# ABHANDHUNGEN <br> <br> DES DEUTSCHEN PALASTINAVEREINS 

 <br> <br> DES DEUTSCHEN PALASTINAVEREINS}

NABHI. K. KHAIRY

THE 1981 PETRA EXCAVATIONS<br>VOLUME I

INKOMMISSION BE:
OHTOHAMRA\&SOWITZ: WIESBADEN

# ABHANDLUNGEN <br> DES DEUTSCHEN PALÄSTINAVEREINS 

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NABIL I. KHAIRY

## THE 1981 PETRA EXCAVATIONS

## VOLUME I

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# THE 1981 PETRA EXCAVATIONS 

VOLUME I

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## CONVENTIONS

| cm | centimeter(s) | m | meter(s) |
| :--- | :--- | :--- | :--- |
| D. | Diameter | mm | millimeter(s) |
| Ex. | Existing | No.; Nos. | Number(s) |
| Fig.; Figs. | Figure(s) | Pl.; Pls. | Plate(s) |
| H. | Height | W. | Width |

## GLOSSARY

| Engobe | "Is often half-way between a clay and a glaze in composition, containing <br> materials that are normally considered glaze materials. It fires, therefore, <br> to a more vitreous state than the body it covers. However, since it does |
| :--- | :--- |
|  |  |
| not fuse to a glassy state, it cannot be called a glaze. Since it is composed of |  |
| nonclay materials entirely, it cannot be called a slip. Therefore, "engobe' |  |
| is the only suitable term that one can apply to such material" (Khairy |  |
| $1983: 39)$. |  |

## INTRODUCTION

For the last five decades archaeological research on pottery excavated in Nabataean sites has been content to use broad designations for dating the finds. Many archaeologists who have dealt with Nabataean studies were not able to draw the border line between Nabataean and non-Nabataean plain pottery. Hence the terms "Roman-Nabataean" or even "Roman" have generally been applied to most of the objects found in Nabataean sites (Murray and Ellis 1940:19; Horsfield and Conway 1942:128-143; Cleveland 1960:57-78; Reed and Winnett 1964:74; Tushingham 1972:23). Furthermore, most of the Nabataean publications have concentrated on producing a typological study and have neglected the chronological sequence of finds and the development of the different excavated pottery types.

This study consists of 173 well stratified objects, most are incomplete or in a fragmentary state. They were uncovered during the 1981 Petra Excavations carried out by the Department of Archaeology of the University of Jordan and the Department of Antiquities in Amman.
In this study the presentation of each chapter is essentially the same, consisting of four parts:

1. A short general introduction for each chapter.
2. A detailed description of every object included in this study. It covers the form, ware and surface treatment. The form tends to reflect the traditional ideas of the potters, which usually change only gradually, and is a better criterion than ware for chronological study. On the other hand, the pottery colour does not depend solely on the type of clay but also on firing. Therefore I concentrate in this study on form rather than on ware. However, if ware shows a possible relationship I have drawn attention to this factor. Although uniformity in colour reading can be obtained by using the Munsell Soil Colour Charts, especially for the thinly painted and fine, delicate Nabataean ware, it is not practical for thick, coarse vessels because the colour of the clay often differs from place to place on the same surface or core. These variations are due to uneven firing or staining. Hence a direct visual interpretation was used for reading the colour of ware and slip of the studied objects.
3. A comparative study of each type. The parallels are mainly from the Nabataean sites but occasionally from other Mediterranean sites where such pottery helps to throw light on the history of the Petra types. One can definitely link some objects to other published examples, but the physical comparison, that is to say the actual handling of the objects themselves, should ideally be made, if possible.
4. A conclusion for each group of types. This conclusion is drawn from both our stratigraphy and the parallels in order to deduce the date of the types and their geographical distribution. Care has been taken to differentiate between the Petra types and the parallels from the other nonNabataean sites.

References to the parallels of each type are given in the standard Oxford system, which is easiest for the reader. For the purpose of accuracy the date of each parallel is quoted from its original publication.

Photographs are not as accurate as drawings for the purpose of this study, although almost every type is photographed and drawn 1:1. Generally the arrangement of the illustrations in the figures and plates follows the sequence set out in the text.

## THE 1981 PETRA EXCAVATIONS

The 1981 Petra Excavations were carried out in the el-Katūte area (Map I), southeast of Qaṣr el-Bint and at the foot of Umm el-Biyära, by the University of Jordan with the cooperation of the Department of Antiquities under the direction of the writer. Excavations began on 4 May and ended on 5 July 1981.

The aims of the excavations were as follows: (a) To obtain, as far as possible, clearly stratified data in order to establish the sequence of the site's different habitations and to correlate the different phases in the three opened areas. (b) To collect information related to the Nabataean progress in the field of hydrology. (c) To assemble an idea of the Nabataeans' ordinary houses and social life. Hence the excavated site had been selected far from visible temples except for some remains of one or two coarses above the top soil and a few scattered ashlar blocks of different sizes.

Three areas were opened (B, C, D) and one area (A) left for future investigation (Map II).

## Area B

Nineteen squares were opened in area B (Map II). They varied in depth from 25 to 110 cm above a paved terrace. Each square consisted of 6 to 8 different loci, except for Squares 14 and 16, which consisted of 22 and 18 loci respectively.
The terrace pavement is in good condition except for some destroyed patches. This terrace displays the same orientation as Qaş el-Bint and is almost square ( $15 \times 15 \mathrm{~m}$ ). The slabs used for paving the terrace are comparatively thin ( $4-11 \mathrm{~cm}$ in thickness) and well-dressed with smooth surfaces. They were carefully arranged over a foundation which consists of irregular slab fragments.
The paved terrace is supported by a podium which includes a net of channels. Three channels were found:

Channel A is the largest and runs along the same orientation as the paved terrace (Map III). This channel was investigated in its northern part. Unfortunately, unstratified deposits were found in Channel A which consist merely of rubble mixed with silt and accompanied by very few unpainted Nabataean pottery sherds. The real depth of this channel is not obvious; the observable depth is about 3.20 m in its northern part and about 1.50 m in the southern part. This channel has uneven natural sandstone sides, and its width varies from 90 cm in the upper part to about 2.20 m below. A defined groove specially cut on each side of the upper part of this channel served to support a vaulted roof which would have run the whole length of the channel. The vault's diameter is 90 cm . It includes a keystone surrounded by three coarses on either side.
Channel B is located at the east side of Channel A and is connected at a right angle (Map III). This channel is smaller in size than Channel A. No investigation has been made in this channel. The present depth from the upper surface of the accumulated deposit to the upper level of the pavement is about 2.20 m . The channel has uneven natural sandstone sides varying in width from 80 cm in the upper part to about 1.80 m below. The channel is covered in a manner similar to channel A; the diameter of the vault is 90 cm but consists of eight coarses separated in the middle by a thin keystone. The vault is carried by a defined ridge cut specially on each side of the upper part of the channel. A Byzantine follis of Justinian I (527-565 A. D.) and seven column drums, all
in good condition, were found in the channel. The diameter of the drums is uniformly 64 cm . No satisfactory explanation can be found for the occurrence of such scattered drums in Channel B, but it seems likely that they were merely hidden for later use. This probably happened during or just after the second and the third quarters of the sixth century A. D., which represents Phase V. During this period some architectural activities occurred in this area. Many Nabataean drums and ashlar blocks of different sizes were re-used in building walls and partitions above the paved terrace.

Channel C is a channel with vertical sides, located east of Channel A, and is connected at an angle of about 45 degrees (Map III). The internal surfaces of this channel are covered with notches made using a mallet and chisel. The excavated length of the channel is about 2.5 m . The height is about $1.00-1.10 \mathrm{~m}$ only. The width is regular at about 1.15 m . There are no similar ridges to those occurring in Channels A and B to carry a vault. Most probably this channel was covered with large and thick regular sandstone slabs.

The process of sealing the top of Channels A and B was as follows: They covered the top of the vaults with a layer of rubble of about 35 cm in thickness. Next, the mason laid down irregular slab fragments above the rubble which functioned as the foundation for the regular pavement. Finally, the surface was sealed with considerably thin regular slabs of different sizes and with a thickness varying from $4-7 \mathrm{~cm}$. The thickness from the inner edge of the vault to the top of the regular pavement is about 90 cm .

Regarding the function of the three channels, and whether they had been used as subterranean chambers for storing goods or merely represent reservoirs, one may offer the following:
(a) The occurrence of open basins cut in the top rock. A good example can be seen at the east side of Channel A. This basin's dimensions are $1.00 \times 2.22 \mathrm{~m}$ with a draining spout of 6 cm in diameter at the southwest corner of the basin. This spout connects the basin with Channel B.
(b) A small channel $(0.35 \times 1.20 \mathrm{~m})$ was found at the bottom of the southwest corner of the large paved terrace. It is most probable that this channel was designed to distribute the collected water in Channels A, B and C to some parts of Petra. It is covered with four large irregular sandstone slabs about 14 cm thick.
(c) The three channels are comparatively narrow, partially filled with accumulated rubble and a thick layer of silt.
(d) No natural light and air would seem to be available to these channels. Therefore the second proposal seems to be more acceptable.

An architectural complex adjacent to the southern side of the paved terrace (Map III) was partially discovered during the 1981 Petra excavations. It consists of the following:
(a) Room 1, which is rectangular $(2.5 \times 4.5 \mathrm{~m})$ and has two doors; the first is to the north, 1.35 m wide. It has well-dressed jambs which open outward. The second door is to the south, opposite the first one, 1.70 m wide with jambs opening inward. The floor is regularly paved with thin sandstone slabs. The level of the floor is lower than the terrace pavement by about 25 cm . The surrounding walls stand about 1.40 m high and mainly consist of six coarses built from welldressed sandstone blocks of irregular sizes. The majority of these blocks are dressed with diagonal groovings, enclosed by a 2 cm smoothed margin.
(b) Room $2(1.95 \times 3.5 \mathrm{~m})$ which is located to the east of Room 1, but with no connecting access. It has one entrance, 1.15 m wide, in the north wall. The jambs of this door are carefully dressed and open inward. The floor pavement of this room is in bad condition and is almost destroyed. The walls' thickness is almost the same, 70 cm .

Two staircases connect the paved terrace with another level ( 1.30 m high) of pavement which is located to the east of the architectural complex.
(a) Staircase 1 is in good condition (Map III) and consists of six steps. The width of the staircase is 1.20 m . The height of the steps varies from 20 to 28 cm and the width is only about 19 to 20 cm .
(b) Staircase 2 is located in the southeast corner of the excavated area (Map III). This staircase is wider $(1.60 \mathrm{~m})$ but is damaged except for two-thirds of the second step, which is still in situ.

The remains of the base foundation, column base and square plinth are in situ and in the same alignment. They are located between the paved terrace and the adjacent architectural complex. They probably represent the main entrance to the paved terrace. The base foundation represents the western corner of the entrance and consists of four rectangular well-dressed sandstone blocks $(27 \times 65 \mathrm{~cm})$ surrounding a square stone $(35 \times 35 \mathrm{~cm})$. The second bearing is a column base which was intended to receive a column of 64 cm in diameter. The third bearing is a square plinth ( $90 \times 90$ cm ), and the fourth bearing does not occur in its proper place. The distances between the mentioned bearings from east to west are 1.40 and 3.60 m respectively.

It is probable that the paved terrace represents a temenos enclosure and that the adjacent architectural complex was intended for the service of the enclosure.

The earliest dating evidence is a Nabataean coin of Aretas IV and his second wife Shaqilat II ( $18-40$ A. D.). This coin was found in the foundation trench of the west wall of the podium which carries the paved terrace described above.

## Area C

Six squares were opened (Maps II and IV). The most interesting and prominent architectural finds in this area are the apse in Squares 1 and 2 and the paved area with the small hexagonal slabs in Squares 3-6.

1. The apse: Squares 1 and 2 in Area C reveal an apse of a church (Map IV) which is related to Phase V. The diameter of this apse is 6.00 m , with northwest orientation. An interesting architectural feature should be noted in the ashlar blocks of the apse. Each stone was formerly a quarter of a Nabataean capital which was decorated with floral motifs. The apse consists now of only two coarses. The lower coarse has ten quarters of Nabataean capitals ( $38 \times 38 \mathrm{~cm}$ ), and the three quarters in the upper coarse are of the same dimensions. Decoration on the rounded sides of the quarters was faced inwards by the stone mason, and the plain flattened surfaces are external. One might think that the mason intended to hide the beautiful decorative elements in order to conceal any evidence of an earlier pagan worship which would be in conflict with Christian belief. One Byzantine coin of the tenth year of the reign of Justin II ( 574 A. D.) and two Byzantine lamp sherds were found in the foundation trench of the apse. The apse corresponds to Loci 1-3 in Areas B and D, which are assigned to Phase V.
2. A paved area with small hexagonal slabs was discovered in Squares 3-6. This beautiful pavement belongs to Phase Ia, Locus 24, which is dated by a coin of Aretas IV before his appearance with his second wife Shaqilat II (9 B. C. -18 A. D.). The length of this pavement is 4.15 m with an east-west orientation. The width is approximately 1.7 m . This rectangular pavement contains two different types of hexagonal slabs which are divided by a straight border joint. The first type covered $1.70 \times 0.95 \mathrm{~m}$ and is located to the east. The measurement of this type of hexagonal slabs is around 19 cm . The second type is located to the west, covering $1.70 \times 3.20 \mathrm{~m}$. The hexagonal slab of the second type is approximately 16.5 cm . The only parallel to such kind of slabs was found in the vicinity of a Nabataean temple at Wad̄ Ramm. A staircase connects with this pavement at right angles on the south side of the pavement (Map IV). The width of the staircase is about 1.80 m , and it consists of eleven steps leading to the top of a naked sandstone rock. This staircase is almost completely damaged except for the remains of some parts of steps which
are still in situ. The staircase belongs to Phase Ia and was closed by some ashlar blocks, drums and dark brown mortar during the second and the third quarters of the sixth century A.D. This wall was found at a height of about 1.20 m .

A small basin was found under the baulk which divided Squares 3 and 4. The dimensions of the basin are $85 \times 85 \mathrm{~cm}$ and 30 cm in depth. The four internal sides and the floor are coated with a thick dark greyish mortar. It is most likely that this basin was used to hold water for some ritual purposes, and I believe that there is a direct relation between the basin, the paved area with hexagonal slabs and the staircase which leads to the naked high rocks. It is probable that religious ceremonies used to take place here.

## Area D

Two squares were opened (Map II). The majority of the intact and semi-intact objects were found in these two squares. A dwelling room was found $(2.25 \times 4.45 \mathrm{~m})$ with a north-south orientation. The thickness of the walls is almost the same $(70 \mathrm{~cm})$. The walls are built from irregular sandstone blocks fixed with a brownish mortar. The majority of the blocks are dressed with the typically Nabataean diagonal grooving, and some other blocks are dressed with notches. Two entrances were found in this room. The first is in the east wall, about 55 cm from the southeast corner. The width of this entrance is only 60 cm . It has well-dressed jambs which open inward. The second entrance is in the north wall about 35 cm from the northwest corner, with jambs opening inward. The floor of this room is covered with a thick layer of light greyish mortar which includes some small fragments of limestone and sandstone of less than $2 \mathrm{~cm}^{3}$. The dating of this room is fixed by two coins of Aretas IV before his appearance with his second wife Shaqilat II (9 B. C. - 18 A. D.). Hence this dwelling room corresponds to the same date as the rectangular paved area with hexagonal slabs, and both are assigned to Phase Ia, which represents the earliest habitation found in the 1981 Petra excavations.

## STRATIGRAPHICAL OUTLINE

Three areas were opened in the 1981 Petra Excavations (B, C, D), and one area (A) was left for future investigation.

The dating of our stratigraphy depends mainly on coins. About one-third of the total number of these coins were readily deciphered; the rest were illegible or merely pieces of fragile rust.

## Area B

Nineteen shallow squares were opened (B.1-19). They varied in depth from 25 to 110 cm above a paved terrace. Each consisted of 6 to 8 different loci, except for Squares 14 and 16, which consisted of 22 and 18 loci respectively.

The phases represented in this area are as follows:
Phase I. a: Not represented in this area.
Phase I. b: Represented by Loci 8-7, where a number of coins of Aretas IV and his wife Shaqilat II were found. The earliest coins found in the foundation trench of the podium and the three channels (A, B, C) which carry the podium belong to Aretas IV and his wife Shaqilat II (18-40 A. D.).
Phase II: Represented by Loci $6-5$, which are dated by coins of Malichus II ( $40-70$ A. D.).
Phase III: Represented by Locus 4 , which is dated by coins of Rabbel II ( $70-106$ A. D.).
Phase IV: Not represented in this area.
Phase V: Represented by Loci 3-1, which are dated to the second and the third quarters of the sixth century A. D. Partitions built from Nabataean drums and stones irregular in size belong to this phase.

## Area C

Six squares were opened (C.1-6). The different phases represented in Area C are as follows:
Phase I. a: Represented by Loci 24-18, which are dated by two coins to the beginning of the reign of Aretas IV before his appearance with his second wife Shaqilat II. One of the two coins belongs to Locus 24 , which represents the paved area with the small hexagonal slabs.
Phase I. b: Represented by Loci 17-12, which go back to the reign of Aretas IV after his marriage to Shaqilat II.
Phase II: Represented by Loci $11-9$, which are dated by coins of Malichus II ( $40-70$ A. D.).
Phase III: Represented by Loci 8-6, which go back to the reign of Rabbel II ( $70-106$ A. D.).
Phase IV: Represented by Loci 5-4, dated by pottery to the second half of the third and early fourth centuries A. D.
Phase V: Represented by Loci 3-1 (except for Islamic pits), which are dated by a coin of Justinian I (525-538 A. D.) and the tenth year of the reign of Justin II ( 574 A. D.).

## Area D

Two squares were opened (D.1-2). The phases represented are as follows:
Phase I. a: Represented by Loci 18-11, which are dated by a coin of Aretas IV before his appearance with his wife Shaqilat II. Locus 18 is represented by a small rectangular room built from medium-sized, well-dressed sandstone blocks.
Phase I. b: Represented by Loci $10-9$, which are dated to Aretas IV and his wife Shaqilat II.
Phase II: Represented by Loci 8-5, which are dated by coins to Malichus II.
Phase III: Represented by Locus 4, which is dated to the reign of Rabbel II.
Phase IV: Not represented in this area.
Phase V: Represented by Loci 3-1, which are dated by pottery and coins to the second and third quarters of the sixth century A. D.

## THE POTTERY LAMPS

## Introduction

Our information on pottery lamps from Nabataean sites remains obscure, since no article on this topic and its chronological significance has been written. It is, therefore, important to present this study on the Nabataean lamps from the 1981 Petra Excavations, to throw new light on one aspect of Nabataean material culture.

Although the Nabataeans absorbed Graeco-Hellenistic-Roman influences and copied many contemporary elements from the well-known classical lamps, they also introduced their own new types which carry incomparable artistic features such as are shown in this study.

The knowledge of the Nabataean lamps, as well as the classical ones, is particularly important because they provide us with information relevant to contemporary Nabataean daily life, religion and arts. Besides, lamp fragments occurred in almost every locus. Thus it would be essential for classical archaeologists to be acquainted with lamps for dating purposes.

Forty eight lamps - some intact, some incomplete and some fragmentary - were found in the 1981 Petra Excavations (Figs. 1-14, Pls. 1-9). The lamps, which go back to the Nabataean era, are classified into six main groups, and those which do not fit within these groups are assembled together as miscellaneous (Nos. 31-38). Lamps Nos. 39-40 came from Area C, Phase IV, which is dated to the third century A. D. Two main groups of Byzantine lamps were found in loci belong to Phase V; the so-called "slipper lamps" (Nos. 41-45), and the cone-like lamps (Nos. 46-48).

## Group I

Rounded moulded lamps with rounded nozzle, rim decorated with tight relief rays and four seven-petalled rosettes, volute on either side of nozzle with tiny concentric circles on top of each volute, groove connected sunken plain discus and wickhole, flat base surrounded with two concentric circles (bases without Nabataean characters). Nine types of lamps belonging to this group were found. They are as follows:

## Description

1. Intact lamp, from D. 2.5 (Fig. 1.1, Pl. 1.1).
L. 8.4 cm ; W. 5.7 cm ; H. 3.3 cm .

Red-creamy ware, traces of dark red slip on upper half and dripped irregularly on lower half, body sooted in places.
2. Almost complete lamp except for chip at nozzle from D. 2.5 (Fig. 1.2, Pl. 1.2).
L. 7.9 cm ; W. 5.4 cm ; H. 3.1 cm .

Greyish ware, darker greyish slip on top and dripped irregularly on lower part of the reservoir, body encrusted in places.
3. Almost complete lamp except for chip at nozzle, from D.2.5 (Fig. 2.3, Pl. 1.3). L. 8.4 cm ; W. $6.0 \mathrm{~cm} ; H .3 .1 \mathrm{~cm}$.

Light creamy ware, dark greyish slip on upper half, body evenly fired, some encrustation in places.
4. Incomplete lamp, part of front nozzle chipped off, from D. 2.5 (Fig. 2.4, Pl. 1.4).

Light grey ware, dark brown slip on top and dripped irregularly on lower half, body evenly fired.
5. Upper half of sunken discus and rim only, from D. 2.5 (Fig. 3.5, Pl. 1.5).

Ex. L. 7.4 cm ; W. 6.0 cm .
Light creamy ware, brownish slip in places, evenly fired.
6. Upper half of lamp only from D. 2.9 (Fig. 3.6, Pl. 1.6).

Ex. L. 7.0 cm ; W. 5.9 cm ; Ex. H. 2.1 cm .
Buff-creamy ware, dark grey slip on top, sooted in places.
7. Incomplete lamp, mainhole and part of nozzle missing, from D.2.5 (Fig. 4.7, Pl. 2.7).
L. 8.2 cm ; W. $5.9 \mathrm{~cm} ;$ H. 3.1 cm .

Greyish ware, evenly fired, traces of dark grey slip on upper half, body encrusted heavily.
8. Upper half of lamp only, from D.2.10 (Fig. 4.8, Pl. 2.8).
L. 8.4 cm ; Ex. W. 5.3 cm ; Ex. H. 2.5 cm .

Buff-creamy ware, brownish slip on top, sooted nozzle.
9. Incomplete lamp, broken and mended, from D. 2.9 (Fig. 4.9, Pl. 2.9).
L. 8.5 cm ; W. 6.0 cm ; H. 3.0 cm .

Light yellowish ware, traces of brownish slip on top, encrusted.

## Parallel Examples

Typically close parallels to the lamps of Group I (Nos. 1-9) would be Hammond 1973: 33, Nos. 94, 96 , illustrated on page 47 and dated "before the middle of the first century A. D."; Negev 1974: 28, Pl. 17.87, "Nabataean"; Rosenthal and Sivan 1978: 97, No. 394, "first century A. D.".

## Conclusion

The lamps of Group I appeared in the loci D. 2.5 to 10 , with a coin of Aretas IV with his second wife Shaqilat (her marriage did not take place before the twenty-seventh year of Aretas IV's reign, i.e. 18 A.D.) and a coin of Malichus II ( $40-70$ A.D.). One could conclude from the abovementioned parallels that such lamps are restricted to the Nabataean sites.

## Group II

Rounded moulded lamps very closely similar to the body shape and ware of lamps of Group I, but different in the following points: (a) The upper part of discus is decorated with a tight ladder-like pattern. (b) The two volutes are connected at the back of the nozzle. (c) On the nozzle there is a symbol which most probably represents a chalice with a hemispherical body and a trumpet base (Kharry 1984). (d) There are two rosettes each consisting of four circles, placed one on each side of the rim, and a rosette of nine petals at the back side of the rim and at the same alignment as the nozzle. Seven different examples are included in this study. They are as follows:

## Description

10. Incomplete lamp, broken and mended, large fragment of lower part missing, from D.2.6 (Fig. 5.10, Pl. 3.10). L. 8.0 cm ; W. 5.6 cm ; H. 4.4 cm .

Greenish ware, sooted and affected by fire, with four incised Nabataean characters below base, as follows: "RAYT" which means "I saw"
11. Complete lamp except for chip at rim, from D.2.9 (Fig. 5.11, Pl. 3.11).
L. 8.8 cm ; W. 6.8 cm ; H. 3.2 cm .

Creamy ware, evenly fired, brownish slip on upper half and dripped irregularly below, body encrusted and stained. The same four Nabataean characters as on lamp No. 10 are inscribed below base.
12. Almost half of lamp only, from D. 2.12 (Fig. 6.12, Pl. 3.12).

Ex. L. 8.2 cm ; W. 6.8 cm ; H. 3.2 cm .
Creamy-greyish ware, traces of brownish slip on top, heavily encrusted, bottom carried the first two Nabataean characters of the word "RAYT"; the other two characters are missing.
13. Upper half of lamp, nozzle missing, from D.2.5 (Fig. 6.13, Pl. 4.13).

Ex. L. 7.2 cm ; W. 6.1 cm ; Ex. H. 1.7 cm .
Greyish ware, dark brownish slip on top, sooted.
14. Small fragment of an inscribed lamp base, as in Nos. $10-12$, from D. 2.5 (Fig. 6.14, Pl. 4.14). Creamy ware, thickness about 2.5 mm , evenly fired.
15. Two-thirds of lower half of lamp only, from B.12.8 (Fig. 7.15, Pl. 4.15).

Ex. L. 4.7 cm ; Ex. W. 5.5 cm ; Ex. H. 1.9 cm .
The same four Nabataean characters as in Nos. 10-12 are inscribed within two incised concentric circles; dull creamy ware, thickness varying from 2.5 to 3.0 mm , body heavily encrusted with white limestone deposit.
16. Intact lamp, from D.1.5 (Fig. 7.16, Pl. 4.16).
L. 8.7 cm ; W. 6.1 cm ; H. 3.2 cm .

Creamy ware, brownish slip on top and dripped irregularly below, bottom inscribed with the following three Nabataean characters "HNY" which means "pleasure"

## Parallel Examples

The lamps of Group II are frequently published in the literature and are exemplified by Dalman 1912: 26-27, Fig. 15b (No. 871 a); Murray and Ellis 1940: 26, Pl. XXXVI. 15 "Nabataean"; Horsfield and Conway 1942: 122, 195, Pl. XI.42-43 and XLIV.415-418 respectively "first century A. D."; Cleveland 1960: 71-72, Pl. 18A; Schmitt-Korte 1968: 514, Abb. 11.42 "Nabataean"; Negev 1970: 48-51, Abb. 32.3; Hammond 1973: 33-34, 36, Nos. 129-132; Negev 1974: 28-29, Pl. 17.88-89 "Nabataean, first century A. D."

## Conclusion

According to the parallels quoted above, the lamps of Group II are restricted to the Nabataean sites and were in use, according to our stratigraphical evidences, from around the beginning of the Christian era to around the end of the reign of Malichus II (40-70 A.D.).

## Group III

Rounded lamps decorated with rosette patterns. Three different types are included in this study. They are as follows:

## Description

17. Incomplete lamp, part of upper top missing, from B.12.8 (Fig. 8.17, Pl. 5.17).
L. 8.7 cm ; W. 6.6 cm ; H. 2.4 cm .

Yellowish-green ware, hard, evenly fired, traces of dark, grey slip on top. Circular body with narrow rim separated from large sunken discus by two concentric incised grooves very close to each other, discus decorated with a twelve-petalled rosette with every pair of petals forming a heart shape, rounded nozzle with double volutes, flat base.
18. Upper half of lamp only, broken and mended, from D.1.4 (Fig. 8.18, Pl. 5.18).
L. 9.4 cm ; W. 6.9 cm ; Ex. H. 2.3 cm .

Yellowish-green ware, lighter than that of No. 17, traces of light brownish slip on top. Very closely similar in shape and decoration to No. 17 except that there are twelve arrow-like shapes around the twelve petals.
19. Small fragment of rim and discus, from B.7.7 (Fig. 8.19, Pl. 5.19).

Light grey ware, evenly fired, encrusted. Broad rim, decorated with metopes (scrolls) and triglyphs (three vertical lines); on sunken discus a petalled rosette.

## Parallel Examples

Published parallels for Nos. 17-19 would seem to be Loeschcee 1919: 417, Pl. XV. 668 "Roman"; Waagé 1934: 63, Pl. IX.2015, "the second half of the first century A. D."; Waagé 1941: 64, Fig. 77.97, which is classified as Type 39 b and dated with a question mark to the "second quarter of the first century A. D.'; Murray and Ellis 1940: 14, 26, Pls. XI.2, XXXVI.17, "undated"; HorsFIELD and CONWAY 1942: 144-145, Pl. XXI.162, which is furnished with an "ear-shaped" handle; they deduce that their example is from the same "local factory" as the painted pottery with a date after the middle of the first century A. D.; Vessberg 1953: 116, Pl. II.4, "Roman"; Crowfoot et. al. 1957: 371, Fig. 88.1, "Roman"; Robinson 1959: 38, Pl. 44. G 155, from the Athenian Agora, Layer II, "first half of the first century A. D."; Perlzweig 1961: 74, Pl. 2: 30, "the middle of the first century A. D."; Bailey 1965: 64, Pl. X.218, "second half of the first century A. D. or perhaps a little later"; Schmitt-Korte 1968: 514, Pl. 11, No. 43, "Nabataean" but the latter example is furnished with two ledge handles; Menzel 1969: 37, No. 162 and Fig. 31.10, "early Roman"; Oziol and Pouilloux 1969: 53, No. 113, "first century A. D."; Negev 1974: 26, Pl. 16.74, 80, from the Nabataean potter's workshop at 'Abde. Negev deduces that the latter examples are of a "local production?"; Oziol 1977: 80, Pl. 10.164, "early Roman"; Negev and Sivan 1977: 123, Fig. 4: 27, from the Necropolis at Mampsis, Phase I, which is dated to "the last quarter of the first century B. C. to about the middle of the first century A. D."; Rosenthal and Sivan 1978: 25, No. 73 , which is decorated with ten petalled rosettes and assigned to the "Roman Imperial lamps"; Bailey 1980: 208, 211, Pls. 29: Q 1008, 30: Q 1020 which are classified as "Type D, group III" and dated to "the second and third quarters of the first century A.D."

## Conclusion

Lamps of Group III (Nos. 17-19) occurred in different loci which are dated from about the end of the second decade of the first century A. D. until around the end of the reign of Rabbel II in 106 A.D. Such dating does not contradict the dating evidence of the above-mentioned parallels.

The ware and some of the characteristics of the form of the lamps of Group III are typically Nabataean, although such types were well-known all over the Roman Empire.

## Group IV

Rounded lamps with large sunken discus, decorated with human figures. Three different Nabatacan lamps are treated in this study. They are as follows:

## Description

20. Incomplete lamp, broken and mended, from D.2.11 (Fig. 9.20, Pl. 5.20).
L. 9.4 cm ; W. 6.3 cm ; H. 3.1 cm .

Light red ware, evenly fired, gritty, thin pinkish slip on top and dripped down in places, body slightly sooted. Rounded body, erotic scene on large sunken discus, double volutes on either side of rounded nozzle, two incised concentric circles on narrow rim, flat base surrounded by groove with impressed planta pedis in centre.
21. Almost one-third of lamp only, from 8.5.12 (Fig. 9.21, Pl. 5.21).

Light grey ware, evenly fired, fine grits included, dark brownish slip on discus and dripped irregularly in places. Rounded body, butchery scene on large sunken discus, two incised concentric circles on narrow rim, within the ring base an impressed potter's name: FAVSTI.
22. Almost one-third of lamp only, from D. 2.9 (Fig. 10.22, Pl. 5.22).

Grey ware, well levigated and evenly fired, top sooted. Rounded body, large sunken discus decorated with Eros wearing leg-shackles, working with a pick-axe and basket, two incised concentric circles on narrow rim, flat base.

## Parallel Examples

Petra provides us with typical parallels to lamp No. 20 in Horsfield and Conway 1942: 196, Pl. XLV.424a and b; Hammond 1973: 37, Nos. 149-152 "probably first century A.D." and in Zayadine 1982: 392, Fig. 15: 169, "probably the end of the first century A.D." Very closely similar examples to the lamp No. 20 with the same erotic scene occurred frequently outside the Nabataean sites and could be compared to Loeschcee 1919: 395, Pl. VIII. 406, 412, "Roman"; Deneauve 1969: 116, Pl. XXXIX.336-337, L.483, "early first century A. D."; Menzel 1969: 42, Fig. 33.14, "early Roman"; Szentléleky 1969: 54, 67-68, 81, Nos. 49, 70, 75-76, 109 respectively. The latter examples are classified as "Roman Imperial Lamps" See also Oziol 1977: 100, Pl. 14.231-235, "middle of the first century A. D." and Bailey 1980: 142, Pl. 4: Q 800, "40-80 A. D."; ibid., 148, Pl. 7: Q 828, "first third of the first century A. D."; ibid., 165, Pl. 13: Q 880, "40-75 A. D."; ibid., 174, Pl. 16: Q 922, "30-70 A.D."

Lamp No. 21 can be compared to Walters 1914: 78-79, Fig. 98, Nos. 522-523, "undated" Two similar examples were bought at Petra in 1929 and are published by Horsfield and Conway 1942: 195-196, Pl. XLIV.421, XLV.428, "early first century A. D.". Horsfield's example No. 421 is furnished with an impressed potter's name on bottom, FAVSTI, whereupon Horsfield deduces that this lamp was imported from Egypt because of the occurrence of the same name on
the base of a lamp from Damanhur in Egypt. The same name also appears on a lamp from Samaria (Crowfoot et.al., 1957:371, Fig. 88.1). Crowfoot states that "Faustus is known to have worked at Cincelli in the first century A. D."

Two similar lamps also signed with the name FAVSTI are in the Victoria and Albert Museum and published by Bailey (1965: 66-67, Pl. 11.228-229). The Nabataean potter's workshop at 'Abde provides us with two other bases with the same potter's name which are published by Negev (1974: 25, Pl. 15.64). A similar example came from Cyprus (Oziol 1977: 99, Pl. 13.230, "first century A.D."). An intact typical parallel found at Petra and "made there" is exhibited in the British Museum with the registration number 1927.7-12.1. This lamp is dated to "the first half of the first century A. D." Recently Zayadine (1982: 392, Fig. 15.134) published a similar example from Petra dated "to the end of the first century A.D."

Lamp No. 22, which is decorated with Eros, has typical parallels in Horsfield and Conway 1942: 123, Pl. XI.49, "first century A.D."; Rosenthal and Sivan: 34, No. 124, "possibly Nabataean"

## Conclusion

One could deduce from the above-mentioned parallels that lamps decorated with erotic scenes are well-known during the Roman period, especially during the first half of the first century A.D. Lamp No. 20 is of Nabataean ware and belongs to Phase I. a, which is dated to around the Christian era until the end of the second decade of the first century A. D.

Lamp No. 21 with its butchery scene occurred frequently in Petra and not outside the Nabataean sites, although the name FAVSTI, which is impressed on the base of lamp No. 21, is the name of a potter known to have worked at Cincelli in the first century A.D.

Lamp No. 22, which is decorated with Eros wearing leg-shackles, is restricted to the Nabataean sites. Both lamps Nos. 21-22 belong to Phase I. b, which is dated to 18-40 A. D.

## Group V

A. Rounded lamps, each with sunken discus and crescentic handle. These lamps are as follows:

## Description

23. Intact lamp, from D.2.5 (Fig. 11.23, Pl. 6.23).
L. 10.0 cm ; W. 4.6 cm ; H. 2.5 cm .

Creamy ware, smooth to touch, pinkish slip. Rounded body, handle in shape of lunulus, comparatively large in proportion to the body, counterbalances the projecting rounded nozzle, two volutes on both sides of nozzle, sunrays decoration on sunken discus, separated from rim by two incised concentric circles, flat base surrounded by an incised circle with impressed planta pedis in centre.
24. Handle of lamp in shape of lunulus, from D.2.6 (Fig. 11.24, Pl. 6.24).

Ex. L. 6.9 cm ; W. of handle 4.1 cm ; H. of handle 2.1 cm .
Creamy ware, few white grits included, pinkish slip.
25. Lower half of lamp only, from D.2.7 (Fig. 12.25, Pl. 6.25).

Ex. L. 7.8 cm ; Ex. W. 4.2 cm ; Ex. H. 3.1 cm .
Creamy ware, evenly fired, brownish slip outside, body encrusted. Boat-like shape, incised circle around flat base with impressed planta pedis in centre.
B. Rounded lamp with small plain sunken discus and broad rim, small rosettes on either side of reservoir which show their bronze ancestry (an adaptation in clay of metal prototypes).

## Description

26. Intact lamp, from D. 2.5 (Fig. 12.26, Pl. 6.26).
L. 8.4 cm ; W. 5.2 cm ; H. 3.0 cm .

Light grey ware, well levigated, evenly fired, traces of dark grey slip outside, some limestone encrustation on top. Bent-up pierced handle added separately, faintly indicated ring base with impressed planta pedis in centre.

## Parallel Examples

Lamps Nos. 23-25 are frequently attested in the literature and are exemplified in Walters 1914: $127-128$, Pl. XXVI.837-850, but each of the latter two examples is furnished with two nozzles; Loeschcke 1919: 224, Fig. 4.1-2, "first century A. D."; Broneer 1930: 169, Pl. VII.396, "Type XXI"; Waagé 1934: 62, Pl. VIII.1927, which is classified as "Roman Group I"; Robins 1939: 55-56, Pl. XII.8; lliffe 1945: 21, Pl. VII.128; Goldman et. al., 1950: 95, Pl. 102: 203, which is attributed to "Group XVI" and dated to "the first century A. D."; Vessberg 1953: 117, Pl. II.17, "first century A. D."; Menzel 1969: 26-29, No. 88 and Fig. 25.14, "early Roman"; Vessberg and Westholm 1956: 123, Fig. 38.17, furnished with two nozzles, "Roman"; Deneauve 1969: 145-146, Pls. LVI.544-545, LVII.551-552, LX.589, "first century A. D."; Szentléleky 1969: 63, Nos. 65a-b, 86a-b, 95a, "early Roman"; Negev 1974: 27, Pl. 16.82, "first century A. D." Negev deduces that the latter example from ' $A b d e$ "is certainly not imported, and must have been produced in one of the local Nabataean potter's workshops"; Oziol 1977: 172-173, Nos. 521-523, "first century A. D."; Rosenthal and Sivan 1978: 19-21, Nos. 42, 49-50, which are classified as "Roman Imperial Lamps"; Bailey 1980: 205, Pl. 28. Q 1002, Type D, Group II, "the first half of the first century A. D."; ibid., 208, PI. 29. Q 1007, Type D, Group III, "second and third quarters of the first century A. D."; ibid., 215-216, Pls. 33. Q 1031, 34. Q 1033, Type D, Group VI, "40-80 A. D."; ibid., 218, Pl. 34. Q $1036-\mathrm{Q} 1038$, "first half of the first century A. D."

Lamp No. 26 finds possible parallels in Murray and Ellis 1940: 26, Pl. XXXVI.12, "undated"; Horsfield and Conway 1942: 144, Pl. XXI.161, "Nabataean"; Robinson 1959: 36, Pl. 44. G 143 from the Athenian Agora, Layer II, which is dated to "the middle of the first century A. D." The latter example is furnished within its raised ring base with the latter alpha in relief.

## Conclusion

Lamps of Group V A (Nos. 23-25) which are furnished with crescentic handles are of a local production and were well-known inside and outside the Nabataean sites during the first century A. D. Our examples belong to Phase II (40-70 A. D.). This date does not contradict the dating evidence of the parallels.

## Group VI

Crude hand-made lamps, mainly boat-like in shape with bent-up rim; decorated with irregular incisions and grooves. Four different types were found in the 1981 Petra excavations. They are as follows:

## Description

27. Intact lamp, from B.3.9 (Fig. 13.27, Pl. 7.27).
L. 9.3 cm ; W. 4.5 cm ; H. 3.6 cm .

Dull pinkish ware, crude with light grey core, rough to touch, encrusted. Boat-like shape, bent-up handle, defined ridge around sunken discus, narrow mainhole, flattened base, incised rays on rim and ridge, sooted nozzle.
28. Complete lamps except for chip at nozzle, from B. 16.10 (Fig. 13.28, Pl. 7.28).
L. 9.2 cm ; W. 5.8 cm ; H. 3.2 cm .

Crude thick grey ware, coarse and encrusted. Rounded body, twisted, flattened discus surrounded by bent-up collar, incised on top, narrow filling hole surrounded by three pierced drain-holes, plain rounded nozzle, high pinched handle added, with the surrounded bent-up collar, separately, uneven ring base.
29. Two-thirds of lamp only, broken and mended, from B.14.12 (Fig. 14.29, Pl. 7.29).
L. 10.4 cm ; W. 4.3 cm ; H. 3.0 cm .

Very crudely modelled, dark grey ware, light grey core, body coarse to touch. Boat-like shape with comparatively stretched nozzle and pinched handle; grooved on top, defined ridge around sunken discus with incised rays below ridge outside, encircled flat base, three grooves on top of nozzle.
30. Incomplete lamp, nozzle missing, from B.16.2 (Fig. 14.30, Pl. 7.30).

Ex. L. 6.8 cm ; W. 3.5 cm ; H. 2.9 cm .
Black ware, hard, evenly fired. Crude, hand-made body, boat-like shape, defined collar around flat discus, pierced with central mainhole surrounded by three pierced drain-holes, long bar handle, flat base.

## Parallel Examples

Lamp No. 27 is closely parallel to Horsfield and Conway 1942: 114, Pl. VI.8, "very crude native example of Hellenistic shape"; and to НАммоnd 1973: 34, Nos. 102-103 on page 47, "undated"

Lamp No. 28 has fairly close parallels in Broneer 1927:332, Fig. 2.1, 3, 5-6, "late Hellenistic"; Broneer 1930: 57, Pl. V, Fig. 25.265, 287, 230, which is assigned to Type XVI, "late Hellenistic"; Horsfield and Conway 1942: 145, Pls. XXI.163, XXIX.240-241, "Nabataean, poor native amalgamation of Hellenistic and Roman lamp shapes, first century A. D."; Howland 1958: 166-167, Pl. 49: 649-660, from Corinth, classified as "Type XIX, early Roman"; Deneauve 1969: 106, Pl. XXXIV.277, "early Roman"; Negev 1974: 29, Pl. 17.92, "Nabataean"; Rosenthal and Sivan 1978: 98, Nos. 397-398 from 'Abde. All the above-mentioned are mould-made.

No published parallels could be found for Nos. 29-30.

## Conclusion

The crude, hand-made lamps of Group VI (Nos. 27-30) are of local Nabataean production, and according to their body shape it is most probable that they are Hellenistic survivals. With the exception of lamp No. 30 they belong to Phase I.b ( $18-40$ A. D.). These lamps are restricted to the Nabataean sites and were chiefly made for domestic use in the poorer homes.

## Miscellaneous

Since some of the lamp types cannot easily be attributed to any of the above groups, they are assembled under a miscellaneous heading. They are as follows:

## Description

31. Fragment of upper half of lamp only, from D. 2.5 (Fig. 15.31, Pl. 8.31).

Light grey ware, evenly fired, body sooted. Broad flattened rim within two circular ridges decorated with a small wreath, flanked by two seven-petalled rosettes, very closely similar to those which appear on the lamps of Group I (Nos. 1-9).
32. Fragment of upper part of lamp, from B.3.7 (Fig. 15.32, Pl. 8.32).

Dull brownish ware, evenly fired, well levigated, slightly sunken discus decorated with ivyleaf pattern around filling hole, two volutes.
33. Fragment of upper part of lamp, from D.2.6 (Fig. 15.33, Pl. 8.33).

Light grey ware, evenly fired, well levigated, thin dark grey slip outside. Small plain discus with broad rim, decorated with wreath of tendrils of ivy leaves in relief and some kind of rounded fruit.
34. Fragment of upper part of lamp, from D.1.11 (Fig. 15.34, Pl. 8.34).

Light buff ware, evenly fired, thick pinkish slip on top, peeled in places. Sunken large discus decorated with wreath of olive leaves bearing olives and with the lower ends of the branches interwoven, impressed circle separating discus from narrow rim.
35. Fragment of upper part of lamp, from D.2.7 (Fig. 15.35, Pl. 8.35).

Creamy-whitish ware, evenly fired, pinkish slip outside, small discus separated from broad rim by defined ridge, ridge decorated with incised lines, and rim with wreath and rosette.
36. Fragment of lamp, from B.5.12 (Fig. 16.36, Pl. 8.37). Light grey ware, evenly fired, dark brownish slip on top and dripped below irregularly. Sunken discus with broad patulated nozzle.
37. Fragment of lamp's handle, from C.4.6 (Fig. 16.37, Pl. 8.36).

Black ware, hard, evenly fired. Triangular lamp-handle attachment decorated with applied coils and incisions.
38. Fragment of large nozzle from B. 16.12 (Fig. 16.38, Pl. 8.38).
L. 5.7 cm ; Diameter of wick-hole 2.8 cm .

Thick light grey ware (almost 7 mm in thickness), with pinkish outerzones, nozzle affected by fire, body wheel-made.

## Parallel Examples

Petra provides us with the only typical parallel which could be found so far to lamp No. 32 in Horsfield and Conway 1942: 122, Pl. XI.46, "Import? lst cent. B. C. - A. D." The latter parallel is intact and decorated with ten ivy-leaves around narrow filling-hole.

Lamp-sherd No. 33 could be compared to Broneer 1930: 80, Fig. 38.13-23, "Type XXIV, first and second centuries A.D."

Lamp-sherd No. 34 is frequently attested in the literature and is exemplified by Walters 1914: 120, Pl. XXIV.800, but the discus of the latter example is decorated with a wreath of oak-leaves and acorns. For olive-wreath see ibid., 152, Pl. XXIX.1018, "undated"; Waage 1941: 64, Fig. 77.99, which is classified as Type 39 and dated with a question mark to the second quarter of the first century A. D.; Goldman et. al., 1950: 93, 109, Pl. 98.142, which is attributed to "Group XII"
and dated to the "first century A. D." and see also ibid., 111, Pl. 99.161, which is attributed to "Group XIII" and dated to the "second quarter of the first century A. D."; Vessberg 1953: 122, Pl. II.13, "first century A. D."; Vessberg and Westholm 1956: 123, Fig. 38.13, "Roman"; Perlzweig 1961: 88, Pl. 7: 197, "first century A. D."; Bailey 1965: 70, Pl. XI.245, "probably Italian of the second half of the first century A. D."; Deneauve 1969: 144, Pl. LIV.533, "first century A. D."; Menzel 1969: 26, 36, Figs. 24.81, 31.15, "early Roman"; Szentléleky 1969: 78, No. 103, "the time of Tiberius"; Oziol 1977: 123, Pl. 18.312 "early Roman"; Rosenthal and Sivan 1978: 31, No. 106, which is attributed to the "Roman Imperial Lamps"; and Bailey 1980: 175, Fig. 101, Pl. 17: Q 925, Type B, group III, "A. D. 40-80"; ibid., 182, Fig. 101, Pl. 20: Q 950, Type B, group V, "second half of the first century A. D."; ibid., 209-210, Fig. 101, Pl. 29: Q 1010, "A. D. 40-80"; ibid., 240, Pl. 40: Q 1103, Type H, "second half of the first century A. D."; ibid., 305, Pl. 59: Q 1226, Type O, "late third of the first century A. D."

The broad spatulated nozzle No. 36 could be compared to Broneer 1930: 76-77, Pl. VII, Fig. 37.422, 431-432, Type XXII, "early Roman"; WaAGé 1941: 64, Fig. 77.102, which is assigned to "Type 40 " and attributed to the "Augustan" period; Horsfield and Conway 1942: 195-197, Pls. XLIV-XLVI.412-434, "undated"; Robinson 1959: 37, Pl. 44. G 150 from the Athenian Agora, Layer II, "first half of the first century A. D."; Negev 1974: 25, Pl. 15.63. Negev deduces that such lamps "were imports"

## Lamps of the late Roman period

Two different lamps of the late Roman period were found in the 1981 Petra excavations. They are as follows:

## Description

39. Incomplete lamp, filling-hole missing, from C.4.5 (Fig. 17.39, Pl. 9.39).
L. 6.9 cm ; W. 6.6 cm ; H. 2.2 cm .

Brownish-red coarse ware, heavily encrusted. Rounded body with small rounded nozzle, tiny bent-up handle, defined ridge separating sunken discus from decorated rim, series of sixteen rounded rosettes impressed on rim, low disc base, body slightly warped.
40. Intact lamp, from C. 6.3 (Fig. 17.40, Pl. 9.40).
L. 9.0 cm ; W. 6.6 cm ; H. 2.6 cm .

Light red ware, dull pinkish slip, peeled in places. Rounded body with small rounded nozzle, tiny pinched up handle, dramatic mask of an African slave on discus with two filling-holes, plain rim, low ring base.

## Parallel Examples

Lamp No. 39 has fairly close related parallels in Loeschcke 1919: 237, Fig. 7.L1, L2, K, H, R and Pl. III. 694 "Late Roman"; Proneer 1930: 86, Fig. 41.4, "Late Roman"; Murray and Ellis 1940: 26, Pl. XXXVI.16, "undated"; Iliffe 1945: 23, Pl. IX. 139, from Ǧerǎ̌, "undated"; Harding 1950: 81-82, Pl. XXV.35, "dated to the mid. - late third century A. D."; Robinson 1959: 51, Pl. 45. J6 from the Athenian Agora, Layer II "late second century A. D.", though the latter example is accompanied by a high pierced handle; Bar-Adon 1961: 28-29, Fig. 1.8, "undated"; Hammond 1973: 36, No. 134, "undated"; Smith 1973: 215-216, Pl. 65.507, Pl. 83.312, from Tomb 8, Chamber, "third century A.D."; Avigad 1976: 24, Fig. 9.5, Pl. LXX.5, which is assigned
approximately to "the middle of the third century A. D."; Negev and Sivan 1977: 117, 129, Fig. 10.65, from Phase II, which go back to "the last quarter of the first century until about 150/200 A.D."

Comparable examples for lamp No. 40 would seem to be Wiegand and Schrader 1904: 279, Fig. 288, "Late Roman"; Kennedy 1963: 73, 99, Pl. XIV.501, "second and third centuries A. D."; Hammond 1973:34, No. 100, illustrated on page 47, "Roman import (?)"; Negev and Sivan 1977: 107-131, esp. 113-114, Fig. 5: 29, though the latter example is without handle and attributed to Phase II, "the last quarter of the first century A. D. until about 150/200 A. D."

## Conclusion

Lamps Nos. 39-40 belong to Phase IV, which is dated to the second half of the third and early fourth centuries A. D., and were well-known all over the Roman world during the third century A. D.

## Lamps of the Byzantine Period

Two main types of Byzantine lamps were found in the 1981 Petra excavations. They are the following:
I. The so-called "slipper lamps", mould made (Nos. 41-45).
II. Cone-like lamps with circular flat base and vertical high loop handle, wheel-made (Nos. 46-48).

## I. The so-called "slipper lamps"

## Description

41. Complete lamp from B. 9.2 (Fig. 18.41, Pl. 10.41).
L. 7.6 cm ; W. 5.2 cm ; H. 2.4 cm .

Broken and mended, rounded body with stretched nozzle, convex top, radial pattern around large filling-hole and pellet, one encircled cross on nozzle and two other crosses enclosed by rough squares and placed on either side of the lamp's shoulder, ring base with a three "finger" motif above the base; light red ware, crude, gritty and encrusted, body slightly twisted.
42. Intact lamp from B.9.1 (Fig. 18.42, Pl. 10.42).
L. 7.2 cm ; W. 5.0 cm ; H. 2.4 cm .

Similar to preceding in shape and decoration except for two volutes between wick-hole and filling-hole and three defined ridges in between, red ware, gritty, body partially encrusted and slightly twisted.
43. Intact lamp from B.9.2 (Fig. 19.43, Pl. 10.43).
L. 7.2 cm ; W. 5.2 cm ; H. 2.2 cm .

For shape and decoration see No. 42, crude light red ware, encrusted and stained.
44. Incomplete lamp from B. 11 (North baulk) Fig. 19.44, Pl. 10.44).
L. 9.3 cm ; W. $6.4 \mathrm{~cm} ;$ H. 2.6 cm .

Broken and mended, convex top, double ridges enclosing large filling-hole, radial pattern on shoulder, ring base, crude creamy ware with grey core, body warped, four tiny knobs between filling-hole and wick-hole which most probably represent a cross.
45. Complete lamp from B. 9.1 (Fig. 19.45, Pl. 10.45).
L. 8.4 cm ; W. 5.2 cm ; H. 2.8 cm .

For description see No. 42 except that there is no "three fingers" motif above the ring base; pinkish coarse ware; grey slip, encrusted.

## Parallel Examples

Petra offers very close parallels to lamp No. 41 in Horsfield and Conway 1942: 137, Pl. VI.125, "Nabataean, 4th century A.D."; and Saller 1957: 52-53, Fig. 16.3, "fourth-sixth century A. D."

Lamp No. 42 has a fairly close parallel from Pella (Smitн 1973: 219, Pl. 66, No. 369) which is dated to the " 6 th century A. D." This example does not show the decoration of the three "fingers" above the ring base as is the case with lamp No. 42. Other examples from Petra can be found in Horsfield and Conway 1942: 159, Pl. XXIX. 239, "Nabataean, 3rd or 4th centuries A. D." and Hammond 1973: 37, No. 143 on p. 49, "undated"

A close parallel to lamp No. 43 is reported by Avigad 1976: 184, Pl. LXXI. 33 which is dated "to the time when the catacombs were used for burial, i. e. up till 351 A. D.". Bethany provides a close parallel in Saller 1957: 52-53, Fig. 16.6, "fourth-sixth century A.D."

Published parallels that could be cited for lamp No. 44 are Crowfoot et.al. 1957:376, Fig. 89.5. This parallel is called "Jerusalem slipper"; Aharoni 1956: 108, Fig. 4.2, " 5 th-6th centuries A. D.", and Saller 1957: 181, Fig. 16.10, "Byzantine"

Lamp No. 45 may be compared with Glueck 1966: 183, Pl. 82a (the first lamp on the left in third row), which is classified as "Byzantine" Petra offers an identical parallel in Horsfield and Conway 1942: 137, Pl. VI.5. This example is designated by Horsfield as "Nabataean - 4th century A. D."

## Conclusion

From the above-mentioned parallels it is clear that lamps Nos. 41-45 are rarely found outside Nabataean sites. The body forms of the parallels from outside Nabataean sites, e.g. Bethany, Pella, Beth Shéarim, Samaria and Ramat Rahel, generally bear a strong resemblance to our lamps, but there seem to be striking differences in the quality of the ware, since it is comparatively thicker and less delicate than the ware of the lamps found in Nabataean sites. With the exception of lamp No. 44, the Petra examples are smaller in size and have slightly concave sides between nozzle and filling-hole. In addition, our examples Nos. 41-43 are furnished with three "fingers" just above the ring base, which could represent either the "thrice blessed" in Christianity or merely a potter's mark. This feature never occurs elsewhere, as far as is known to the writer. Hence I deduce that these lamps were made in Petra and were influenced by the so-called "slipper lamps", which were very common outside the Nabataean sites during the Byzantine period.

## II. Cone-like lamps with circular flat base and vertical loop handle, wheel-made

## Description

46. Intact pottery lamp from B. 9.1 (Fig. 20.46, Pl. 11.46).
L. 8.7 cm ; W. 7.0 cm ; H. 4.0 cm .

Cone-like body, circular flat base with concentric ribbing below, rim flattened on top, body
covered with sharp close ribbing, high loop handle from rim to shoulder, applied in an askew position, small nozzle almost in a straight line with the handle, attached to the lower part of the body, thick greyish ware, crude, thick for size of object, body sooted outside.
47. Intact pottery lamp from B.9.1 (Fig. 21.47, Pl. 11.47).
L. 8.9 cm ; W. 7.3 cm ; H. 5.0 cm .

Flaring rim, rounded on top, cone-like body, flat circular base, high loop handle in an askew position, short projecting nozzle in a straight line with the handle, body unribbed, thick heavy greyish ware, creamy slip outside, encrusted in places.
48. Large fragment of pottery lamp from B.5.3 (Fig. 22.48, Pl. 11.48).
L. 8.9 cm ; Ex. H. 5.9 cm .

Flaring rim, everted and flattened on top, short straight nozzle, thick dark grey ware, thin red outer zones, body sharply ribbed and sooted.

## Parallel Examples

Lamp No. 46 is frequently attested in the literature and is exemplified by Macalister 1912, Pl. LXXII.11; Fitzgerald 1931, Pl. XXXVI.25; Aharoni 1956:108, Fig. 4.3, from Stratum II, "5th-6th centuries A. D."; Colin-Baly 1962: 63-64, Pl. XXVIII.23, "Late Byzantine and Early Arab Times"; Corbo 1965: Pl. 25.21; Oziol and Poumloux 1969: 115, No. 475, Pls. XI, XXV; Rosenthal and Sivan 1978: $122-123$, Nos. 506-507, "around the time of the end of the sixth, beginning of the seventh century A.D."; and Sellers and Baramio 1953: 40-41, Fig. 42, Nos. 208, 399, "Type IX, which can hardly be earlier than the 4th century A. D.".

Lamp No. 47 can be compared to Crowfoot et al. 1957:376-377, No. 10, Fig. 89.10, which is dated to the "third-fourth century A.D."; MacCown 1947, Pl. 72.1650; Colin-Baly 1962: 63-64, Pl. XXVIII.22, "Late Byzantine and early Arab times"; Macalister 1912, Pl. C1(a).11, and Rosenthal and Sivan 1978: 122-123, 508-509, "the end of the sixth and the beginning of the seventh century A.D."

## Conclusion

The above-mentioned three lamps Nos. 46-48 were found in Phase IV, which was dated by two Byzantine coins to the second and the third quarters of the sixth century A.D. With the exception of the early dates supplied by Crowfoot et al. 1957, Sellers and Baramiki 1953, the majority of the parallel examples confirm the fact that this type of lamp belongs to the end of the Byzantine period and still appears even in the early Islamic period.

## A Pottery Lantern

A lantern is an object for protecting a light from the wind and is intended for carrying a small light, especially when the holder uses it outdoors during the night. Such an object probably was furnished with a basketry handle as in Walters (1914: 227, Fig. 352, No. 1511), or with a rounded handle surmounting the dome-like top of the lantern (Horsfield and Conway 1942: 113, Pl. VI.3).

## Description

49. About two-thirds of the lower part of the pottery lantern is broken and mended, from C.3.10 (Fig. 23.49).

| Existing height: | 8.7 cm |
| :--- | :---: |
| Body diameter: | 13.8 cm |
| Diameter of ring base: | 8.3 cm |
| Dimensions of opening: | $3.8 \times 5.6 \mathrm{~cm}$ |
| Diameter of air-holes (approx.): | $5-6 \mathrm{~mm}$ |

Buff-red ware, evenly fired, considerably gritty, creamy slip outside. Cylindrical body with a high ring base. A square opening is cut out by a sharp tool, and traces of cutting are obvious. Airholes were pierced from the outside when the clay was "leather hard" resulting in coarse attachments on the inside walls.

## Parallel Examples

Priene produced a parallel to lantern No. 49 (Wiegand and Schrader 1904: 423, Fig. 540.1), which was found in a Hellenistic architectural complex dated to the middle of the second century B. C. Another parallel is published by Petrie (1913, Pl. XV.15), which is attributed to the Roman period. Lantern No. 49 could be also compared to Walters 1914: 227, No. 1433, Fig. 352, No. 1511. Waiters referred lantern No. 1433, which was found at Enkomi, to the "Hellenistic" period. A further comparable form came from the Cyprus Museum (Taylor and Seton-Williams 1938: 35, D 627) and is assigned to the "early Hellenistic times". Another probable example which may be compared to lantern No. 49 was found at Salamis and published by Bailey 1965: 61, Pl. IX.200. The latter example is furnished with a double ribbed handle. See also Bailey 1975: 225-226. Pl. 98. Q 495-Q 496. Baney pointed out that "there is very little information" relating to the dating of such pottery objects.

## Conclusion

From the above-mentioned parallels one can notice the paucity of literary sources for pottery lanterns from the Levant area and the high frequency of published examples in other areas, especially in Cyprus and Egypt. According to the parallels, such lanterns were mainly of the Hellenistic period. Lantern No. 49 occurred in Phase II, which is dated by coins of Malichus II (40-70 A. D.).

## TERRACOTTA FIGURINES

## Introduction

The term "terracotta" is confined in this study of the 1981 Petra finds to the human and animal pottery figurines. None of us, surely, would disagree with Philip Hammond's dictum that "complete and fragmentary figurines from Nabataean sites are extremely numerous, although no thorough study of them has really been made" (Hammond 1973: 84). This chapter is devoted only to the terracottas which were found in the 1981 Petra excavations. The majority of these figurines are moulded (Nos. 1-19, 23-27, 32-33), but some are wheel-made (No. 28) or even modelled by hand (Nos. 20-22). Limbs are usually moulded, though there also occur hand-made (No. 29) or a combination of moulded and hand-made examples (No. 31).

All the 33 different terracotta figurines illustrated (except for No. 9) were found in a fragmentary state, in stratified deposits. Presumably the majority of our figurines were dedicated as votive offerings in sanctuaries, and some of the human figurines probably represent gods and goddesses (Nos. 1-2, 6). They were deliberately broken and buried near temples and sanctuaries. Twenty different figurines out of the total in our collection were found in two adjacent trenches (D. 1 and 2). According to our stratigraphical evidence, they belong to the first seven decades of the first century A.D. Hence one may deduce that such a large percentage of fragmentary human and animal figurines would be explained by the above-mentioned phenomenon. Solid animal figurines (Nos. 20-22) are hand-made and reflect a primitive artistic skill. They may have been playthings for children. Although one of the hand-made animal figurines occurs in Phase II (the reign of Malichus II), two other examples belong to Phase V (the second and the third quarters of the sixth century A. D.).

Figurine No. 9 is the only intact example in our plates; it is probably the one found in a tomb at Petra by D. Kirkbride (Harding 1958: 15). The purpose of including the intact figurine No. 9 in this study is to throw light upon fragment No. 8, which most probably was made in the same mould, but only one-fifth of the whole figurine was found. Figurine No. 9 may have a symbolic meaning for the dead or, perhaps, represents a favourite item during the life-time of the dead, comparable to the Egyptian "ushabti" idols (Higgins 1967: 1).

With the exception of No. 15 (see below) each human figurine was made in two halves with two different moulds, as is the case with the lamps. The artist paid much attention to giving the front side of the archetype, since it carries the required body shape and proportions, a specific style of clothing, facial features, and proper hair arrangements. All these artistic elements have to be shown on a small specific area, must not contradict the traditional social demands, and in addition must sometimes provide some religious significance. The back half is usually simpler and carries some details of the physical structure (No. 4) and the hair arrangements (Nos. 1, 13-14). The artist intended not only to show the front parts of these small figurines but also the back half.

Although animal figurines were made in two halves as is the case with the human figurines, the two halves were made in two different moulds carrying almost the same features and details (Nos. $16-19,23-26$ ). The stylized human figurine No. 15 is an exceptional case since its two halves were made in the same mould.

Most of the 33 different figurines included in this study are classified into two main groups:
A. Human figurines (Nos. 1-15).
B. Animal figurines (Nos. 16-26).

Figurines which cannot easily be assigned to either of these two groups are assembled under the miscellaneous heading (Nos. 27-33).
A. Human Figurines (Nos. 1-15)

## Description

1. Upper half of female figurine, from D. 2.9 (Fig. 24.1, Pl. 12.1).

Ex. H. 4.7 cm ; W. 3.0 cm .
Nude female figurine which most probably represents "Atargatis", the Nabataean goddess of fertility. She has her right hand in a gesture of benediction, with fingers closed. The raised right hand with an open palm symbolizes the bestowal of blessings, happiness, prosperity or success upon her worshippers and believers. The left hand appears with a strong closed fist, slightly protruding from the waist ${ }^{1}$ The wrist of the raised right arm wears a bracelet. The hair is arranged in plaits very similar to the Hathor wig and reaches the shoulder. Structure and facial features indicate that the goddess is young and physically attractive. Similar published and unpublished examples show such figures seated on a high pedestal or stool. The reverse of the pedestal is decorated with an incised oblong pattern (a vertical incised line surrounded by two incised rectangles one inside the other). Horshield and Conway (1942: 161, Pl. XXX. 257-258) published two examples of Atargatis seated on a pedestal. An intact front half is published by Glueck (1966: 175, Pl. 81). The latter example wears anklets and shoes very similar to No. 3 (Fig. 16.3, Pl. XII.3). Schmitt-Korte (1976: 43, Pl. 26, the second object to the right) illustrates an intact pedestal.
The ware of figurine No. 1 is pinkish-red with a darker pinkish slip outside, evenly fired and polished.
2. Headless hermaphrodite figurine, from D. 2.7 (Fig. 24.2, Pl. 12.2a-b).

Ex. H. 7.7 cm ; W. 3.2 cm .
Figurine No. 2 is hermaphroditic, neither totally male nor female. The head is missing, but one can obtain an idea about comparable features by referring to a published example (Schmitt-Korte 1976: 43, Pl. 26, third object to the right). The latter example has male facial features, with short hair and visible ears. Figurine No. 2 wears a necklace of small beads with a crescentic shaped pendant in an inverted position. The crescent-pendant probably has religious significance, the crescent appearing as a cultic symbol in different forms in the ancient Middle East ${ }^{2}$
The hand's positions in figurine No. 2 are typically the same as in No. 1. Another prominent
1 Human figures with a raised hand also appear on the reverse of the coins of Obodas III (Meshorer 1975: 25, 33, Pl. 3.35) and Aretas IV (Meshorer 1975: 25, Pls. 4:55-56, 58, 60, 5: 66). Meshorer deduces that this figure "may be the queen herself standing in a ceremonial posture connected with the Nabataean cult". Closely similar hand positions also occur on statues from South Arabia (Pirenne 1960-61: 326-347, Pls. XIV.1-3, 5, XV: 4, 7-8; 1962-63: 256-262, Pl. XXXIX.9-10).

2 In Mesopotamia, the crescent played an important role in Akkadian art, representing the moon god Sin, who was the counterpart of the Sumerian goddess Nana, worshipped at the Aramaic capital Harran (Bashour 1981: 86). Ishtar was the daughter of Sin. Atargatis was a direct descendent of Ishtar and represents the same worship. Similar necklaces with crescentic pendants appeared at Mari on a bronze statuette of a worshipper (Maxwell-Hyslop 1971:87-88, Fig. 66). At Tell el-'Ağull, a golden crescentic pendant was found in Grave 447 (Maxwell-Hyslop 1971: 123-124, Fig. 88). The latter example is dated to "the
feature in figurine No. 2 is the stance, with legs closed together, mainly barefooted and standing on a shallow plinth. The plinth is decorated with two horizontal incised lines around the four sides. The Greek myth informs us that one of Aphrodite's children was Hermaphroditus (neither male nor female), whose father was Hermes (Huyghe 1963: 68). The Greeks recognized in Atargatis a form of Aphrodite (Hammond and Scullard 1979: 136). Hence I assume that figurine No. 2 with its hermaphroditic features represents the counterpart of Hermaphroditus and the son of the Nabataean goddess of fertility "Atargatis" The ware is red-creamy, well levigated, evenly fired, with some traces of pinkish slip outside.
3. Fragment of two feet on a plinth, from D. 2.9 (Fig. 24.3, Pl. 12.3).

Legs broken off, feet tight together, standing on a shallow plinth and wearing anklets and leather-like shoes with pointed front. Each shoe shows three stripes on either side. Two incised horizontal lines appear on the front side of the plinth only. Light pinkish ware, evenly fired, traces of pinkish slip outside.
4. Large moulded fragment of the back half of a figurine, from D. 2.5 (Fig. 25.4, Pl. 13.4). Ex. H. 6.1 cm ; W. 2.9 cm .
Standing nude figurine, head and feet missing. Light red ware with a few fine white limestone grits, pinkish slip in places outside, body slightly encrusted.
5. Large fragment of female figurine, from D.2. 19 (Fig. 25.5, Pl. 13.5).

Ex. H. 5.2 cm .
About two-thirds of the upper part of female figurine only. The upper part of her head is chipped away, but with Nabataean facial features of a healthy young female. She is wearing a chiton and mantle. The chiton has a V-shaped collar, tight vertical folds and long sleeves. A head-cover falls on her back and shoulder. Red ware, evenly fired with a few small grits, thin pinkish slip outside, peeled in places.
6. Large fragment of the front upper half of figurine which probably represents Atargatis. Fragment is broken and mended, from D.1.7 (Fig. 26.6, Pl. 13.6).
Ex. H. 3.4 cm ; W. 4.6 cm .
The figurine wears a necklace of comparatively large beads without amulet pendant. The right hand is in a gesture of benediction, as is the case with figurines Nos. $1-2$, but with fingers parted. The left hand wears two armlets and is holding a bird, perhaps a dove with flapping wings, a symbol of fertility (SHEPHERD 1980: 57, Fig. 5 b ). This motif is shared by the greeks, Romans and Christians (Galling 1923: 20). The bird can also represent the escaping soul (Feetcher 1961: 217; Khairy 1980: 51). Furthermore, fish and doves were sacred to Atargatis. One version of the myth informs us that Atargatis fell into a pool and was saved by a fish. According to another version Atargatis turned into a fish and her daughter Semiramis into a dove (Diod. Sic 2.4.2-6; 2.20.1-2). Atargatis also appeared with two dolphins on her head at Hirbet et-Tannur (Glueck 1945: 184, Fig. 116; 1966: 315, Pls. 1-2a-c).
The ware of figurine No. 6 is of a pinkish colour, evenly fired with some encrustations in places.
7. Fragment of the front upper half of female figurine, from C.4.12 (Fig. 26.7, Pl. 13.7). Ex. H. 3.3 cm .
The head is slightly inclined toward the right side, and the hair is arranged in vertical plaits. She wears a tight necklace of defined beads and an amulet. Her right hand is raised with an open palm in a gesture of benediction as in Nos. 1-2, 6. Dull red ware, evenly fired, fine white grits included; heavily encrusted.
earlier part of the seventeenth century B. C." The worship of the moon was also common and referred to the god Men, who was well-known during the first four centuries A. D. (LaNe 1964: 39).
8. Large fragment of "The Three Nabataean Musicians", from D. 2.18 (Fig. 26.8, Pl. 14.8). Ex. H. 7.3 cm .
For description and details see No. 9.
Red ware, evenly fired, few fine grits, traces of brownish-red slip in places, with some encrustations.
9. Moulded figurine of "The Three Nabataean Musicians" Unstratified object (Fig. 27.9, Pl. 14.9).

Intact except for a chip at the lower right corner.
$H$. of the middle figure: $\quad 9.2 \mathrm{~cm}$
H . of the surrounding figures: $\quad 8.6 \mathrm{~cm}$
W. across shoulders: $\quad 8.6 \mathrm{~cm}$

Th. of figurine varies: $\quad 1.8-2.6 \mathrm{~cm}$
Base dimensions (approximately): $\quad 7.9 \times 2.4 \mathrm{~cm}$
Three seated musicians. A man in the center plays a double flute (each pipe of which is about 3.0 cm in length, 2.4 mm in thickness, and punctured with eight holes). He is flanked on either side by female musicians who appear younger and slightly smaller in size than the middle male figure. The woman on his right plays a musical instrument very similar to the harp (approximately $3.6 \times 1.2 \mathrm{~cm}$ ) which has rounded ends; the lower side is slightly heavier than the top, and its upper two-thirds are furnished with five strings. She holds the harp on her left side and is using her right hand for plucking at the upper part of the strings. The male figure is blowing the double flute and using all his fingers to control the required notes. The female on his left may be beating a drum-like instrument under her right shoulder. The hair of the middle figure is arranged in double bands around the forehead, each band consisting of many tight vertical plaits. The back of his head is covered with a head-cover. The hair arrangement of the two females is almost the same, divided from the middle into two equal halves. Both heads wear a heavy cover. The three figures are wearing a chiton and mantle. Each chiton has a V-like collar, with tight vertical folds on the upper part and wavy horizontal folds on the lower part. The male's chiton ends in a tassle-like pattern. Each female wears a bracelet on her right wrist. The male is barefooted, while the females are wearing leather-like shoes. Their feet rest on a plinth decorated with a chevron-like pattern. A small branch is in the left hand of the male figure, and a bag, (perhaps woollen) is hanging from his left side and tied at the waist with an elaborate knot. This bag is decorated with two bands of tassles and may represent a pouch for the double flute.
The figurine was made in two halves but poorly joined together, as the back half was slightly split before firing. The potter did not devote much attention to removing the joint's attachments with the help of a sharp tool, as some of these are still visible in places. The figurine's base is slightly warped, and so the object does not stand properly.
The figurine is made from a red-pinkish ware, with a light grey core and medium size white limestone grit temper. The external surface is dark pinkish except for a small creamy patch of discolouration.
This figurine sheds new light on an unknown side of Nabataean cultural and social aspects. For the first time one could establish a clear idea about the Nabataean's enjoyment of music. Three musical instruments (the harp, the double flute and the drum) are employed simultaneously. These are still the main musical instruments used to the present time in most countries of the Middle East, especially in Palestine and Jordan. One could also deduce that Nabataean men and women might have joined the same social parties and worked together as one team. The mural of the "Painted House" at Sig el-Bärid near Petra provides us with another example
of instrumental music, where a seated figure is playing a single flute, surrounded by flourishing floral motives (vines, flowers) with many birds in different positions and of bright colours (Glueck 1966: 5-6, Pl. 203a-b). In addition the handles of some Nabataean lamps are furnished with a female head wearing a flute-like headdress with three strings (Horsfield and Conway 1942: 197-198, Pl. XLVI.438; Glueck 1966: 6, Pls. 67a-c, 68; Hammond 1973: 90).

Harding (1958: 15) states in his note on the "Recent Discoveries in Jordan" during the years 1955-1956 that D. Kirkbride found a well preserved tomb which produced pottery objects including a figurine of the same discription as No. 9. Since the Jordanian Archaeological Museum records do not give us any information about the figurine No. 9 except that this object is from Petra, I believe that this figurine is the one which was found by D. Kirkbride during her excavations at Petra (1955-1956).
10. Small fragment of moulded figurine, from D. 2.9 (Fig. 28.10, Pl. 15.10).

Front upper part of female head only. The hair above the forehead is decorated with two roses. Each rose contains five rounded petals. Two horizontal bands of loosely hanging plaits or tassles in the form of cork-screws have spiral ridges running round the outside of each plait. The forehead is also decorated with a fillet worn round the head for binding the hair. An elaborate knot in the form of two floral leaves like hearts is on the left side of the forehead. Upper edge is pierced ( 1.5 mm in diameter) either to function as a vent to release the expanded air inside the figurine during firing, or more likely for suspending the figurine. Pinkish ware with light grey core, traces of light red slip in places outside.
11. Small fragment of moulded figurine, from D.2.9 (Fig. 28.11, Pl. 15.11).

Front upper part of male figurine, head only. The left eyelid is notable. The hair is short and curly. The upper part of the head is pierced ( 2 mm in diameter) to allow the expanded air to escape during firing, or probably for suspension. Light red ware, light grey core in places, traces of red slip in places.
12. Small fragment of moulded figurine, from D.2.5 (Fig. 28.12, Pl. 15.12).

Part of front half of moulded head of male figurine. The peculiar facial features would remind one of the dramatic, tragic, or the slaves' masks found on the Italian lamps which are usually "based upon New Comedy masks" (Bailey 1980: 62-64, Fig. 67, Q 1326). Pinkish ware, darker pinkish slip outside, smooth to touch.
13. Fragment of moulded figurine, from D.1.7 (Fig. 29.13, Pl. 16.13).

Back half of moulded head, the body is missing. The hair is arranged in two equal halves by a vertical incised line and is slightly curly. Light red ware, evenly fired, light brownish slip outside, peeled in places, with some encrustations.
14. Fragment of moulded figurine, from B. 14.10 (Fig. 29.14, Pl. 16.14).

Back half of moulded head. The body is missing. The hair is tall and divided by irregular vertical incisions. Red-pinkish ware, traces of light grey core in places, pinkish engobe outside, body is coarse to touch.
15. Fragment of moulded head, from D. 2.5 (Fig. 29.15, Pl. 16.15).

Ex. H. 5.7 cm ; W. 3.3 cm .
A head of figurine with stylized features. The nose is represented by defined ridge and eyes by pierced hole. The two halves of this stylized head were made in two different moulds carrying the same features and details. Pinkish ware, evenly fired, darker pinkish slip outside.

## Parallel Examples

A similar parallel to figurine No. 1 would be an example from Petra (Schmitt-Korte 1976: 43, Pl. 26 , third object to the left). The latter example is seated on a pedestal and is identified as "Nabataean" Glueck published similar examples which are also attributed to the Nabataean culture (Glueck 1935: 64, Pl. 30B:12; 1966: 508, Pl. 81).

Figurine No. 2 has fairly close parallels from Petra (Horsfield and Conway 1942: 198-199, Pl. XLVII.445; Schmitt-Korte 1976: 43, Pl. 26, the second object to the left). The latter is furnished with a male head features.

Fragment No. 3 is comparable to an example from Petra (Glueck 1966: 508, Pl. 81), since both have the same anklets and shoes, except for thick encrustations on Glueck's parallel.

Figurine No. 4 represents the back half only, but it is probable that this example should be classified to the same group and show the same characteristics as figurine No. 2.

Petra provides a similar parallel to figurine No. 7 (Horsfield and Conway 1942: 161, Pl. XXX.255), "Nabataean"

The "three seated Nabataean musicians" appearing on Nos. 8-9 could be compared to a small sherd from Petra, probably made in the same mould (Horsfield and Conway 1942: 199, Pl. XLVII.446). The latter is mistakenly described as a "fragment of headless female figure in low relief holding a pole (?) in each hand" Yet one can observe that the right hand of the person to the right is plucking at the upper part of the harp's strings, while the right hand of the male (in the center) is playing a double flute.

The dramatic features of figurine No. 12 could be shared with those examples from Petra (Horsfield and Conway 1942: 198, Pl. XLVII.442-443) which are classified as "Nabataean".

## Conclusion

Such elaborately moulded human figurines (Nos. 1-15) are typically Nabataean and have never so far occurred in the non-Nabataean sites.

According to our stratigraphical evidence figurine No. 8 belongs to Phase Ia, figurines Nos. 1, $3,5,7,10-11$ are found in the different loci of Phase $I b$, and figurines Nos. 2, 4, 6, 12-15 are encountered in Phase II.

## B. Animal Figurines (Nos. 16-26)

## Description

16. Large fragment from the left side of a moulded horse figurine, from D. 2.5 (Fig. 30.16, Pl. 17.16).

Ex. L. 5.5 cm ; H. 4.1 cm .
The horse is saddled and decorated with trappings, head and foreleg are missing. An inverted crescentic nail-impression represents the hind leg's hoof. A cork-screw-like tail is stylized, since it is tall for the size of horse. Such a horse type is common at the Nabataean sites, especially at Petra, and usually appears with strong and steady features. Presumably, cavalry played an important role in the Nabataean army (Homés-Frederice 1980: 148-151). Pinkish ware, fine grits, evenly fired, darker pinkish engobe outside.
17. Large fragment of moulded horse back, from D.2.9 (Fig. 30.17, Pl. 17.17).

Ex. L. 7.6 cm ; Ex. W. 3.9 cm .
A band of indented pattern between two incised lines is along the top of the horse back. The
purpose of furnishing the mentioned decorated band is two-fold: First for keying and reinforcing the two moulded halves together. Second, to beautify the appearance of the horse's back by sealing the joints and removing any coarse attachments. Pinkish ware, few fine grits, evenly fired, darker pinkish engobe outside, partially stained.
18. Fragment of the left hind leg of a moulded horse, from D.1.5 (Fig. 30.18, Pl. 17.18). Ex. H. 4.6 cm .
Moulded left hind leg with a flattened lower surface decorated with an inverted nail impression, as in No. 16, for representing the horse hoof. Fine and small incisions around the top of the inverted crescent representing the hair above the hoof. Light red ware, fine grits, evenly fired, pinkish engobe externally.
19. Small fragment of the left hind leg of a moulded horse, from D.1.5 (Fig. 30.19, Pl. 17.19). Ex. H. 2.1 cm .
For shape description see No. 18, but smaller in size. Red-pinkish ware, fine grits included, light pinkish engobe outside.
20. Incomplete dog-like hand-made solid figurine, from C.5.10 (Fig. 31.20, Pl. 18.20).

Ex. L. 5.6 cm .
Ears and forelegs are mostly chipped off, and the back half is missing. Two pierced holes represent eyes, and the dog's open mouth was executed by cutting off a piece from two directions and forming a slot of 90 degrees. This figurine shows a primitive artistic skill and was most probably merely a children's toy. Light red ware with a light grey core, small white limestone included, crude surface.
21. Fragment of an ibex head, from C. 3.3 (Fig. 31.21, Pl. 18.21).

Ex. H. 5.2 cm .
Solid hand-made ibex head; the right horn is missing and the top of the left one is broken off. The front of the left horn is decorated with horizontal incisions. Neck is hollowed; thus it is most probable that such an ibex head belongs to a zoomorphic vessel which was used as aquamanile (Baramki and Avi-Yonah 1934: 9-16; Baramki 1934: 113-117; 1940: 73, Fig. 16: 18-19). Pierced circular eyes and the elongated spout-like nose were applied to the head without smoothing the attachments. Brownish ware with few small grits, evenly fired, body is crude and rough to touch.
22. Head of a camel only, from D.2.1 (Fig. 32.22, Pl. 18.22).

Ex. L. 3.5 cm .
Solid hand-made camel head; ears are missing. The mouth, nose and eyes are incised by a sharp tool. Dull pinkish ware with a grey core, gritty and coarse.
23. Large fragment of zoomorphic vessel, from D. 2.5 (Fig. 32.23, Pl. 19.23).

Ex. L. 6.2 cm ; Ex. H. 5.3 cm .
Moulded sheep with the hind left leg only; the head and the other three legs are missing. External body is deeply pitted in circles to represent the fur. A circular opening in the middle of the back may be the filling hole of the zoomorphic vessel. Light red ware, considerably gritty with no core, dark grey slip outside, body heavily encrusted with calcite deposit.
24. Fragment of the right side of horse head, from B. 16.6 (Fig. 33.24, Pl. 19.24).

Head L. 5.9 cm ; Ex. H. 3.8 cm .
Moulded head, traces of bridle behind ears; the horse face details are not clear. Red-pinkish ware with fine white grits, evenly fired.
25. Small fragment of horse head, from C. 6.5 (Fig. 33.25, Pl. 19.25).

The top of the head only, moulded and consisting of two halves. The bridle is clear. Red ware, comparatively coarse, evenly fired, with some encrustations on outside surface.
26. Small fragment of horse head, from B. 16.10 (Fig. 33.26, Pl. 19.26).

One rounded pastille eye and one ear are visible. The remains of a bridle can also be noticed above nose. Light grey core with some grits, evenly fired.

## Parallel Examples

Petra provides horse figurine No. 16 with fairly close parallels (Horsfield and Conway 1942: 124, Pl. XII.52; Hammond 1973: 38, No. 158; Homès-Frederice 1980: 148-151, Nos. 50, 193-194) which are identified as "Nabataean"

The ibex head No. 21 finds eleven similar parallels from the Christian basilica at 'Ain Hanniye (Baramki 1934: 113-117, Pl. XL.1) which are dated tentatively to "the fifth or sixth centuries A. D.". Another parallel to figurine No. 21 comes from the Christian church at Hirbet 'Asida (Baramki and Avi-Yonah 1934: 9-16, Pl. XII.2, first object to the left). The latter example is attributed to the "fifth century A. D.". Hirbet el-Mefgir provides two examples similar to figurine No. 21 (Baramki 1940: 73, Fig. 16-18) which are dated to around the "middle of the eighth century A. D." The eyes of Hirbet el-Mefgir figurine No. 16 are painted with fine black lines. Petra provides a typical parallel to figurine No. 21 from the kilns which have been found on the outskirts of Petra at Umm Şahūn, north and west of the modern village of Elği (Zayadine 1982: 389, Pl. CXXXVII.96), "probably 5th century A. D.". A horn fragment of an ibex of the same type as in No. 21 is published by Horsfield and Conway (1942: 160, Pl. XXIX.247) and is classified under the heading "Nabataean"

Camel head No. 22 could be compared with some examples from Petra (Horsfield and Conway 1942: 124, 199, Pls. XII.54, XLVII. 448 respectively; Schmitt-Korte 1968: 515, Pl. 3; HamMOND 1973: 38, No. 161) which are assigned as "Nabataean".

Horse head No. 24 could be compared with some published examples from Petra (Murray and Ellis 1940: 26, Pl. XXXVI.7; Horsfield and Conway 1942: 161, Pl. XXX.252, 254; Hammond 1973: 38, No. 159).

## Conclusion

With the exception of the solid hand-made ibex No. 21, the above-mentioned animal figurines are hardly paralleled outside the Nabataean sites and are purely of Nabataean production.

According to our stratigraphical evidence, figurines Nos. 17, 26 belong to Phase Ib, figurines Nos. 16, 18-20, 23 were found in loci belong to Phase II. Figurine No. 24 belongs to Phase III. Figurine No. 25 was encountered in Phase IV. Solid hand-made figurines Nos. 21-22 were found in Phase V. The dating of the examples parallel to figurine No. 21 would correspond to the dating provided by our excavations.

## C. Miscellaneous (Nos. 27-33)

## Description

27. Large fragment of moulded figurine, from D. 2.4 (Fig. 34.27, Pl. 20.27).

Ex. H. 6.5 cm ; Ex. W. 3.8 cm .
Stylized human figurine; head and body are featureless, probably a waster. Pinkish ware, comparatively gritty and coarse, evenly fired, body is stained in places.
28. Large fragment of cylindrical pottery object, from B.16.2 (Fig. 34.28, Pl. 20.28).
H. 3.8 cm ; D. 1.6 cm .

The lower part is missing, top is rounded with a circular opening of 8 mm in diameter, body is hollowed and has concave sides. Red-pinkish ware, evenly fired, some encrustations in places.
29. Fragment of an arm, from D. 2.11 (Fig. 34.29, Pl. 20.29).

Ex. L. 3.2 cm .
Armlet is defined by two horizontal incised lines around the solid arm. Pinkish ware with a dark grey core, comparatively coarse and gritty.
30. Palm fragment, from D.15.4 (Fig. 34.30, Pl. 20.30).

Ex. L. 3.6 cm .
Moulded palm, wears a bracelet and ring on the forefinger. Crude greyish ware, evenly fired, encrusted.
31. Small fragment of a head-like form, from D.1.7 (Pl. 20.31).

Most probably represents the back half of a head, which is heavily punctured to produce curly hair. Pinkish ware, evenly fired, darker pinkish engobe outside.
32. Small fragment of moulded figurine, from D.2.18 (Pl. 20.32).

Unknown moulded fragment of figurine. Light red ware evenly fired, fine grits, pinkish slip in places, mostly peeled.
33. Large fragment of moulded figurine, from B.5.4 (Pl. 20.33).

This fragment shows two cloven hooves of a hunted ibex. Pinkish ware with few grits, evenly fired.

## Parallel Examples

A similar open palm to No. 30 can be seen on a lamp fragment (Horsfield and Conway 1942: 159, Pl. XXIX.23.7), "Nabataean"

Petra provides a more complete parallel to No. 33. Probably both were made in the same mould (Horsfield and Conway 1942: 124, Pl. XII.51). The latter parallel shows a lion in high relief, with mane, legs and a hind paw, hunting an ibex.

## Conclusion

Figurines Nos. 27-33 are restricted to the Nabataean sites. Sherds Nos. 29, 32 belong to Phase Ia, Sherd 31 was found in loci belonging to Phase II. Nos. 27, 30, 33 are encountered in loci belonging to Phase III. Figurine No. 28 belongs to Phase V.

## TERRA SIGILLATA

A few Terra Sigillata types, in a fragmentary state, were found in the 1981 Petra excavations. The ware of our studied sherds is rather uniform, well-levigated and evenly fired; hardly any grits or core are visible. The majority of our sherds have the light buff creamy ware with a chestnutbrownish or, sometimes, red-brownish slip. Although the body form of our types is related to the Eastern Terra Sigillata A, the slip is darker and tends not to peel off. Negev (1972: 381-98) attributes the Terra Sigillata, which was found in the potter's workshop and the other loci at 'Abde, to a local production and applies to his types the name "Nabataean Sigillata" The ware and form of our sherds are closely similar to the counterparts from Nessana (Colin-Baly 1962) and the other Nabataean sites.
Sherds Nos. 1-3 belong to Phase Ia, which is dated to the turn of the Christian era, not later than the appearance of Aretas IV with his second wife Shaqilat II on coins. Sherds Nos. 4-18 come from Phase Ib, which is dated to the second quarter of the first century A. D. Such dating corresponds precisely to the dating of the 'Abde material (Negev 1972: 384).

Eighteen different types are represented by the Terra Sigillata discovered in our excavations.

## Description

1. Fragment of rim and body, from C. 4.22 (Fig. 35.1). D. 15 cm .

Hanging rim, decorated on top with egg and dart pattern. Pinkish ware, chestnut-brownish slip with blotches.
2. Fragment of rim and body, from C. 4.20 (Fig. 35.2). D. 21.0 cm .

Rim everted and turned down, "fish-plate" shape. Light brownish ware, evenly fired; welllevigated, dark brownish slip outside and inside.
3. Fragment of rim and body, from D.2. 11 (Fig. 35.3). D. 15.3 cm . Upright rim, flange at junction with base. Buff ware, evenly fired; well levigated, brownish slip outside and inside.
4. Small fragment of rim, from C.2.17 (Fig. 35.4). D. 14.8 cm .

Rim sharp on top, shallow rounded sides. Dull light grey ware, well levigated, evenly fired; dark brownish slip outside and inside, smooth to touch.
5. Small fragment of rim, from C. 2.17 (Fig. 35.5). D. 24.8 cm .

Rim sharp on top with rounded sides. Light creamy ware, well levigated, evenly fired; coated with brownish slip.
6. Fragment of rim and body, from B. 4.7 (Fig. 35.6). D. 23.8 cm .

Rim pointed on top. Light creamy-buff ware, well levigated; brownish slip.
7. Fragment of high ring base, from C.1.15 (Fig. 36.7).

Light creamy ware, well levigated, evenly fired; brownish slip with some encrustations.
8. Fragment of high ring base, from D. 2.9 (Fig. 36.8).

Break of body may be artificial and base was used as a gaming stone. Creamy ware, well levigated, evenly fired; brownish slip outside and inside, highly polished.
9. Fragment of ring base, from C.3.14 (Fig. 36.9).

Creamy-buff ware, well levigated, evenly fired; chestnut-brownish slip outside only.
10. Fragment of high ring base, from B. 10.8 (Fig. 36.10).

Creamy ware, well levigated, evenly fired; light brownish slip outside and inside.
11. Fragment of high ring base, from B. 10.8 (Fig. 36.11).

Cone-like center beneath the high ring base. Creamy-buff ware, well levigated, evenly fired; light brownish slip outside and inside, peeled in places.
12. Fragment of high ring base, from B. 8.7 (Fig. 36.12).

Light creamy ware, well levigated, evenly fired; brownish slip outside and inside.
13. Fragment of ring base, from D. 2.10 (Fig. 36.13).

Light creamy ware, well levigated, evenly fired; brownish slip outside and inside.
14. Fragment of ring base, from C.3.16 (Fig. 36.14).

Light creamy ware, well levigated, evenly fired; brownish slip outside only, with some encrustations.
15. Small fragment of wide and high ring base, from B.3.8 (Fig. 36.15).

Creamy-buff ware, well levigated, evenly fired; coated with brownish slip outside and inside.
16. Large fragment of ring base, from D.1.14 (Fig. 36.16).

Light buff ware, well levigated, evenly fired; chestnut-brownish slip outside and inside, peeled in places.
17. Large fragment of high ring base, from C.4.16 (Fig. 36.17).

Creamy-buff ware, well levigated, evenly fired; dark red slip outside and inside.
18. Large fragment of wide ring base, from C.2.14 (Fig. 36.18)

Light creamy ware, well levigated, evenly fired, chestnut-brownish slip outside and inside.

## Parallel Examples

Shallow bowl No. 1 with its hanging rim, decorated in top with a pattern of egg and dart, is of a type well documented at different sites in the Levantine area and is exemplified by a similar type from Tell Sandahanne (Bliss and Macalister 1902: 128, Pl. 61.2), which is attributed to the "Seleucidan Period". Petra provides a close parallel (Horsfield and Conway 1942: 128, Fig. 8, Pl. XVI.82) which is identified as an "Import Fine Eastern Sigillata" and is dated to the "2nd cent. B. C.". Another similar example to bowl No. 1 comes from Antioch (Waggé 1948: 24, Pl. IV), "Late Hellenistic" Hamma offers similar parallels which are attributed to the late Hellenistic period (Christensen and Johansen 1971: 84-87, Fig. 36, Form 8.19, 21, 23). The Harvard excavations at Samaria found a close parallel in Vault Cistern 2 which is also dated to the late Hellenistic period (Reisner et.al., 1924: 305-306, Fig. 185.6a; Lapp 1961: 215, Type 253.2, No. 1, "75-25 B. C."). Samaria also offers another comparison to bowl No. 1 (Crowfoot et. al., 1957: 327-328, Fig. 78.8), dated to the late Hellenistic period. In Duncan's Corpus a similar parallel to bowl No. 1 is attributed to the Hellenistic period (Duncan 1930: 21, Type 2P4).
The form of the "fish-plate" bowl No. 2 seems to be paralleled in Thompson (1934: Fig. 117, D.5), which belongs to "mid. second century A.D." Samaria provides a close parallel to bowl No. 2 in Crowfoot et al. (1957: 263-264, Fig. 55.4), assigned to "second century B. C.". Bowl No. 3, with its plain rim, upright sides, and a flange at junction with base, is of a type well-known at the Hellenistic sites and could be compared with two examples found at Samaria in Vault Cistern 2 (Reisner et al., 1924: 305-306, Fig. 185.4a and 4b "late Hellenistic"; Lapp 1961: 218, Type 254.2 , No. 2A, " $75-25$ B. C."). Samaria provides two more closely similar parallels to bowl No. 3 (Crowfoot et.al., 1957: 330-331, Form 14b, Fig. 79.17-18). Another similar parallel comes from es-Shèta in the Negev region (Crowfoot 1936: 22, Pl. IV.1b), which is dated to the "early first century B. C." Colin-Baly (1962: 272-274, Pl. XLIV.3-4) offers a close parallel (but undated) from Nessana. The Nabataean potter's workshop at 'Abde produced a fairly close parallel (Negev 1972: 391-392, Fig. 4.14, Pl. XXXIV.1) which is designated as "Nabataean Sigil-
lata", dated to the first half of the first century A. D." Horsfield and Conway (1942: 202, Fig. 55.467 , PI. XLVIII) classify a typical parallel from Petra as an "Import Eastern Sigillata" and attribute their example to "Ist cent. B. C.". Fairly close parallels to bowl No. 3 come from Antioch (Waagé 1948: 34, Pl. V.432) and Tarsus (Goldman et.al., 1950: 242, Fig. 192: 386, 394), and are assigned to the late Hellenistic period. The Athenian Agora supplies us with a close parallel to bowl No. 3 (Robinson 1959: 24, Pl. 60.G10), which comes from "Layer II" and is dated to the "first half of first century A. D."

Shallow bowl No. 6 could be compared to an example from the Katute dump in Petra (Horsfield and Conway 1942: 129, Fig. 10.86, Pl. XVI) which is classified as an "Import, Fine Plain Eastern Sigillata" and is dated to the "2nd cent. B. C." Another similar example comes from Samaria (Reisner et. al., 1924: 304-305, Fig. 185.2e "late Hellenistic". Ashdod provides us with two closely similar examples (Dothan and Freedman 1967: 52-53, Fig. 6.1, from Locus 2, Stratum 3; Dothan 1971:44-45, 54, Fig. 15.14). The latter two examples are dated "not later than the middle of the first century B. C." and "early first century A. D." respectively. Colin-Baly adds four undated parallels to bowl No. 6 from Nessana (Colin-Baly 1962: 272-274, Pl. XLIIIA.1-4).

Base No. 8 finds a closely similar parallel to its form, ware and the peculiarity of the deliberate breaking of walls above the base in Horsfield and Conway (1942: 129, Pl. XVI.84). The latter parallel is assigned to the " 2 nd century B. C."

Base No. 15 could be related to an example from Samaria (Crowfoot et.al., 1957: 313, Fig. 73.9 ) which is dated "pre 30 B. C. - Augustan period". Another example to base No. 15 comes from the Athenian Agora (Robinson 1959: 24, Pl. 60.G15), from "Layer II" which is dated to the first half of first century A. D.

Base No. 17 has similar parallels from Samaria (Crowfoot et. al., 1957: 296-297, Fig. 68.1, 3, "Roman Ia") and Nessana (Colin-Baly 1962: 272-274, Pl. XLIII.4, "undated").

Base No. 18 has similar parallels from Petra (Horsfield and Conway 1942: 202, Fig. 55.468, Pl. XLVIII), Samaria (Reisner et.al., 1924: 304-305, Fig. 185.2f; Crowfoot et.al., 1957: 313-314, Fig. 68.4, "Roman Ia"), Nessana (Colin-Baly 1962: 272-274, Pl. XLIII.10), and Antioch (Watgé 1948: Pl. XV.6, "early first century B. C.").

## Conclusion

Our Terra Sigillata sherds Nos. 1-3, 16 are attributed, according to our stratigraphical evidence, to Phase Ia, which is dated 9 B. C. -16 A. D. Sherds Nos. $4-15,17-18$ belong to Phase Ib, which is dated to $18-40$ A. D. No Terra Sigillata sherds were found after the end of the reign of Aretas IV during the 1981 Petra excavations.

The parallels sited above confirm in general the dating of our Terra Sigillata sherds, since the majority of the parallels represent the period from around the middle of the first century B. C. until about the middle of the first century A. D.

## FINE WARE

Most people associate Nabataean pottery with the beautiful painted ware of egg-shell thinness, forgetting that much of it is unpainted and can be equally thin. On the whole, however, the unpainted vessels, both plain and decorated (impressed or rouletted), are of greater thickness than the painted ware.
By "fine ware" is meant the virtual absence of grits. In the examples studied (Fig. 32.1-5) very fine grits (not more than 0.1 mm in size) are nearly always present. This very fine clay enabled the potters to make exceptionally thin ware, especially on a fast wheel.

From the results of recent intensive research into such Nabataean pottery production (Khairy 1982: 275-283; 1983: 17-40), it is clear that the different types of the Petra "fine ware" with impressed and rouletted decorations are not found outside Nabataean sites and are almost entirely restricted to the Nabataean sites. From the stratigraphical evidence it would seem that the richest period for the unpainted Petra "fine ware" was from about the beginning of the reign of Aretas IV until shortly after the Roman annexation in 106 A. D., though the traditions continue on in debased forms until and into the third century A.D.

## Description

1. Fragment of rim and body, from C.3.10 (Fig. 37.1). D. 6.4 cm .

Everted rim, flattened on top; most probably this sherd belongs to an avoid jug with wide neck. Pinkish-red ware, evenly fired.
2. Small fragment of rim and body, from B. 10.8 (Fig. 37.3). D. 6.0 cm .

Rim sharp on top, grooved below rim outside. Black ware, evenly fired, well levigated, smooth to touch.
3. Fragment of rim and body, from B. 16.10 (Fig. 37.2). D. 6.1 cm .

Rim sharp on top, bulging short neck, body rouletted with narrow strokes. Light red ware, well levigated, evenly fired; red-pinkish engobe outside and inside, smooth to touch.
4. Fragment of rim and body, from B.3.7 (Fig. 37.4), D. 5.2 cm .

Rim sharp on top, rounded shoulder, shoulder rouletted with circular impressions. Light red ware, well levigated, evenly fired; pinkish engobe outside and inside.
5. Large fragment of fine cup, from D.2.10 (Fig. 37.5).

Shallow ring base, walls flare up, band of rouletting on upper part. Pinkish ware, evenly fired; fine to touch, darker pinkish engobe outside and inside.

## Parallel Examples

Fragment No. 2 is paralleled by a similar example from Petra (Horsfield and Conway 1942: 138-139, 150, Pl. XIX. 132, 136, XXV. 183), "Nabataean"
Published parallels for No. 3 are Horsfield and Conway 1942: 155, Pl. XXVII: 214, "second century A. D."; and Moevs 1973: 204, Pl. 42.390. The fine globular bowl, No. 4, has fairly close parallels in Murray and Ellis 1940:14, 18-19, Pls. 10.21, 11:1, 28: 72, 39: 97, "undated"; and Colin-Baly 1962: Pl. 10, Group 69.

Possible parallels for cup No. 5 appeared at the Nabataean sites such as "Abde (Negev 1970:

48-51, Pl. 32.7), dated to the "first half of the first century A. D."; and Petra (Bennett 1962: 233-242, esp. 241; Hammond 1973: 33, Nos. 88, 91), "Nabataean"

## Conclusion

From the parallels quoted above it is clear that different types (Nos. 1-5) of the Petra "fine wares" with their impressed and rouletted decoration are very rarely found outside the Nabataean sites. Therefore, the different types of vessels studied, with their delicate and thin wares (mainly ca. $0.9-2.2 \mathrm{~mm}$ ) and their extremely fine clays, seem to be uniquely Nabataean.

Furthermore, although the stratigraphical evidence of the 1981 Petra excavations shows that our types (Nos. 1-5) occurred during the second and the third quarters of the first century A. D., such ware covered a wider range; it was in use from about the second half of the first century B. C. until about the end of the first century A. D. (Khairy 1982: 275-283; 1983: 17-40).

## PAINTED "EGG-SHELL" WARE

## Introduction

The Nabataeans mastered great skills in practising the architectural activities in Petra and Medä in Sälih, and had their own script and coinage; they also produced another cultural aspect, which is the so-called "egg-shell" painted ware. This ware was first identified and studied by G. Horsfield and his wife Agnes in 1930 (Horsfield and Conway 1930: 375; Crowfoot 1936: 17), who ran the first systematic excavation in Petra in 1929. They offer the first illustrated study (Horsfield and Conway 1942: 105-204) to include a good number of painted vessels and in which many decorative patterns were properly reconstructed. Short articles and notes which include a few Nabataean sherds started to appear (Starkey and Harding 1932: 15, Pl. LXiV; Glueck 1934: 111, Pl. 25 a and 25 b; Iliffe 1934: 132-135, Pls. XLV-XLVII; Iliffe 1936: 12-13, Pl. III; Сrowfoot 1936: 14-27, Pls. I-II). Murray and Ellis (1940: Pls. XII-XIII, XXXIV-XXXV) provide some more examples of painted Nabataean ware which include the first occurrence of an animal and a birdlike motif on a shallow bowl. Similar bird designs were found and published later by Parr (1978: 202, Fig. I.11) and Zayadine (1982: 562, Pl. CXXXVIII: 29). A Nabataean tomb at Amman was excavated in 1943 in which two Nabataean decorated bowls, in a fragmentary state, were found (Harding 1946: 58-62, Figs. 3-4, Nos. 20-21). Glueck was able to locate many Nabataean settlements in the Negev region depending on the occurrence of the distinctive painted Nabataean pottery, and discovered, using the same method, something like "five hundred Nabataean farming communities in Transjordan" alone (Glueck 1959: 200).
During the last three decades more scholarly work on the painted Nabataean pottery has been published. The three campaigns (1950-53) at $\underline{D} \bar{i} b \bar{b} n$ provide us with some examples of this ware (Winnett and Reed 1964: 55-56, 73, Pls. 55.1-4, 62b, 68.6-9, 56-57, Pls. XXII.1-5, XXIII.3-4, 6). Two chapters of Hammond's thesis (1968) concentrate on the painted Nabataean pottery (Hammond 1959: 371-82; 1962: 169-179). Negev (1974: 14-19, Pls. 3-13) has published his painted pottery from the Nabataean potter's workshop at 'Abde which is based on his Ph. D. thesis (Negev 1963). Schmitt-Korte was the first to produce a study on the distribution of the floriated patterns on the painted Nabataean bowls (Schmitt-Korte 1968: 496-519, Figs. 2-9, 13-14; 1970: 41-47, Pl. 23-26). Parr in particular (1978: 202-209) provided a genuine contribution to the study of the painted Nabataean ware when he dealt with the problems of chronology and the origin of this ware.

Twelve different painted pottery sherds and objects are described and illustrated in this study. They are as follows:

## Description

1. About one-fifth of a painted bowl, broken and mended, from D.1.10 (Fig. 38.1, Pl. 21.1). D. 17.0 cm ; H. 3.6 cm ; Th. $1.5-2.0 \mathrm{~mm}$.

Large fragment of shallow bowl with tiny up-turned rim, sharp on top, rounded base. Pinkish ware, well levigated, evenly fired, body smooth to touch, darker pinkish engobe on the exterior and interior. The interior is decorated with a light brownish paint. The design is
arranged in triangular segments separated by bands of trellis pattern. Each triangle contains two pomegranate-like objects flanked by a guilloche pattern.
2. Large fragment of painted bowl, from D. 2.5 (Fig. 38.2, Pl. 21.2).
D. 19.0 cm ; H. 4.4 cm ; Th. $1.5-2.0 \mathrm{~mm}$.

Shallow bowl with tiny up-turned rim, sharp on top, rounded base. Light pinkish ware with a few small white limestone grits visible, evenly fired, some encrustations on the exterior surface, dark pinkish engobe on the exterior and interior. The interior is decorated with a light brown paint. A feather-like wreath forms an interior border beneath the rim, while the remaining surface is decorated with a straight line, scattered dots, splashes and guilloches.
3. Fragment of rim and body of shallow bowl, broken and mended, from D.2.5 (Fig. 39.3, Pl. 21.3).
D. 20.0 cm ; Th. $1-1.5 \mathrm{~mm}$.

Form is very closely similar to Nos. 1-2, with a tiny up-turned rim, slightly inverted and sharp on top. Light pinkish ware, well levigated, evenly fired, with a calcite encrustation in places. The interior is decorated with a light brownish paint depicting dots and scrolls separated by bands of trellis pattern.
4. Large fragment of shallow bowl, broken and mended, from D. 2.6 (Fig. 39.4, Pl. 22.4). D. 19.0 cm ; Th. $1.5-2.0 \mathrm{~mm}$.

Form is closely similar to that of No. 3. Dark pinkish ware, evenly fired, with a few white limestone grits. The body is slightly encrusted and has a whitish-creamy slip around the exterior. The interior is decorated with a light brownish paint. The design consists of a row of dots below the inside rim, while the remaining surface is covered with a trellis pattern forming a network of tiny rhomboids.
5. Complete painted bowl, broken and mended, unstratified objects (Fig. 40.5).
D. 18.0 cm ; H. 4.3 cm ; Th. $1.0-1.3 \mathrm{~mm}$.

Shallow bowl, inverted rim, rounded on top, rounded base. Pinkish-red ware, evenly fired, dark pinkish engobe with creamy slip around outside rim. The interior is decorated with a brownish paint. The design is divided into two equal halves by a central wreath of almonds. The two halves are arranged in a head to foot "tête-bêche" position, each half containing a stylized human figure ( 15.4 cm in length). The head is almost circular and is surrounded by dots. It has two eyes with central pupils, and the face is divided into two halves by a vertical line. The hands are raised with the palms open, and the figure probably represents a worshipper. The body is in the form of a millipede, with numerous legs placed on each side of the segment in double pairs.
6. Fragment of rim and body of thick shallow bowl, from C.1.5 (Fig. 41.6, Pl. 22.5).
D. 18.2 cm ; Th. $5.0-12.0 \mathrm{~mm}$.

Rim of triangular section, rounded on top and bevelled externally. Purplish ware with light grey core, gritty and coarse to touch, no slip or wash on body. The interior is decorated with a black paint depicting a continuous palmette around the inside rim.
7. Hemispherical painted bowl, broken and mended, some body fragments missing, from B. 16.6 (Fig. 41.7, Pl. 22.6). D. 15.4 cm ; H. 4.7 cm ; Th. $1.0-1.5 \mathrm{~mm}$.

Vertical walls with plain rim, sharp on top, rounded base. Pinkish thin ware, well levigated, evenly fired, calcite encrustation in places. The interior is decorated with a reddish-brown paint. The design consists of a wreath of "cypresses" on stalks around the rim, while the center is decorated with a rosette-like form made up of "cypresses" on stalks. Both the border wreath and the central rosette turn anticlockwise.
8. Thin painted pottery sherd, from D. 2.5 (Fig. 42.8, Pl. 23.7).

Dimensions are $4.4 \times 2.7 \mathrm{~cm}$; Th. $1.0-1.1 \mathrm{~mm}$.
Light pinkish ware, well levigated, evenly fired, smooth to touch, pinkish engobe on the exterior and interior. The interior is decorated with a stylized human figure depicted in a linear manner and is closely similar to those which are depicted on No. 5 . The head, which is two-thirds complete, is almost circular, having large round eyes with upward-gazing pupils. Short strokes radiating from the head give the impression of hair. The nose is represented by a vertical line. The right shoulder and a palm with five fingers are visible. The decoration is light brown.
9. Hemispherical painted bowl, broken and mended, some body sherds missing, from D.1.9 (Fig. 42.9, Pl. 23.8).
D. 11.3 cm ; H. 4.4 cm ; Th. $1.0-1.5 \mathrm{~mm}$.

Inclined walls with rim sharp on top, low ring base. Pinkish-red ware, well levigated, evenly fired, smooth to touch, yellowish-white slip on the exterior surface. There is an incised spiral wheel finishing on the base. The interior is covered with three concentric zones of decoration; the inner circular zone is divided into three equal fields by three bands of trellis pattern radiating from the center. Each trellis alternates with a millepede of numerous legs, and the background is covered with dots. The middle circular zone consists of a trellis bordered on both sides by dots. The outer zone is decorated with dots of different sizes, wavy lines and tiny splashes evenly distributed on the interior of the rim. The painted decoration is dark red.
10. Small globular bowl, broken and mended, part of the rim and few body sherds missing, from C.4.7 (Fig. 43.10, Pl. 24.9).

Mouth diameter is 5.3 cm ; H. 5.0 cm . Th. $3.0-4.0 \mathrm{~mm}$.
Everted rim, grooved below the exterior edge of rim, short bulging neck, small strap handle from rim to shoulder, rounded shoulder with squat body, uneven disc base with traces of string cutting. Red ware, evenly fired, with a few white limestone grits. The exterior surface is covered with a creamy slip. The shoulder is decorated with a continuous horizontal wreath of palmettes, with six pomegranates underneath. More than half of the decoration has peeled off. The painted decoration is dark brown.
11. Painted jug, complete except for chip at rim, body broken and mended, from C.4.8 (Fig. 43.11, Pl. 24.10).

Mouth diameter is 6.6 cm ; H. 9.7 cm ; Th. $2.0-3.0 \mathrm{~mm}$.
Wide mouth with everted flattened rim, flattened vertical handle from rim to shoulder, combed externally. The neck slopes down towards a globular body with a ring base. Pinkishred ware, evenly fired, with a few small grits, dark red engobe on the exterior surface, polished, encrustation in places. The upper half is decorated with four horizontal bands of decoration. The upper two bands consist of diagonal strokes, almost parallel to each other. The third band represents a continuous palmette, and the lower band consists of five large pin-like patterns. The painted decoration is almost black.
12. Fragment of rim, body and handle, from C. 4.3 (Fig. 43.12).
D. 11.1 cm ; Th. $2.0-3.0 \mathrm{~mm}$.

Everted rim with two horizontal incised lines below the outside rim. A vertical loop handle from rim to shoulder is slightly askew. The handle is incised on top with traces of sharp tool cutting. Pinkish ware, well levigated, few small grits included. Horizontal wreath of black decoration representing a palmette around the upper part of the neck.

## Parallel Examples

The decoration on bowl No. 1 closely parallels the one figured in Khairy (1981: 142, Pl. 78), but the body shape of the latter is furnished with straight sides.
Bowl No. 2 could be compared in body form and decoration to an example from Dī̈bān in Moab (Tushingham 1972: 51-53, Fig. 2: 60-61, Pl. XXIII.3,6. "Nabataean").
Bowl No. 3 is comparable to examples from Petra (Horsfield and Conway 1942: 178-179, Pl. XXXIX.334-335, "Nabataean") and from Mampsis (Kurnub) in the Negev region (Negev and Sivan 1977: 112, Fig. 3.12). The latter example is attributed to "Phase I", which is dated to "the last quarter of the first century B. C. to about the middle of the first century A. D.".
Bowl No. 4 is similar in body form and decoration to some parallels from Petra (Murray and Ellis 1940: 15, Pl. XIII.74; Schmitt-Korte 1968: 506-507, Fig. 3.10-11, "Nabataean").

Bowl No. 7 could be compared to a painted sherd which carries the same internal decoration but is not reconstructed by Negev. This parallel came from the Nabataean potter's workshop at 'Abde (Oboda) in the Negev region (Negev 1974a.18, Pl. 10.27).
Nos 5-6 and 8-12 are not paralleled elsewhere except for the external decoration on jug No. 11, which closely parallels the decoration appearing on a "surface find" small cup from the Nabataean necropolis at Mampsis (Negev 1971: 167; Negev and Sivan 1977: 117, Fig. 9.64a). Negev describes, with a question mark, the lower band of the decorative elements on his small cup as "rows of dolphins?"

## Pottery Characteristics and Chronology

With the exception of the painted bowl No. $5^{3}$, all the studied sherds and objects are from stratified deposits of the 1981 Petra excavations.

Nos. 1 and 9 belong to Phase Ib (18-40 A. D.), and Nos. 2-4, 7-8 were turned out in loci belonging to Phase II ( $40-70$ A. D.). The ware colour of the examples belonging to the above phases is mainly of a light pinkish to dark reddish-pink, with a thickness varying from 1.0-2.0 mm . No grits visible and without core. The painted decoration is light brownish to reddishbrown. Body is smooth to touch.

Nos. 10-12 are attributed to Phase III (70-106 A. D.), with a reddish-pink ware and a few small grits included, and sometimes a thin, light core occurred in places. Thickness varies from 2.0-4.0 mm . The painted decoration is almost dark brownish to, sometimes, black.

Sherd No. 6 belongs to Phase IV (second half of the third and early fourth centuries A. D.). The ware is dull purplish with a light grey core, gritty and coarse to touch. Thickness varies from $5.0-12.0 \mathrm{~mm}$. The decoration is of a black paint.

With the exception of the occasional occurrence of a creamy-whitish band around the exterior of the tiny up-turned or slightly inverted rim of the shallow bowls, no real slip was applied to the surfaces of the thin painted vessels of Phase I-III. Instead, an "engobe" or self-slip occurs. In Phase IV though, a thin slip and not an "engobe" was applied to the painted pottery, the slip here is very easy to peel, either completely or in places.

## STANDS

A few stands are represented among the pottery finds of the 1981 Petra excavations. The studied stands are generally of a thick, hard and coarse ware; they were used to support vessels with pointed or rounded base. The lower part of these stands is heavier than the upper part, so as to give a proper standing balance. However, for a similar example Murray and Ellis (1940: 14, Pl. IX.54) illogically suggest that "it stands only on the narrower surface" Three different types are classified in this study. They are as follows:

## Description

1. Large fragment of a stand, from D. 2.4 (Fig. 44.1 ). Upper D. 8.8 cm ; Lower D. $14.4 \mathrm{~cm} ;$ H. 2.5 cm .
Rim bevelled internally by a sharp tool; body slopes down toward a thickened, rounded edge. Red ware with light thin grey core, fine small grits included; body coarse to touch, creamy slip outside, mainly peeled.
2. Large fragment of a stand, from D.1.7 (Fig. 44.2). Upper D. 12.4 cm ; Lower D. $13.8 \mathrm{~cm} ; \mathrm{H}$. 5.3 cm .

Flaring-up rim with thickened everted base. Thick reddish-pink ware, many fine white grits, evenly fired; body stained and encrusted.
3. Fragment of a stand, from D.2.10 (Fig. 44.3). Upper D. 9.2 cm ; Lower D. $12.8 \mathrm{~cm} ; H .5 .2 \mathrm{~cm}$. Rim thickened, inverted and bevelled internally; body slopes down toward a pedestal-like base. Grey ware with very thin red outer zones, gritty, hard; darker greyish slip outside, peeled in places.

## Parallel Examples

Stand No. 1 is closely paralleled by one from Jericho (Brown 1971: 95-96, Pl. XXXIX b, the second stand to the right) which represents a kiln stand, "undated"

Stands Nos. 2-3 can be compared to some examples which came from Petra (Murray and Ellis 1940: 14, Pl. IX.54), and Geraš (Kraeling 1938: 562-563, Fig. 41.X6, X47). The Ǧeraš examples came from Tomb 8, which is dated to "the first century A. D." At Qumran a similar example was found in "Trench A", dated to " $50-31$ B. C." (de Vaux 1954: 218-219, Fig. 2.17). Qumran offers another similar example (de Vaux 1953: 98-99, Fig. 3.5) which belongs to "Period II" and is dated to "50-68 A. D." The latter example is of a thicker ware than that of Nos. 2-3. Two other close parallels are from Jericho (Brown 1971: 95-96, Pl. XXXIXb, the first and the fourth objects).

## Conclusion

According to our stratigraphic evidence, stands tend to develop from a curving profile to an angular one. The ware tends to become comparatively thinner, and the stand is shorter around the beginning of the second century A. D. The non-Nabataean parallels are well known and date from around the middle of the first century B. C. until about the end of the first century A.D.

## LIDS

Lids are shallow plates which have a simple, obliquely cut rim to fit firmly the rim of a cooking pot which is bevelled internally. Occasionally such lids have small knob handles (Fig. 45: 1-6). Two of the knob handles are pierced with a circular hole of about $1.5-2.5 \mathrm{~mm}$ in diameter to permit the escape of steam from the vessels (Fig. 45: 1-2). The other knob handles are unpierced (Fig. 45: 3-6). Most probably the lid itself was pierced or cut in some places by a sharp tool in a zigzag form, similar to the character W, to release the steam (Fig. 45: 8). Petra provides a lid with rounded stems on top, which suggests that a rounded handle was attached to the lid (Horsfield and Conway 1942: 113, Pl. VI.3). Eight different lids are illustrated in this study. They are the following:

## Description

1. Fragment of knob handle of a lid, from D. 2.10 (Fig. 45.1 ). Top D. 2.1 cm ; Piercing D. 2 mm . Flattened top, pierced at center, concave sides, pinkish-red ware with a thickness varying from $2-3 \mathrm{~mm}$; well levigated, evenly fired.
2. Fragment of knob handle of a lid, from C.2.14 (Fig. 45.2). Top D. 1.9 cm ; piercing D. 3 mm .
Top concave and pierced at center. Light red ware with a thickness varying from 2.5-3.5 mm , comparatively gritty, evenly fired.
3. Fragment of knob handle of a lid, from B.9.4 (Fig. 45.3). Top D. 1.8 cm .

Top slightly concave and unpierced. Light grey ware, thickness varying from 5-6 mm, gritty, coarse to touch, evenly fired, encrusted.
4. Fragment of knob handle of a lid, from C.2.4 (Fig. 45.4). Top D 2.2 cm .

Flattened top with slightly concave sides. Pinkish-red ware, thickness varying from 4-7 mm , comparatively coarse, evenly fired; creamy slip outside, peeled in places.
5. Fragment of knob handle of a lid, from C. 3.5 (Fig. 45.5). Top D. 2.0 cm .

Flattened top with sloping sides. Dull brownish ware, thickness varying from $6-8 \mathrm{~mm}$, fine grits included, evenly fired; creamy slip outside with some encrustations.
6. Fragment of tall knob handle of a lid, from C.3.4 (Fig. 45.6). Top D. 1.9 cm .

Flattened top with sloping sides. Dull brownish ware, thickness varying from $4-7 \mathrm{~mm}$, fine white limestone grits included, evenly fired; traces of yellowish-creamy slip in places.
7. Fragment of a lid, from B. 11.2 (Fig. 45.7 ). D. 10.8 cm ; H. 2.8 cm .

Rim bevelled externally by sharp tool. Grey ware, thick and coarse for size of lid, wheel traces internally, body discoloured.
8. Almost one-third of a lid, from B.3.3 (Fig. 45.8). D. 17.8 cm ; Approx. H. 4.4 cm . Rim bevelled externally, body slightly ribbed. Grey ware, fine grits included, evenly fired; top cut before firing by a sharp tool in the form of W to release the steam; some calcite encrustation in places.

## Parallel Examples

Knob lid handles Nos. 1-2 have published parallels from Dïbān in Moab (Tushingham 1972: 137, Fig. 5.20), and from the Beth-Shan excavations (Frtzgerald 1931: 28, Pl. XXXI.12).

Lids Nos. 3-6 find a possible parallel in Horsfield and Conway 1942: 14, Pl. X.1-2, "Nabataean"

The best parallels for lid No. 7 would seem to be one example from es-Sbēta (Crowfoot 1936: 26, Pl. IV.7) and one from Petra (Murray and Ellis 1940: 113, Pl. VI.3). The latter example is designated as "Nabataean, Coarse Plain Ware" and dated to "the third-sixth centuries A.D." Hirbet el-Kerak provides another similar example for lid No. 7 (Delougaz and Haines 1960: 33, Pl. 54.16), which is dated as "late Roman" Dïbān offers another parallel (Tushingham 1972: 135, Fig. 4.90), which is dated in the "Byzantine period".

Lid No. 8 corresponds to an example from Jericho (Kelso and Baramki 1955: 3, Pl. 25.X420) and one from Rāmat Rähēl (Aharonı et.al., 1964: Fig. 8.2), from Stratum II A which is attributed to the "Byzantine period". Hisbān provides similar examples to No. 8 (Sauer 1973: 25, Fig. 2.51-53), which are assigned to the "Late Roman"

## Conclusion

Knob handles of lids Nos. 1-2 are of a comparatively thin and delicate ware which varies from 2 to 3.5 mm in thickness. They belong to Phase Ib. Knob handle No. 3 is assigned to Phase III. It is thicker than Nos. 1-2 and without piercing. Phase IV is represented in knob handles Nos. 4-6, which are coarse to touch and are of a thick ware. Shallow, plate-like lids (Nos. 7-8), which have a simple obliquely cut rim and a slightly ribbed body, occurred in Phase V. Such lids were wellknown outside the Nabataean sites, e. g. Hisbān, Rāmat Rāhēl, and Hirbet el-Kerak, during the late Byzantine period.

## STRAINERS

Six different types of strainers are represented in the 1981 Petra excavations. They could be classified into two main groups: (a) The medium size saucer-shaped strainers which are furnished with an everted flattened rim, grooved on top, and have a rounded base (Nos. 2-4). (b) The large bowl-shaped strainers with a high ring base (No. 6) or with a low pedestal base (No. 5). The pierced area in group (a) is restricted to the lower part of the body, and its upper border is always confined by a horizontal groove which occurs externally. Piercing is usually of the same diameter $(2-3 \mathrm{~mm})$ and applied from the outside surface. The potter removed some of the coarse attachments on the interior. Some of these holes were sealed before firing because of ware elasticity, or even during the firing process. The distribution of the holes is usually regular. They were pierced with the aid of a pointed tool.

## Description

1. Body fragment of a strainer, from D. 2.4 (Fig. 46.1). Medium size piercing (approx. 2 mm in diameter), regularly distributed; almost $50 \%$ of the punctured holes are sealed because of ware elasticity. Pinkish-red ware, well levigated, evenly fired; body partially encrusted.
2. Large fragment of rim and body of a strainer, from D.1.10 (Fig. 46.2).
D. 11.8 cm .

Everted flattened rim, grooved on top, base pierced by tight holes ( 1.5 mm in diameter) of regular distribution; inner attachments are smoothed off. Red-buff ware, well levigated, evenly fired, pinkish engobe outside and inside, smooth to touch.
3. Body fragment of a strainer, from B.16.8 (Fig. 46.3). Tight piercing ( 1.5 mm in diameter), horizontal groove surrounded the pierced area; piercing attachments are smoothed off from the inside. Reddish-pink ware, well levigated, evenly fired; darker reddish-pink engobe outside and inside, body smooth to touch.
4. Large fragment of rim, body and base of a medium size, saucer-shaped strainer, from D.2.10 (Fig. 46.4).
D. 14.8 cm ; H. 5.0 cm .

Everted flattened rim, grooved on top with rounded base; seven concentric circles of holes ( 2 mm in diameter), of regular distribution; horizontal groove surrounding the pierced area, inner surface, is carefully smoothed off from the piercing attachments. Reddish-pink ware, well levigated, evenly fired; thin darker pinkish engobe outside and inside.
5. Fragment of a low pedestal base, from D. 2.18 (Fig. 46.5). Base pierced with five holes ( 3.5 mm in diameter) and a larger central one ( 5 mm in diameter), rough attachment visible internally. Reddish-pink ware, well levigated, evenly fired; darker pinkish engobe outside and inside.
6. Fragment of high ring base of a strainer, from C.4.15 (Fig. 46.6).

Base pierced with five holes ( 5 mm in diameter) without internal attachments. Buff-creamy ware, evenly fired; body heavily encrusted.

## Conclusion

The absence of similar strainers in publications is striking, in view of the high frequency of these vessels at Petra. They appeared in loci dated from the beginning of the reign of Aretas IV until the end of the reign of Rabbel II. Because of the fragmentary state of most of the studied strainers, one could not establish the chronological sequence of form development.

## A MORTAR

One single type of mortar has been distinguished in the 1981 Petra excavations. It has a broad rim which turns slightly down on the outside. This example is a thick, heavy, large bowl; hard, gritty and coarse ware. Used presumably for grinding seeds with the help of a pestle. Contemporary non-Nabataean examples generally lack the everted broad rim (Lapp 1961: 167-168 [Corpus 41.A-L]).

## Description

1. Heavy and large fragment of a mortar, from C.1.6 (Fig. 47.1).
D. 36 cm ; Thickness $1.8-3.8 \mathrm{~cm}$.

Everted broad rim, turned down slightly. Dull brownish ware, gritty and coarse, evenly fired, partially encrusted.

## Conclusion

Since no similar published parallels occur, the Petra mortar could be uniquely Nabataean. The stratigraphical evidence assigned this mortar to Phase III, which is dated to the reign of Rabbel II (70-106 A. D.).

## MOULDED VESSELS

The Nabataeans added to their pottery production another artistic pottery element: the decorated moulded vessel. These are comparatively small in size, e.g. less than 10 cm in height, made by mould as in the case of lamps and terracotta figurines.

Moulded pottery vessels (Figs. 48.1-2, 49.3-5, Pl. 25.1-5) can be classified into two major groups:
(a) Small juglets and amphoriskoi (Figs. 48.1-2, 49.3, Pl. 25.1-3). Each vessel of this group consists of two equal halves which are made in the same mould and carry the same designs and motifs. The clay was impressed into the mould, and thumb-impressions are clearly visible internally. When the clay of the two halves was leather-dry, the potter joined them together by adding a moist clay to the edges. The surplus clay and the attachments which appeared on the external joints as a result of gently pressing the two halves together were pared with a sharp tool to beautify the appearance of such small vessels. Then handles were added to the neck in a slightly askew position and carelessly pierced with a tubular tool.
(b) Cube-like shaped bowls which have tiny ledge handles at the rim (Fig. 49.4-5, Pl. 25.4-5). These bowls were made by mould, and the potter added, before the ware was completely dry, some incised decoration on the external surfaces with a sharp pointed tool. Such decorations include several bands on the rim. Each band consists of three incised lines. Moreover, small notches or irregular circles and vertical and diagonal incised lines appear on the four external surfaces of the cube-shaped bowls.

The body of the two groups of moulded vessels is comparatively thick for this size of object. The ware is usually dull red, or sometimes of a pinkish colour, and is generally well levigated. These moulded vessels are coated with a thick brownish, light grey or dark pinkish slip to beautify the objects and to seal the porosity. Horsfield and Conway apply to such vessels different terms, such as "miniature loving-cups" or "small cosmetic pots" or even "bitumen bowls" (Horsfield and Conway 1942: 149, 150, 166 respectively).

Five different fragments of moulded vessels turned up in the 1981 Petra excavations. They are the following:

## Description

1. Fragment of moulded juglet, from D. 2.9 (Fig. 48.1, Pl. $25.1 \mathrm{a}-\mathrm{b}$ ).

Mouth D. 2.2 cm ; ex. H. 5.5 cm .
Everted rim, flattened on top, neck flaring up, globular body, base missing. Body outside decorated with four horizontal bands of decoration, separated by incised lines. Neck decorated with two horizontal panels: upper consists of short vertical strokes, lower consists of impressed small circles. Shoulder decoration with vertical strokes, closely similar to sun-rays. The fourth panel, covering the lower part, shows a female human head with Nabataean characteristics, e.g. healthy face, pronounced eyes, inward lips and rounded chin. The wig-like hair, which consists of thick plaits around the face and reaches the shoulder, is also characteristically Nabataean. Each plait is covered with incised horizontal strokes. The head is crowned by a
ribbon which is suspended from a big knot above the head. Creamy greyish ware, traces of red-dish-brown slip outside, body partially sooted.
2. Large fragment of moulded juglet, from D. 2.5 (Fig. 48.2, Pl. 25.2).

Ex. H. 5.8 cm .
Rim thickened and rounded on top, slightly pinched mouth, defined, undecorated neck; body consists of two equal, moulded halves, made in the same mould. Horizontal band of chevrons around widest part of body outside, lower part covered with fluted vertical lines, closely similar to a pattern of sun-rays spreading from the juglet's base. Thick pinkish ware, evenly fired, thick brownish slip outside.
3. Fragment of rim, neck and handles of moulded amphoriskos, from D.2.5 (Fig. 49.3, Pl. 25.3). Ex. H. 2.3 cm .
Everted rim, flattened on top, short tubular neck, two nose-like shaped handles, each pierced with pointed tool, D. 1.5 mm , piercing attachments still visible; body consists of two equal, moulded halves made in the same mould. Neck decorated with horizontal band of small circles. Greyish ware, sooted and slightly encrusted.
4. Fragment of rim and body of moulded bowl, from D.2.4, (Fig. 49.4, Pl. 25.4).

Rim bevelled internally; band consists of three incised lines on rim; cube-like body, horizontal and diagonal incised lines on outside body. Pinkish ware, darker pinkish slip outside and inside.
5. Fragment of rim and moulded body of shallow bowl, from D.2.4 (Fig. 49.5, Pl. 25.5).

Rim bevelled internally, small ledge handle at rim. Band of three incised lines on rim, cube-like body, circular notches, double vertical lines and crossed lines on the external surfaces. Pinkish ware, thick for size of object, darker pinkish slip outside and inside.

## Parallel Examples

Identical or even similar parallels to juglet No. 1 are not yet available. The only parallel which one could refer to corresponds to the ribbon which is suspended from a knot above a female human head (Fig. 48.1, Pl. $25.1 \mathrm{a}-\mathrm{b}$ ). Such a ribbon can be seen on a moulded vessel published by Sivan (1977: 142-144, Fig. 2, Pl. 14A). The latter mentioned a ribbon separating two human heads but not crowning a single full-face head of a female with side locks or a wig as in juglet No. 1. As well, a closely similar knot, facial characteristics and curly side locks occur on a lintle from Hirbet etTannür which is wrongly identified by Glueck (1966:353-354, Pl. 38a) as the "Medosa". In fact the Hirbet et-Tannür's female head is surrounded by a large number of rich leaves which may remind one of "Atargatis", the Nabataean Goddess of fertility and vegetation. Her facial characteristics can also be compared to an example from Petra (Horsfield and Conway 1942: 165, Pl. XXXII.278) which is designated as "Nabataean"

Sivan (1977: 143, Fig. 2, No. 11, Pl. 14B) fails to identify a Nabataean moulded vessel which carries the same knot and ribbon of juglet No. 1 when he states, "Although it is reported that this vessel came from Petra, it is difficult to include it in this repertoire", and added, "we have no solution for the dating or the origin of this enigmatic vessel" (Sivan 1977: 144). Although Sivan's moulded vessel was acquired from a dealer and was not a stratified object, it is clear that his moulded bowl is purely Nabataean, since all the close similar examples only occur in Nabataean sites, especially in Petra. It is most probable that such an object (depending on similar stratified material) can be dated to the first half of the first century A.D.

The moulded fragment No. 3 is very similar to an intact, small, moulded amphoriskos from Petra which was published by Horsfield and Conway (1942: 157, Pl. XXVII. 221 b). The latter artifact is furnished with a pointed base and a more defined collared rim.

Petra offers the only published parallel to the cube-like moulded bowls Nos. 4-5, also published by Horsfield and Conway (1942: 162, Pl. XXX.261) and called "Nabataean".

## Conclusion

Moulded juglet No. 1 comes from Phase Ib (the second quarter of the first century A. D.). Juglet No. 2 and the amphoriskos No. 3 belong to Phase II (the reign of Malichus II). Cube-like shaped bowls Nos. 4-5 are from Phase III (the reign of Rabbel II).
According to the above-mentioned parallels, moulded vessels Nos. 1-5 are restricted to Nabataean sites. Such moulded vessels are of Nabataean ware and carry Nabataean artistic elements. In one new case (No. 1) a female head with purely Nabataean characteristics also occurs. The appellation "Nabataean moulded vessels" for such pottery production seems fully justified.

## INSCRIBED CHARACTERS

A small fragment of an inscribed alabaster, from D. 2.3 (Fig. 50.1).
The preserved dimensions of the fragment are approximately $3.0 \times 3.5 \times 1.3 \mathrm{~cm}$. It has a straight, regularly cut lower side, evidently to fit into a wall or plinth of a statue. The other three sides are broken and missing. The remains of two lines of Nabataean characters were inscribed on its smooth surface. The characters were sharply incised with the aid of a pointed chisel and a mallet, and are reasonably well executed. These characters are as follows: The lower tail of the character mim in the upper line, and four characters in the lower one. They represent the last two characters of one word (mo) and the first two characters of another ('t). No words dividers are used, and any reconstruction of the entire text would be hypothetical and probably unreliable.

## A STAMPED HANDLE

Only one stamped fragment of an amphora handle was found in the 1981 Petra excavations (Fig. 51, Pl. 26.1). It bears three legible Greek lines in low relief.

## Description

Upper part of a handle from unstratified deposit in Area D, EX. L. 8.2 cm . Light red-creamy ware, well levigated, smooth to touch, evenly fired. Greek formula arranged in three rows is stamped on the top of the handle. It reads:

```
ЕПI[ПР]ATO
ФA[NEY]\Sigma
\DeltaA[\Lambda]IO[Y]
\varepsiloṅлì П\varrho\alpha\tauóра\alphav\etaک \Delta\alpha\lambdaíov
"In the year of Pratophanes month Dalios (December)"
```


## Parallel Examples

Samaria provides typical parallels in Crowfoor et.al. 1957: 382, Qb, n, x, y, Dg (7) III, "ca. 220-180 B. C." Another parallel was recently uncovered at Gadara (Inv. No. II.F.41) by the German Protestant Institute for Archaeology in Amman.

## Conclusion

Our stamped handle belongs to a Rhodian jar which carries the name of the priest in whose term of office the jar was made. The name refers to the eponymous official Pratophanes. Such stamped handle could be dated to the second half of the third or early second century B. C.

## A BRONZE FIGURE

A bronze figure of a larger object (Fig. 52; Pl. 26.2), perhaps a handle, was found in the temenos enclosure of Area (B) and belongs to Phase Ib (18-40 A. D.).

## Description

Bronze object in the form of Eros from B. 9.8 (Fig. 52; Pl. 26.2):
L. 11 cm ;
L. of stem: 4.8 cm .
D. of stem: $1.1 \mathrm{~cm} ; \quad W$. across wings: 11.0 cm .

Frontally facing Eros with spread wings, emerging from a three-petalled lotus. The head is enveloped in a wig covering the whole back including the neck. A knob surmounts the forehead. The facial features are schematic and almost stylized. The eyes are represented by two punctured holes, the nose is nearly destroyed and the mouth is marked by two raised lines representing lips. The chest is shown with prominent muscles on both sides. There are two wings in the place of arms; the tip of the right one is missing, while the left is intact. The upper parts of the wings are slightly curved, while the lower parts are almost in a straight line. No feathers are shown on either wing. The stem of the lotus is curved to the front, and is circular in cross-section. This object is covered with a thick coat of patchy dark green and brown corrosion but is not otherwise decayed.

## Discussion

The Nabataeans adopted Hellenistic-Roman representations of the winged Eros but with stiffness in the feathers. According to Greek mythology Eros is the god of love and the youngest among the Greek gods. His father Zeus armed him with gold wings (Ames 1963: 68-69).

Although our bronze object is unparalleled, the occurrence of Eros is also known in Nabataean sculpture from Petra, where two panels were found. They show "Eros harnessing two winged lions" (Brünnow and Domaszewski 1905: 178, 319, Fig. 348; Dalman 1912:324-25; Bachmann et.al. 1921: 67, Fig. 59; Parr 1957: 9, Pl. VA-B; Glueck 1966: 57, Pl. 167a-b). The upper lintel of the doorway of one of the houses in Qaṣ er-Rabba showing a defaced Eros belongs to the Nabataean period (Glueck 1966: 57, Pl. 167c). Eros is also represented in the handsome Nabataean mural at Sī el-Bārid near Petra (Glueck 1966: 291, 243, Pls. 203-04), which is dated around the beginning of the first century A.D.
The discus of a Nabataean pottery lamp from Petra is decorated with the winged Eros (Horsheld and Conway 1942: 123, Pl. XI.49) and assigned to "the first century A. D.". Rosenthal and Sivan (1978: 34, No. 124) also published another example of the same type as Horsfield's which is classified as "Nabataean" The Eros shown on the above-mentioned lamps is in captivity, wearing leg-shackles, working with a pickaxe and basket. This subject is confirmed by Greek mythology, which relates that Eros was a beautiful boy, thoughtless, rebellious, and capricious, whom Aphrodite sometimes had to punish by taking away his wings (Ames, 1963: 68).

The three-petalled lotus may be referred to in its role in Egyptian religion. The lotus was the symbol of birth and fertility, and it was believed that the worshipped dead had to emerge again to life from the lotus (Clark 1978: 239). The head of the young Tutankhamun emerges from the
lotus as the sun god appears from the flower when it opens its petals early each morning (Desroches-Noblecourt 1972: 32, Pl. 1) and closes these petals, hiding the sun god at every sunset. This Egyptian belief is probably reflected in our object.

## STONE OBJECTS

Two stone objects were found and were probably votive offerings. They are the following:

## 1. A seated nude male figure from D.1.9 (Fig. 53; Pl. 27)

## Description

H. 4.1 cm ; W. 4.0 cm ; Th. at base 3.2 cm .

The head is missing, but the lower part of the neck is visible and surrounded with a necklace consisting of thirty-two raised dots representing beads. There is a pendant hanging to the front of the necklace. The right hand is missing, while the left one is resting on the left side of the seat. The body is plain and does not show any physical features except the navel and the phallus, which is shown between two monkey-like legs. The seat is cube-like and is furnished with a couch beneath the seated figure. With the exception of the chair's base, each of the three external flattened sides of the chair is decorated with two incised lines crossing each other diagonally. The stone is a soft yellowish limestone with some greyish deposits of calcite encrustations in places. There are also faint traces of red paint on the external surfaces.

## Discussion

This object is the only example of its kind ever found in Petra or in other Nabataean sites. It represents the god Bes seated on a high-backed chair or throne. Hammond has published a different example of the god Bes which was purchased at Petra during his excavations at the Main Theatre in 1961-62. The latter object was made from pottery and shows Bes with a large head and pronounced phallus (Hammond 1973b: 37, photo No. 155 on page 49). Murray and Ellis (1940: 15, Pl. XIV.15) illustrate a piece of decorated pottery from Petra which is identified as "possibly head of a figure of Bes". Furthermore, three cube-like stone incense altars were found at Petra and published by Horsfield and Conway (1942: 165, Pl. XXXII.277-79). Though Horsfield's examples are not quite the same, they remind one of our seated figure. The engraved heads shown on two of the latter examples, Nos. 277-78, can probably be identified as the god Bes with a mask-like face.

Bes plays an important role in Egypt especially during the New Kingdom, until around the Christian era (Baines and Málek 1980; 214). He is depicted as a dwarf, usually with a large head and stylized legs. It was believed that every family had to be protected by placing his figure or idol on a pillar, stela or in a niche to avoid any danger, for example, harmful spirits, snake-bites or scorpions' stings. He is often associated with childbirth and was also considered to be the god of marriage (Graves 1978: 39). The existence of his figure in Petra, therefore, probably indicates that Bes played a similar role among the N abataeans.

## 2, Head of a female statue from B. Channel "A" (Fig. 54; Pl. 28)

## Description

Ex. H.: 11.4 cm ; Th. 7.3 cm ; W. across face 4.9 cm ; W. across neck: 5.1 cm .
The head is slightly inclined to the right. The head cover consists of an oval-shaped cap, falling down to the nape of the neck and bordered with a pronounced ridge. The hair is parted in the middle and twisted on both sides of the forehead. Four tight braids of hair fall against the cheeks and cover the ears. The eyes are almond-shaped, and each is furnished with a heavy upper eyelid but without an iris. The length of the disc of each eye is almost the same $(1.1 \mathrm{~cm})$, and the width is about 0.6 cm . Hence the proportion of the eyes to the height of the head is almost normal, c. 1:13. Although the nose is almost chipped off, the nostrils are still visible. The mouth is marked out by a downward curved line with thin lips suggesting a tender smile. The face is fleshy and has a heavy rounded jowl. The neck is comparatively long and thick for the size of the head. The sculpture is made of a sandstone of beige-creamy colour with some faint yellowish and purplish streaks, suggestive of the geology of the Petra region.

## Discussion

This female head was found in an unstratified deposit in Area B, Channel A. The deposit consisted of rubble mixed with silt and was accompanied by a few unpainted Nabataean sherds mostly belonging to the first century A. D. The head carries some purely Nabataean elements, for example the hair arrangements, the eyes, the fleshy face with a heavy rounded chin and a very thick neck. The hair treatment consists mainly of two heavy twisted plaits around the forehead and four tight braids falling against each cheek. Similar hair arrangements can be seen on some of the Nabataean coins dated from around the twenty-seventh year of the reign of Malichus I (34-33 B. C.) until about the third year of the reign of Aretas IV (7-6 B. C.). For similar Nabataean coins one may refer to Meshorer (1975: Pls. 2-4). Therefore, the female head can probably be identified as a Nabataean queen or princess who lived some time during the above-mentioned period or possibly later. The large eyes and the heavy chin are reminiscent of the same conventions in the Nabataean sculpture from Hirbet Bräk published by Parr (1960: 134-135, Pl. XV.1). Avi-Yonah (1944: 112-113. 116-118) attributed such features to "the oriental style of Palestinian art" which is dated to the first two centuries A. D. The head of a female statuette with such similar characteristics has been attributed "either to Huldu or Shaqilat I" (Negev 1974b: 77-78, Pl. XIII A-B) and is dated to the first half of the first century A. D.

## OUTLINES OF OBJECTS AND CHRONOLOGY

| 1. Lamps |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| No. | Figs. | Pls. | Locations | Phases |
| 1 | 1 | 1 | D. 2.5 | II |
| 2 | 1 | 1 | D.2.5 | II |
| 3 | 2 | 1 | D. 2.5 | II |
| 4 | 2 | 1 | D. 2.5 | II |
| 5 | 3 | 1 | D.2.5 | II |
| 6 | 3 | 1 | D. 2.9 | Ib |
| 7 | 4 | 2 | D. 2.5 | II |
| 8 | 4 | 2 | D.2.10 | Ib |
| 9 | 4 | 2 | D. 2.9 | Ib |
| 10 | 5 | 3 | D.2.6 | II |
| 11 | 5 | 3 | D. 2.9 | Ib |
| 12 | 6 | 3 | D.2.12 | Ia |
| 13 | 6 | 4 | D. 2.5 | II |
| 14 | 6 | 4 | D. 2.5 | II |
| 15 | 7 | 4 | B. 12.8 | Ib |
| 16 | 7 | 4 | D.1.5 | II |
| 17 | 8 | 5 | B. 12.8 | Ib |
| 18 | 8 | 5 | D.1.4 | III |
| 19 | 8 | 5 | D. 7.7 | Ib |
| 20 | 9 | 5 | D.2.11 | Ia |
| 21 | 9 | 5 | B.5.7 | Ib |
| 22 | 10 | 5 | D. 2.9 | Ib |
| 23 | 11 | 6 | D. 2.5 | II |
| 24 | 11 | 6 | D.2.6 | II |
| 25 | 12 | 6 | D.2.7 | II |
| 26 | 12 | 6 | D.2.5 | II |
| 27 | 13 | 7 | B.3.8 | Ib |
| 28 | 13 | 7 | B. 16.10 | Ib |
| 29 | 14 | 7 | B.14.12 | Ib |
| 30 | 14 | 7 | B. 16.2 | V |
| 31 | 15 | 8 | D. 2.5 | II |
| 32 | 15 | 8 | B.3.7 | Ib |
| 33 | 15 | 8 | D.2.6 | II |
| 34 | 15 | 8 | D.1.11 | Ia |
| 35 | 15 | 8 | D.2.7 | II |
| 36 | 16 | 8 | B.5.8 | Ib |
| 37 | 16 | 8 | C.4.6 | III |
| 38 | 16 | 8 | B. 16.12 | Ib |
| 39 | 17 | 9 | C.4.5 | IV |



## 3. Terracotta Figurines

| 1 | 24 | 12 | D.2.9 | Ib |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 24 | 12 | D.2.7 | II |
| 3 | 24 | 12 | D.2.9 | Ib |
| 4 | 25 | 13 | D. 2.5 | II |
| 5 | 25 | 13 | D. 2.18 | Ia |
| 6 | 26 | 13 | D.1.7 | II |
| 7 | 26 | 13 | C.4.12 | Ib |
| 8 | 26 | 14 | D. 2.18 | Ia |
| 9 | 27 | 14 | - | - |
| 10 | 28 | 15 | D.2.9 | Ib |
| 11 | 28 | 15 | D.2.9 | Ib |
| 12 | 28 | 15 | D. 2.5 | II |
| 13 | 29 | 16 | D.1.7 | II |
| 14 | 29 | 16 | B. 14.10 | Ib |
| 15 | 29 | 16 | D.2.5 | II |
| 16 | 30 | 17 | D. 2.5 | II |
| 17 | 30 | 17 | D.2.9 | Ib |
| 18 | 30 | 17 | D.1.5 | II |
| 19 | 30 | 17 | D.1.5 | II |
| 20 | 31 | 18 | C.5.10 | II |
| 21 | 31 | 18 | C.3.3 | V |
| 22 | 32 | 18 | D.2.1 | V |
| 23 | 32 | 19 | D.2.5 | II |
| 24 | 33 | 19 | B. 16.6 | II |
| 25 | 33 | 19 | C.6.5 | IV |
| 26 | 33 | 19 | B. 16.10 | Ib |
| 27 | 34 | 20 | D.2.4 | III |
| 28 | 34 | 20 | B. 16.2 | V |
| 29 | 34 | 20 | D.2.11 | Ia |


| No. | Figs. | Pls. | Locations | Phases |
| :--- | :--- | :--- | :--- | :--- |
| 30 | 34 | 20 | B.15.4 | III |
| 31 | - | 20 | D.1.7 | II |
| 32 | - | 20 | D.2.18 | Ia |
| 33 | - | 20 | B.5.4 | III |

## 4. Terra Sigillata

| 1 | 35 | - | C.4.22 | Ia |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 35 | - | C.4.20 | Ia |
| 3 | 35 | - | D.2.11 | Ia |
| 4 | 35 | - | C.2.17 | Ib |
| 5 | 35 | - | C.2.17 | Ib |
| 6 | 35 | - | B.4.7 | Ib |
| 7 | 36 | - | C.1.15 | Ib |
| 8 | 36 | - | D.2.9 | Ib |
| 9 | 36 | - | C.3.14 | Ib |
| 10 | 36 | - | B. 10.8 | Ib |
| 11 | 36 | - | B. 10.8 | Ib |
| 12 | 36 | - | B.8.7 | Ib |
| 13 | 36 | - | D.2.10 | Ib |
| 14 | 36 | - | C.3.16 | Ib |
| 15 | 36 | - | B.3.8 | Ib |
| 16 | 36 | - | D.1.14 | Ia |
| 17 | 36 | - | C.4.16 | Ib |
| 18 | 36 | - | C. 2.14 | Ib |

5. Fine Ware

37

| - | C.3.10 | II |
| :--- | :--- | :--- |
| - | B. 10.8 | Ib |
| - | B. 16.10 | Ib |
| - | B.3.7 | Ib |
| - | D.2.10 | Ia |

6. Painted Ware

| 1 | 38 | 21 | D. 1.10 | Ib |
| :--- | :--- | :--- | :--- | :--- |
| 2 | 38 | 21 | D.2.5 | II |
| 3 | 39 | 21 | D.2.5 | II |
| 4 | 39 | 22 | II |  |
| 5 | 40 | - | - | D.2.6 |
| 6 | 41 | 22 | C.1.5 | IV |
| 7 | 41 | 22 | B.16.6 | Ib |
| 8 | 42 | 23 | D.2.5 | II |


9. Strainers

| 1 | 46 | - | D.2.4 | III |
| :--- | :--- | :--- | :--- | :--- |
| 2 | 46 | - | D.1.10 | Ib |
| 3 | 46 | - | B.16.8 | Ib |
| 4 | 46 | - | D.2.10 | Ib |
| 5 | 46 | - | D.2.18 | Ia |
| 6 | 46 | - | C.4.15 | Ib |

10. Mortar
1
47
C. 1.6
III
11. Moulded Vessels

| 1 | 48 | 25 | D.2.9 | Ib |
| :--- | :--- | :--- | :--- | :--- |
| 2 | 48 | 25 | D. 2.5 | II |
| 3 | 49 | 25 | D.2.5 | II |
| 4 | 49 | 25 | D.2.4 | III |
| 5 | 49 | 25 | D.2.4 | III |

## 12. Inscribed Characters

| No. 1 | Figs. $50$ | Pls. | Locations <br> D. 2.3 | Phases Ia |
| :---: | :---: | :---: | :---: | :---: |
| 13. Stamped Handle |  |  |  |  |
| 1 | 51 | 26 | - | - |
|  |  | 14. Bronze Figure |  |  |
| 1 | 52 | 26 | B. 9.8 | Ib |
| 15. Stone Objects |  |  |  |  |
| 1 | 53 | 27 | D.1.9 | Ib |
| 2 | 54 | 28 | - | - |

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Map I. Contour map showing excavated area (shaded)


Map II. Grid map showing the excavated squares in $A$ reas $A, B$ and $C$


Map III. Top plan of Area B


Map IV. Top plan of Area C


1


Fig. 1. Pottery lamps. Group I (1:1)


Fig. 2. Pottery lamps. Group I (1:1)


Fig. 3. Pottery lamps. Group I (1:1)


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Fig. 4. Pottery lamps. Group I (1:1)



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Fig. 6. Pottery lamps. Group II (1:1)


Fig. 7. Pottery lamps. Group II (1:1)




Fig. 8. Pottery lamps. Group III (1:1)


Fig. 9. Pottery lamps. Group IV (1:1)


Fig. 10. Pottery lamp. Group IV (1:1)


Fig. 11. Pottery lamps. Group V(1:1)


Fig. 12. Pottery lamps. Group V(1:1)


Fig. 13. Potterylamps. Group VI(1:1)


29


30
Fig.14.Potterylamps.Group VI(1:1)


Fig. 15. Pottery lamps. Miscellaneous (1:1)


Fig. 16. Pottery lamps. Miscellaneous (1:1)


Fig. 17. Pottery lamps of the late Roman period (1:1)


Fig. 18. Pottery lamps of the Byzantine period (1:1)


Fig. 19. Pottery lamps of the Byzantine period (1:1)


Fig. 20. Cone-like pottery lamp (1:1)


Fig. 21. Cone-like pottery lamp (1:1)


Fig. 22. Cone-like pottery lamp (1:1)


Fig. 23. Pottery lantern (1:1)

## 2 3 <br> 

## Reprodugion Not Fot



Fig. 24. Terracotta figurines. Human figures (1:1)


Fig. 25. Terracotta figurines. Human figures (1:1)


Fig. 26. Terracotta figurines. Human figures (1:1)


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Fig. 27. Terracotta figurine of "The Three Nabataean Musicians" (1:1)


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## Reproduction <br> Not For



Fig. 28. Terracottafigurines. Human figures (1:1)


Fig. 29. Terracotta figurines. Human figures (1:1)


Fig. 30. Terracotta figurines. Animal figures (1:1)


Fig. 31. Terracotta figurines. Animal figures (1:1)

## Not Foill

## Reprodugtion

Fig. 32. Terracotta figurines. Animal figures (1:1)


## Reproduction



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Fig. 33. Terracotta figurines. Animal figures (1:1)


## Not For



Fig. 34. Terracotta figurines. Miscellaneous (1:1)


Fig. 35. Terra sigillata ware (1:2)



Fig. 37. Fine tuare (1:1)


Fig. 38. Painted "egg-shell" ware


Fig. 39. Painted "egg-shell" ware


Fig. 40. Painted "egg-shell" ware. Complete shallow bowl


# Not \%ig or 

8


Fig. 42. Painted "egg-shell" ware


10



Fig. 43. Painted "egg-shell" ware


Fig. 44. Pottery stands (1:1)



Fig. 46. Pottery strainers (1:2)



Fig. 48. Moulded pottery vessels


Fig. 49. Moulded pottery vessels


Fig. 50. Inscribed character


Fig. 51. Stamped handle

Fig. 52. Bronze figure

## Not For


$b$


| 10 | 20 | 3 | mm |
| :--- | :--- | :--- | :--- |
| 5 | 5 | 5 |  |

Fig. 53. Stone object. Seated nude male figure

$a$

$b$


Fig. 54. Stone object. Head of a female statue

PLATES


Plate 1. Pottery lamps. Group I (1:1)


Plate 2. Pottery lamps. Group I (1:1)



Plate 4. Pottery lamps. Group II (1:1)



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Plate 5. Pottery lamps. Group III and IV (1:1)


Plate 6. Pottery lamps. Group V (1:1)


Plate 7. Pottery lamps. Group VI (1:1)


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37
Plate 8. Pottery lamps. Miscellaneous (1:1)


Plate 9. Pottery lamps of the late Roman period (1:1)


Plate 10. Pottery lamps of the Byzantine period (1:1)


Plate 11. Cone-like pottery lamps (1:1)


3
Plate 12. Terracotta figurines. Human figures (1:1)


Plate 13. Terracotta figurines. Human figures (1:1)


9
Plate 14. Terracotta figurines. Human figures (1:1)


Plate 15. Terracotta figurines. Human figures (1:1)


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Plate 16. Terracotta figurines. Human figures (1:1)


Plate 17. Terracotta figurines. Animal figures


20


21


22

Plate 18. Terracotta figurines. Animal figures


Plate 19. Terracotta figurines. Animal figures


Plate 20. Terracotta figurines. Miscellaneous (1:1)


Plate 21. Painted "egg-shell" ware


Plate 22. Painted "egg-shell" ware



Plate 23. Painted "egg-shell" ware


## 

Plate 24. Painted "egg-shell" ware


Plate 25. Moulded pottery vessels (1:1)


Plate 26. 1. Stamped Rhodian jar handle. 2. Bronze figure


Plate 27. Stone object. Seated nude male figure


Plate 28. Stone object. Head of a female statue

