3).

Sixty-one percent of the lamps have a necklace pattern (45% of these lamps also bear volutes and small lines but lack the double-axe decoration). Most of the 39% of the Apollonia lamps lacking the necklace pattern belong to Sub-group 2–3. The larger percentage of Group 1 lamps may indicate that the more richly ornamented lamps were in greater demand and may also reflect the aesthetic tastes of both the artisans and their customers.

Exceptional Lamps

Lamp No. 12317 (Fig. 5)

Many fragments of Roman lamps were discovered in Area E, at the centre of a courtyard (L.1225, B.12317) that was used as a disposal site on the edge of the Roman settlement. The general shape and the rim decoration of the lamp is similar to those of contemporaneous lamps, but what is extraordinary is what appears on the discus — a man's profile in relief.

The lamp's diameter is 6.9 cm.; the rim is 3.5 cm. wide and the discus is 2.1 cm. in diameter. The lamp is flat, standing only 2.1 cm. high. In the middle of the lamp is a small concave discus with elevated edges emphasized by two incised lines.

The lamp is made of molded upper and lower halves with a clearly visible joint

FIGURE 6. FRAGMENTS OF A DECORATED DISCUS

No.	Reg. No.	Locus	Description
D2	8175/1	825	Reddish clay, unpainted. A human image standing in front of a shell,
			probably Venus (see Fig. 4).
D3	12233/1	1225	(Fill in the Roman room). Buff clay with brown paint. The lower part of a human image, probably a satyr.
D4	12559	1306	(Surface). Fine pinkish-red clay painted red, well-fired. Image of
			straight-branched horned animal, lying down. dd.=5.6 cm.
D5	12596	1299	(Roman floor). Buff clay with brown paint. Horns and curls, possibly
			the head of Helios. See, Hanig and King 1986:190; Fig. 4; Rosenthal
			and Sivan 1978:86; No. 347.
D6	12066/2	Dump	Buff clay with brown paint. Horns of Helios's head inside a ring of
			sun rays.
D7	12525	1320	Pinkish-yellow unpainted clay. Unidentified decoration (Fig. 1).
D8	12901	1318	(Roman fill in a room of the Roman Complex). Yellowish-red clay
			with red paint. Well-made and fired. Possibly a vine leaf connected to another branch which may have another leaf.
D9	8136/2	817	(Fill in the Roman room). Reddish clay with dark red paint.
	,		Well-made and fired. Discus decoration unidentified.
D10	B.12864	1318	Yellowish-red clay with red paint. Unidentified decoration.
			dd.=cannot be measured (see D8).
D13	12233/2	1225	Pinkish clay with reddish-brown paint. A winged human image (see
			D3). See also, Neidinger 1982: Pl.23:2, 7; Rosenthal and Sivan
			1978:89; No. 366.
D15	12532	1299	Reddish clay with dark red paint. Well-made and fired. Curved
			horns, possibly Helios's head (see Fig. 5).

FIGURE 7. ONE TYPE OF DECORATED DISCUS

No.	Reg. No.	Locus	Description
Lamp 1–3:7	B.12915 /1	1297	(Roman stratum under Byzantine layer in the Roman room). Yellowish clay with brown paint. One false ring-base. Mother-of-pearl shell on broken discus. Unidentified figure. h.=2.3 cm.; d.=7.0 cm.; dd.=4.7 cm.
D11		1250	(Roman dumps). Two fragments made of low quality yellowish clay, painted dark brown; two made of pinkish clay, painted dark red. Daisy leaves. See also, Neidinger 1982: Pl. 23:13.
D12		1225	Two fragments made of yellowish unpainted clay; third fragment made of low quality pinkish clay, painted brown. Two different types of leaves: daisy and fern (see Lamp 27). dd.=cannot be measured. See also, Rosenthal and Sivan 1978:89; No. 366.







04

D7

D 10

D 15



D 5

D 8

D2





D 9











D 13

Fig. 6. Fragments of a decorated discus.

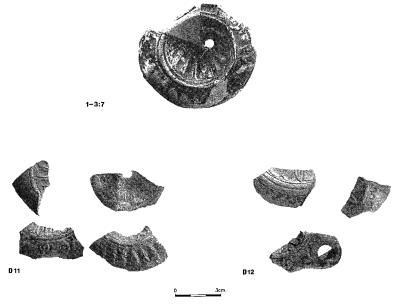


Fig. 7. One type of decorated discus.

between them. The reddish clay is especially fine and well-levigated, and painted red. Two circles on the base of the lamp form a false ring-base. On the surviving part of the base a small portion of the potter's mark can be discerned.

The discus, preserved in its entirety, bears a relief which, when viewed from the front, would have been visible through the flame. We see a bearded man with a moustache in left profile. His nose is wide and flat, his eye large and emphasized by the eyebrow. He wears a head covering that surrounds the upper part of his head and descends to his neck, but a few locks of hair protrude, concealing part of his ear.

The man is facing what looks like a palm frond (*lulav*) tied with a ribbon. Volutes (one survives) on the sides of the nozzle and double-axes adorn the lamp as well.

Lamp No. 8002 (Fig. 2)

This is an exceptionally large lamp with elaborate decoration (found in Locus 1007, B.8002). The lamp's diameter is 9.9 cm., the rim is 6.7 cm. across and the discus is 5.7 cm. in diameter. The lamp is flat with a height of 2.3 cm. The rim of the discus is bordered by two lines from which small radial lines extend toward the centre. The joint between the two parts of the mold is clearly visible. The reddish clay is especially fine and carefully worked and the lamp is painted red. The base has two outer circles containing a smaller, central circle, thus creating two false ringbases of 5.1 cm. and 2.2 cm. in diameter. Here, too, the discus was broken, so it is impossible to determine whether it bore any decoration.

A necklace motif of semi-circles is etched along the exterior edge of the rim; the volute motif is replaced by four pairs of dots, indicating that the lamp should probably be dated later than the other lamps at the site, foreshadowing the changes in lamp decoration.

A Roman Chandelier (Multi-Nozzle Lamp, Fig. 11)

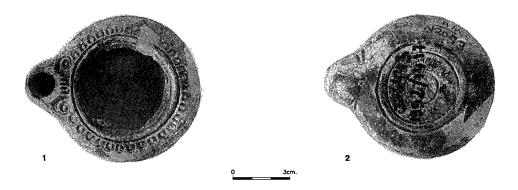
The chandelier was found in L.1320 in a layer of Roman fill that served as a substructure for a Byzantine building. Rosenthal and Sivan (1978:91) dated similar chandeliers to the first half of the 2nd century C.E. and note several types. The Apollonia chandelier might belong to the 'Polilychnoi with Leaf-shaped Handle' group (Type 5) despite the following differences:

- 1. The Apollonia chandelier is constructed like a ring. No traces of hanging hooks survive.
- 2. Our chandelier does not have the central discus which in Rosenthal and Sivan's chandeliers served as an oil reservoir. Instead, there is a circular reservoir at the base of its nozzles.
- 3. Its decoration is more ornate, especially between the volutes and on the rim of the central discus.

4. It is evident from the fragment in our possession, that the entire chandelier must have had some 11 or 12 nozzles and one handle. If not, then all the nozzles must have been concentrated in one section more densely than in the chandeliers presented by Rosenthal and Sivan.

The pinkish-red clay is well-levigated and well-fired, and the lamp is painted brownish-red on its upper side. It was made from two molds with a visible joint.

The surviving fragment of the chandelier seems to comprise only a quarter of the original (Fig. 11). The structure of the chandelier from Apollonia resembles that of a chandelier found in Pompeii (Kelsey 1982:372; Fig. 197) and one discovered at the Winter Palaces of the Judean kings in Jericho (Netzer 1977:13; Fig. 14).⁶ Our fragment would indicate that the chandelier was round; the interior diameter of the ring-base would be 8.3 cm. and the radius of the entire chandelier (including the nozzles) 15.5 cm. The fragment we found had three nozzles, one slightly broken and two barely discernible. The size of each nozzle is 1.5 cm. and each is spaced 7.4 cm. from the other. Between them appears a volute motif in its most advanced form. Between the volutes, along the middle of the nozzle, is the shape of a torch burning at both ends. On either side of the torch, near the centre of the chandelier, appear two circles in relief. The nozzle area is separated from the decorated rim by a raised line bordered on the inside by a necklace motif made up of drop-like shapes. The rest of the upper surface of the oil reservoir is decorated with carefully executed motifs and a wreath made of intertwined leaves with buds surrounded by seashells.



Lamp 1-3:5: Reg. No. 8061, L.806 (Roman fill in the terra-cotta level in the Roman Room), h=2 cm., d=7.2 cm., dd=5.1 cm. Fine yellowish clay with dark brown paint, well-made and well-fired. Double false ring-base with circle in centre. Double 'V-sign' on the lower sides of the nozzle.

⁶ It is unclear whether the Apollonia chandelier was meant to be suspended, or to stand. The Jericho and Pompeii chandeliers have hooks for hanging, making them true chandeliers.

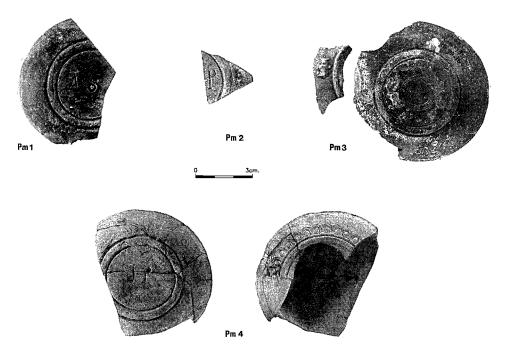


Fig. 9. Potter's marks.

Lamp Pm1: (fragment) Reg. No. 8175/2, L.825 (see Fig. 4). Pinkish-yellow clay, painted brown. One false ring-base with a circle in the centre. Lamp Pm2: (fragment) Reg. No. 8106, L.821 (Roman fill). Reddish clay, painted brown. Lamp Pm3: (fragment) Reg. No. 12844, L.1297 (Fig. 7, Lamp 1-3:7), h.=2.1 cm., d.=7.2 cm. Buff clay with dark brown paint. Double false ring-base with a circle in the center. Lamp Pm4: (fragment) Reg. No. 12532/2, L.1299 (see Fig. 6:D15). Fine buff clay, unpainted. One false ring base. Broken discus. On the rim one double-axe and necklace pattern.

The filling holes in the repeated shell pattern were made with a sharp tool at the leather-hard stage of production, apparently in four places (two filling holes have survived). The reservoir is 6.8 cm. wide and 4.5 cm. deep, and can hold 700 cc. of oil.

The lower part of the lamp has a double ring-base with an exterior diameter of 19.8 cm. and an interior diameter of 13.6 cm.

Summary and Conclusions

Oil lamps constitute the most delicate and aesthetic pottery items discovered in the Roman Period strata of Apollonia. The fact that lamps were common in day-to-day life makes them an excellent aid for accurate dating, thus enabling the Roman layers to be dated to the 2nd-3rd centuries C.E., perhaps even as early as the late 1st century C.E. Rosenthal and Sivan (1978:85) hold that the decorative motifs have chronological significance, namely, that lamps with a decorated discus antedate those with a plain discus. It must be said, however, that the evidence from Apollonia-Arsuf contradicts this supposition since both types were found in the level of occupation. If the decoration does bear any chronological significance, then it most probably lies in the changes that evolved in the volutes on the sides of the nozzle, the volutes being perhaps a natural development of the original wavy contour line of the pinched type of lamp. In the 1st century C.E., when the oil reservoir was closed to form a round chamber, the wavy line on the nozzle's edge remained, highlighted by volutes. The volutes gradually progressed into their full and final form, the form which graces the Roman chandelier from Apollonia. In the 2nd and 3rd centuries C.E. the small volute on the round lamps turns into a decorative line no higher than other decorations on the lamp's rim. The volute decoration gradually loses its decorative importance until it finally disappears by the end of the 3rd century C.E., occasionally replaced by such motifs as series of lines, circles or dots.

The presence of the highly developed and emphasized volutes on the chandelier from Apollonia indicates that it was made at the end of the 1st century or in the early 2nd century C.E. The chandelier may be evidence that special objects such as these were kept and passed on for longer periods than were common lamps.

Another phenomenon that has occupied not a few archeologists over the years is the missing discuses from Roman lamps. The existence of lamps and discuses bearing graven images in the levels of occupation at Apollonia contradicts the claim that lamps were deliberately broken in keeping with the religious beliefs of the buyer. If a lamp had a figure that the buyer considered to be improper to have in his home, it is unlikely he would have purchased such a lamp at all. Nevertheless, if the lamp was already in the house, then the owner was obligated not only to break the discus but also to cast it beyond the settlement borders or to pulverize it, as it was considered an abomination (Brand 1969). Since the finds at Apollonia include discuses, it seems that the people who altered the lamps did not discard the discuses very far from home. Furthermore, some of the broken discuses bear plant and animal motifs that are not offensive to Jewish or Samaritan religious law. Brand claims that the Jewish populace chose to buy imperforate lamps - even from Jewish potters — and then to break out the discuses because the act of breaking the discus as it was brought into the home was part of the ritual of purifying the lamp (ibid.). We prefer to believe that the discus is the lamp's weakest part and therefore simply broke as a result of use or from the pressure of the accumulating layers. Furthermore, 'Long Nozzle Lamps' or 'Lamps with a Spatulate Nozzle and Decorated Rim' (Rosenthal and Sivan's terminology), which are dated to the same period and are classified as 'Judean', are rare at Apollonia (two fragments only). This supports our claim that the Roman lamps of Apollonia were not necessarily

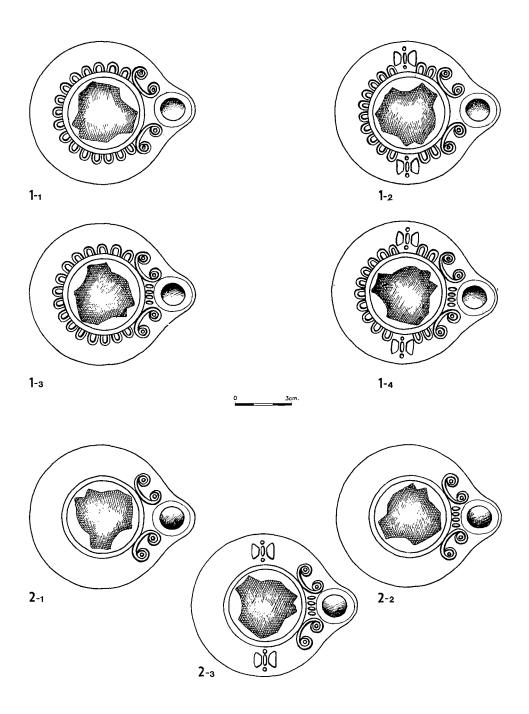


Fig. 10. Classification by type.

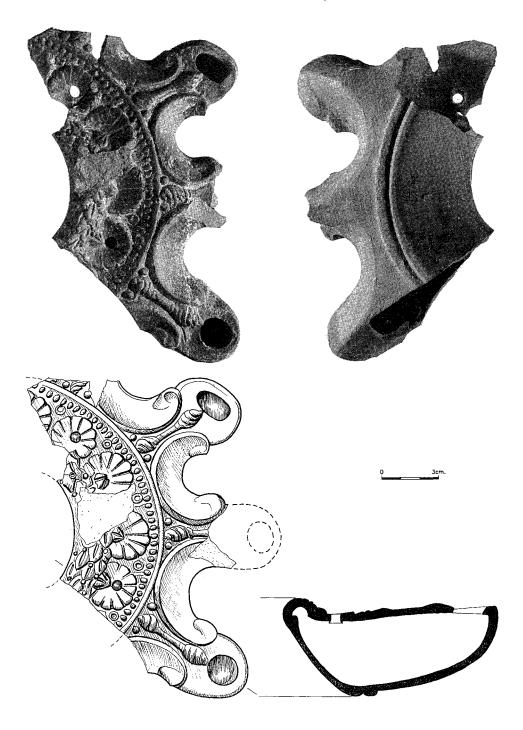


Fig. 11. The Roman chandelier.

broken by the monotheistic populace (i.e. Christians, Samaritans and Jews), whose relative number is unknown to us.

According to many archeologists, the Roman lamps of Syria-Palestine are local imitations of lamps produced in larger Roman centres. A reading of excavation reports and catalogues (Brants 1913; Walters 1914; 1936; Broneer 1930; Delougaz and Haines 1960; Deneauve 1960; Grandjouan 1961; Kahane 1961; Perlzweig 1961; Elgavish 1962; Kennedy 1963: Pl. XXI–XXII; Israeli and Avida 1969; Hammond 1973; Bailey 1980; Goethert-Polaschek 1985), and an examination of the lamps from Apollonia, lead us to believe that in the eastern provinces — and most of all in the Land of Israel — a flourishing local industry existed which was unique in its own right. Albeit influenced by the centre of the art of oil-lamp making in Rome, our local industry displayed a rich variety of decorative motifs, its distinctive double-axe plus volute ornamentation being an example *par excellence*.

Acknowledgements

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